

Community Health Needs Assessment 2013



Community Health Needs Assessment 2013

Midland Memorial Hospital
Community Health Needs Assessment
2013

Contents

Consultant’s Report	1
Introduction	2
Summary of Community Health Needs Assessment.....	3
Summary of Findings	4
General Description of the Hospital	5
Community Served by the Hospital	6
Defined Community	7
Community Details	8
Identification and Description of Geographical Community	8
Community Population and Demographics.....	9
Socioeconomic Characteristics of the Community	15
Income and Employment.....	15
Poverty.....	19
Uninsured	20
Education	21
Health Status of the Community	22
County Health Synopses.....	23
Leading Causes of Death	29
Health Outcomes and Factors	32
Midland County.....	33
Howard County	35
Martin County	37
Andrews County.....	39
Health Care Resources	41
Hospitals and Other Licensed Facilities and Providers	41

Midland Memorial Hospital
Community Health Needs Assessment
2013

Contents (Continued)

Key Informant Interviews.....	44
Methodology.....	44
Key Informant Profiles.....	44
Key Informant Interview Results	45
Key Findings	49
Community Health Input Questionnaire.....	50
Methodology.....	50
Input Questionnaire	50
Community Health Input Results	51
Prioritization of Identified Health Needs	54
Texas Regional Healthcare Partnership Plan	59
Appendices	
Sources	61
Acknowledgements	63
Key Informant Interview Protocol.....	65
Community Health Input Questionnaire Detail Results	68
Texas Regional Healthcare Partnership Plan.....	109

Consultant's Report

Mr. Stephen Bowerman
Vice President/Chief Financial Officer
Midland County Hospital District
d.b.a Midland Memorial Hospital
400 Rosalind Redfern Grover Pkwy
Midland, Texas 79701

On behalf of Midland County Hospital District, we have assisted in conducting a Community Health Needs Assessment consistent with the scope of services outlined in our engagement letter dated July 25, 2013. The purpose of our engagement was to assist Midland Memorial Hospital (Hospital) in meeting the requirements of Internal Revenue Code §501(r)(3). We relied on the guidance contained in IRS Notice 2011-52 when preparing your report. We also relied on certain information provided by Midland Memorial Hospital, specifically certain utilization data and existing community health care resources.

Based upon the assessment procedures performed, it appears Midland Memorial Hospital is in compliance with the provisions of §501(r)(3). Please note that, we were not engaged to, and did not, conduct an examination, the objective of which would be the expression of an opinion on compliance with the specified requirements. Accordingly, we do not express such an opinion.

We used and relied upon information furnished by the hospital, its employees and representatives and on information available from generally recognized public sources. We are not responsible for the accuracy and completeness of the information and are not responsible to investigate or verify it.

These findings and recommendations are based on the facts as stated and existing laws and regulations as of the date of this report. Our assessment could change as a result of changes in the applicable laws and regulations. We are under no obligation to update this report if such changes occur. Regulatory authorities may interpret circumstances differently than we do. Our services do not include interpretation of legal matters.

<Insert BKD Signature>



Introduction

As a result of the *Affordable Care Act*, tax-exempt hospitals are required to assess the health needs of their communities and adopt implementation strategies to address identified needs. Compliance with section 501(r) of the Internal Revenue Code (IRC) requires that a tax-exempt hospital facility:

- Conduct a community health needs assessment every three years.
- Adopt an implementation strategy to meet the community health needs identified through the assessment.
- Report how it is addressing the needs identified in the community health needs assessment and a description of needs that are not being addressed with the reasons why such needs are not being addressed.

The community health needs assessment must take into account input from persons who represent the broad interest of the community served by the hospital facility, including those with special knowledge or expertise in public health. The hospital facility must make the community health needs assessment widely available to the public.

This community health needs assessment is intended to document Midland Memorial Hospital's compliance with IRC Section 501(r). Health needs of the community have been identified and prioritized so that the Hospital may adopt an implementation strategy to address specific needs of the community.

The *process* involved:

- Collection and analysis of a large range of data, including demographic, socioeconomic and health statistics, health care resources and patient use rates.
- Interviews with key informants who represent a) broad interests of the community, b) populations of need or c) persons with specialized knowledge in public health.
- Circulating a community health input questionnaire which gathered a wide range of information and was widely distributed to members of the community.

This *document* is a summary of all the available evidence collected during the initial cycle of community health needs assessments required by the IRS. It will serve as a compliance document as well as a resource until the next assessment cycle.

Both the process and document serve as the basis for prioritizing the community's health needs and will aid in planning to meet those needs.



Summary of Community Health Needs Assessment

The purpose of the community health needs assessment is to understand the unique health needs of the community served by the hospital and to document compliance with new federal laws outlined above.

Midland Memorial Hospital engaged **BKD, LLP** to conduct a formal community health needs assessment. **BKD, LLP** is one of the largest CPA and advisory firms in the United States, with approximately 2,100 partners and employees in 33 offices. BKD serves more than 1,000 hospitals and health care systems across the country. The community health needs assessment was conducted from July 2013 through December 2013.

Based on current literature and other guidance from the U.S Treasury Department and the IRS, the following steps were conducted as part of the Midland Memorial Hospital's community health needs assessment:

- The “community” served by Hospital was defined by utilizing inpatient and outpatient data regarding patient origin. This process is further described in the section entitled *Community Served by the Hospital*.
- Population demographics and socioeconomic characteristics of the community were gathered and reported utilizing various third parties (see references in *Appendices*). The health status of the community was then reviewed. Information on the leading causes of death and morbidity information was analyzed in conjunction with health outcomes and factors reported for the community by CountyHealthrankings.org. Health factors with significant opportunity for improvement were noted.
- An inventory of health care facilities and resources was prepared and a demand for physician and hospital services was estimated. Both were evaluated for unmet needs.
- Community input was provided through interviews of 23 key informants and a widely-distributed community health input questionnaire. The community health input questionnaire was completed by 337 individuals. Results and findings are described in the Key Informant and Community Health Input sections of this report.
- Information gathered in the above steps was analyzed and reviewed to identify health issues of uninsured persons, low-income persons and minority groups and the community as a whole. Health needs were ranked utilizing a weighting method that considers 1) the ability to evaluate and measure outcomes, 2) the size of the problem, 3) the seriousness of the problem and 4) the prevalence of common themes.

Health needs were then prioritized taking into account the perceived degree of influence the Hospital has to impact the need and the health needs impact on overall health for the community. Information gaps identified during the prioritization process have been reported.

- Recommendations based on this assessment have been communicated to the Hospital.



Summary of Findings

The following health needs were identified based on the information gathered and analyzed through the Community Health Needs Assessment conducted by Midland Memorial Hospital.

These needs have been prioritized based on information gathered through the Community Health Needs Assessment.

Identified Community Health Needs

1. Uninsured / Lack of access to services (cost)
2. Obesity
3. Diabetes
4. Lack of primary care physicians
5. Heart Disease
6. Lack of mental health services
7. Poor nutrition
8. Physical inactivity
9. Lack of health education
10. Lack of specialty health services

These identified community health needs are discussed in greater detail later in this report.



General Description of the Hospital


The Hospital is located in Midland, Texas, and is part of Midland County Hospital District, a Texas nonprofit organization that operates and offers a variety of services to the residents of West Texas. The Hospital's Boards of Trustees and Governors, as well as the Board of Directors of the Midland County Hospital District, guides the Hospital and ensures medical services are available to the residents of Midland, Midland County and surrounding areas.

The Hospital is an integrated provider and the leader in comprehensive health care delivery in West Texas. The Hospital has been providing health care to the community for over 60 years. The Hospital proudly offers a wide range of services and specialties to meet the health care needs of patients close to home. The Hospital is made up of an experienced team with primary care, mid-level and specialist physicians on the medical staff, totaling over 1,400 employees. The Hospital is committed to providing high-quality, compassionate care and service to all patients; treating every patient, visitor, staff member and physician as guests in their home.





Community Served by the Hospital

The Hospital is located in Midland County, Texas. Midland County is approximately four hours West of Dallas, Texas. The Hospital's proximity to the metropolitan city, Interstate 20, and state routes 349, 350 and 158, allows many people from outside of Midland County to have quick and easy access to the health care services offered. The map pinpoints the Hospital's location and can be identified by the  symbol.





Defined Community

A community is defined as the geographic area in which a significant number of the patients utilizing hospital services reside. While the community health needs assessment considers other types of health care providers, the Hospital is the single largest provider of acute care services. For this reason, the utilization of hospital services provides the clearest definition of the community. The criteria established to define the community is as follows:

- A zip code area must represent two percent or more of the Hospital’s total discharges.
- The Hospital’s market share in the zip code area must be greater than or equal to 20 percent.
- The area is contiguous to the geographical area encompassing the Hospital.

Based on the patient origin of acute care inpatient discharges from October 1, 2011, through September 30, 2012, management has identified the community to include the zip codes listed in *Exhibit 1* (the Community). These zip codes are listed with corresponding demographic information in *Exhibits 2* through 5. Pages 8 and 9 present maps of the Hospital’s geographical location and the footprint of the Community. The first map displays the Hospital’s geographic relationship to the Community, as well as significant roads and highways. The second map displays the Community in relation to surrounding counties.

When specific information is not available for zip codes, the community health needs assessment relies on information for specific counties. The geographic area of the defined community based on the identified zip codes covers significant portions of Andrews, Martin, Howard, and Midland Counties (see map on page 8). The community health needs assessment will utilize these three counties with all or significant portions included in the community when that corresponding information is more readily available.

**Exhibit 1
Midland Memorial Hospital
Summary of Inpatient Discharges by Zip Code
10/1/2011 - 9/30/2012**

Zip Code	City	Discharges	Percent of Total Discharges	Cumulative Percent
79705	Midland	2,383	18.9%	18.9%
79701	Midland	2,320	18.4%	37.3%
79707	Midland	2,022	16.0%	53.4%
79703	Midland	1,453	11.5%	64.9%
79706	Midland	1,304	10.3%	75.3%
79720	Big Spring	501	4.0%	79.2%
79782	Stanton	280	2.2%	81.5%
79714	Andrews	162	1.3%	82.7%
	Other	2,175		
	Total	12,600	82.7%	

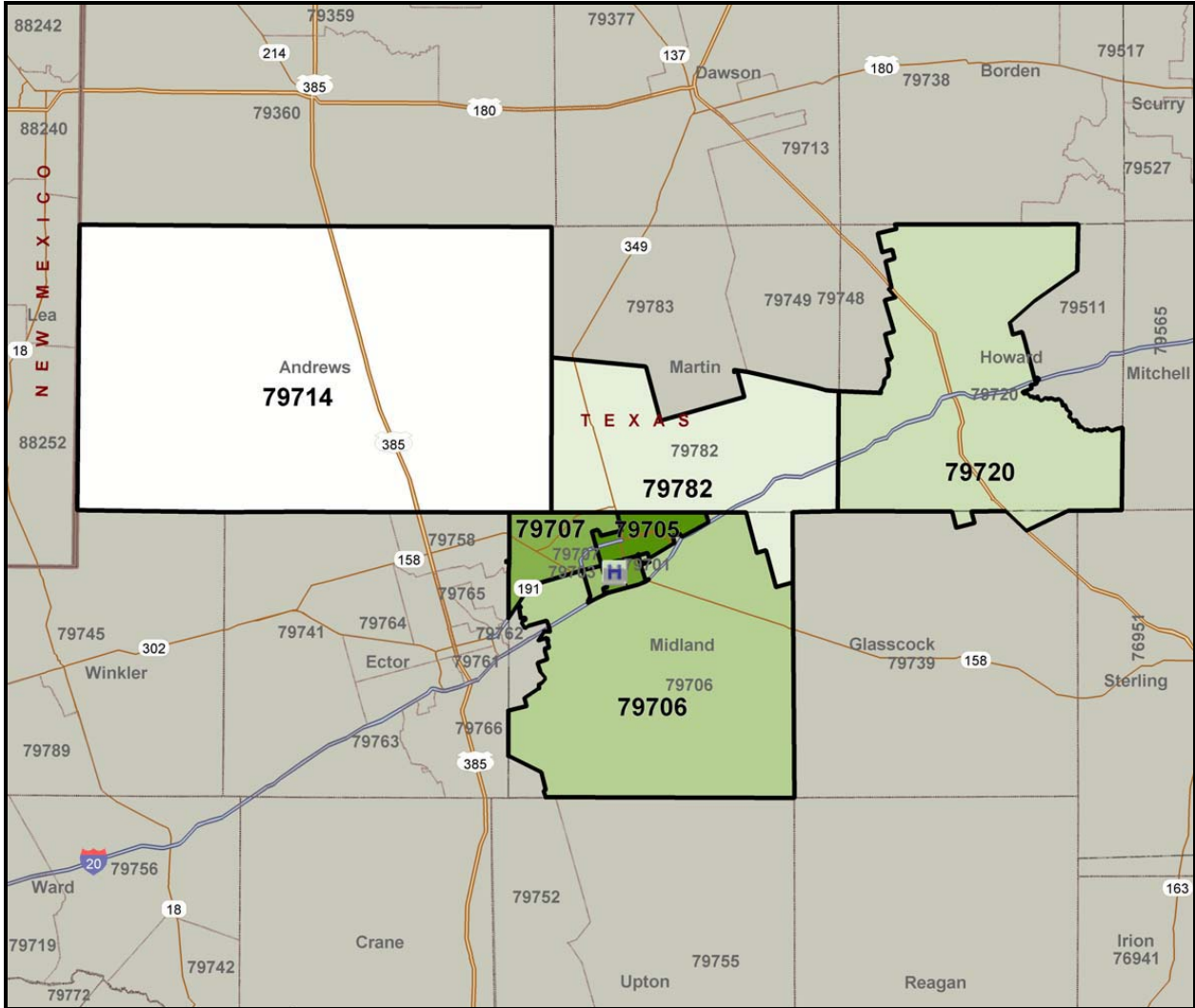
Source: Midland Memorial Hospital



Community Details

Identification and Description of Geographical Community

The following map geographically illustrates the Hospital's community by showing the community zip codes shaded by concentration of inpatient discharges.





Community Population and Demographics

The U.S. Bureau of Census has compiled population and demographic data based on the 2010 census. The Nielsen Company, a firm specializing in the analysis of demographic data, has extrapolated this data by zip code to estimate population trends from 2013 through 2018. The map below shows the community in relation to the three counties that are used for data collection when zip code level data is not available. Population estimates by age and zip code for the Hospital's community are presented after the map in *Exhibit 2*.

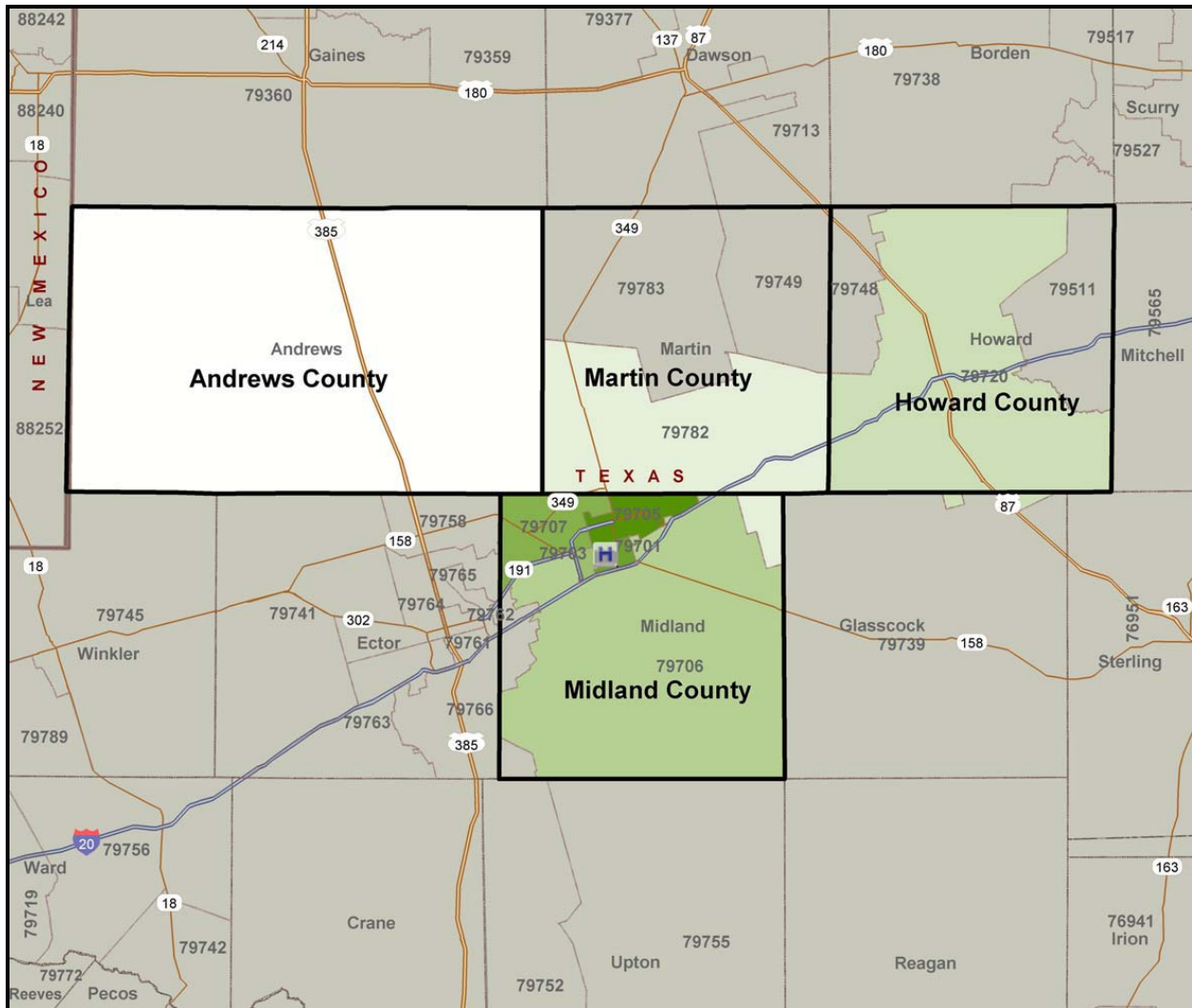


Exhibit 2 illustrates that the overall population is projected to increase over the five-year period from 195,978 to 211,958, or 8.2%. The age category that utilizes health care services the most, 65 years and over, is projected to increase from 23,213 to 27,919, or 20.3%. The ratio of males to females in the total community is projected to remain approximately the same over the five-year period.



**Exhibit 2
Midland Memorial Hospital
Estimated 2013 Population and Projected 2018 Population**

Zip Code	City	Under 15 years	15-44 years	45-64 years	65 years and over	Total	Male	Female
Estimated 2013 Population								
79705	Midland	7,343	13,475	8,861	5,054	34,733	16,796	17,937
79701	Midland	7,692	12,178	6,803	2,986	29,659	14,453	15,206
79707	Midland	7,294	14,177	9,333	4,123	34,927	17,201	17,726
79703	Midland	5,391	9,294	4,605	1,957	21,247	10,444	10,803
79706	Midland	4,968	8,253	5,406	2,019	20,646	10,469	10,177
79720	Big Spring	6,361	13,459	9,521	4,574	33,915	19,183	14,732
79782	Stanton	1,130	1,773	1,127	592	4,622	2,297	2,325
79714	Andrews	3,916	6,396	4,009	1,908	16,229	8,082	8,147
PROVIDER SERVICE AREA		44,095	79,005	49,665	23,213	195,978	98,925	97,053
Projected 2018 Population								
79705	Midland	8,134	14,387	8,896	5,996	37,413	18,125	19,288
79701	Midland	8,382	13,062	7,101	3,513	32,058	15,672	16,386
79707	Midland	8,288	15,155	9,693	5,208	38,344	18,895	19,449
79703	Midland	5,824	9,674	4,866	2,375	22,739	11,190	11,549
79706	Midland	5,467	9,059	5,791	2,665	22,982	11,605	11,377
79720	Big Spring	6,766	13,855	9,260	5,091	34,972	19,724	15,248
79782	Stanton	1,224	1,939	1,220	703	5,086	2,518	2,568
79714	Andrews	4,412	7,184	4,400	2,368	18,364	9,139	9,225
PROVIDER SERVICE AREA		48,497	84,315	51,227	27,919	211,958	106,868	105,090

Source: The Nielsen Company



Exhibit 2.1 provides the change in percent from the estimated 2013 to projected 2018 population for each age category for the four counties, as well as a comparison to state and national changes. Exhibit 2.1 illustrates that the overall population is projected to increase at rates consistent with the state of Texas, but slightly higher than national projections. Note that the age category that utilizes health care services the most, 65 years and over, is projected to increase by 20 percent, it is above the national projected increase of 16.3 percent, however, it is slightly under the state of Texas increase of 22.6 percent. This increase in the 65 year and over category will have a dramatic impact on both the amount and type of services required by the community.

Exhibit 2.1
Midland Memorial Hospital
Estimated 2013 Population vs Projected 2018 Population Percent Difference

Zip Code	City	Under 15 years	15-44 years	45-64 years	65 years and over	Total	Male	Female
Percent Difference								
79705	Midland	10.8%	6.8%	0.4%	18.6%	7.7%	7.9%	7.5%
79701	Midland	9.0%	7.3%	4.4%	17.6%	8.1%	8.4%	7.8%
79707	Midland	13.6%	6.9%	3.9%	26.3%	9.8%	9.8%	9.7%
79703	Midland	8.0%	4.1%	5.7%	21.4%	7.0%	7.1%	6.9%
79706	Midland	10.0%	9.8%	7.1%	32.0%	11.3%	10.9%	11.8%
79720	Big Spring	6.4%	2.9%	-2.7%	11.3%	3.1%	2.8%	3.5%
79782	Stanton	8.3%	9.4%	8.3%	18.8%	10.0%	9.6%	10.5%
79714	Andrews	12.7%	12.3%	9.8%	24.1%	13.2%	13.1%	13.2%
PROVIDER SERVICE AREA		10.0%	6.7%	3.1%	20.3%	8.2%	8.0%	8.3%
TEXAS 2013 ESTIMATED (1,000s)		5,949	11,068	6,358	2,922	26,297	13,041	13,256
TEXAS 2018 PROJECTED (1,000s)		6,343	11,545	6,862	3,583	28,333	14,046	14,287
PERCENT DIFFERENCE		6.6%	4.3%	7.9%	22.6%	7.7%	7.7%	7.8%
UNITED STATES 2013 ESTIMATED (1,000s)		61,803	126,084	83,113	43,862	314,862	154,820	160,042
UNITED STATES 2018 PROJECTED (1,000s)		63,380	126,608	84,336	50,998	325,322	160,000	165,322
PERCENT DIFFERENCE		2.6%	0.4%	1.5%	16.3%	3.3%	3.3%	3.3%

Source: The Nielsen Company



Certain characteristics of a population can be factors in determining the health care services required by a community. *Exhibit 2.2* is an analysis of the age distribution of the population for the community. The analysis is provided by county and provides a comparison to Texas and the United States.

Exhibit 2.2
Midland Memorial Hospital
Estimated 2013 Population vs Projected 2018 Population with Percent Totals

Zip Code	City	Under 15 years	15-44 years	45-64 years	65 years and over	Total	Male	Female
Estimated 2013 Population								
79705	Midland	21.1%	38.8%	25.5%	14.6%	100.0%	48.4%	51.6%
79701	Midland	25.9%	41.1%	22.9%	10.1%	100.0%	48.7%	51.3%
79707	Midland	20.9%	40.6%	26.7%	11.8%	100.0%	49.2%	50.8%
79703	Midland	25.4%	43.7%	21.7%	9.2%	100.0%	49.2%	50.8%
79706	Midland	24.1%	40.0%	26.2%	9.8%	100.0%	50.7%	49.3%
79720	Big Spring	18.8%	39.7%	28.1%	13.5%	100.0%	56.6%	43.4%
79782	Stanton	24.4%	38.4%	24.4%	12.8%	100.0%	49.7%	50.3%
79714	Andrews	24.1%	39.4%	24.7%	11.8%	100.0%	49.8%	50.2%
TOTAL PROVIDER SERVICE AREA		22.5%	40.3%	25.3%	11.8%	100.0%	50.5%	49.5%
Projected 2018 Population								
79705	Midland	21.7%	38.5%	23.8%	16.0%	100.0%	48.4%	51.6%
79701	Midland	26.1%	40.7%	22.2%	11.0%	100.0%	48.9%	51.1%
79707	Midland	21.6%	39.5%	25.3%	13.6%	100.0%	49.3%	50.7%
79703	Midland	25.6%	42.5%	21.4%	10.4%	100.0%	49.2%	50.8%
79706	Midland	23.8%	39.4%	25.2%	11.6%	100.0%	50.5%	49.5%
79720	Big Spring	19.3%	39.6%	26.5%	14.6%	100.0%	56.4%	43.6%
79782	Stanton	24.1%	38.1%	24.0%	13.8%	100.0%	49.5%	50.5%
79714	Andrews	24.0%	39.1%	24.0%	12.9%	100.0%	49.8%	50.2%
TOTAL PROVIDER SERVICE AREA		22.9%	39.8%	24.2%	13.2%	100.0%	50.4%	49.6%
ESTIMATED 2013 POPULATION		22.5%	40.3%	25.3%	11.8%	100.0%	49.6%	50.4%
PROJECTED 2018 POPULATION		22.9%	39.8%	24.2%	13.2%	100.0%	99.5%	100.5%
PERCENT DIFFERENCE		10.0%	6.7%	3.1%	20.3%	8.2%	8.0%	8.3%
TEXAS 2013 ESTIMATED		22.6%	42.1%	24.2%	11.1%	100.0%	49.6%	50.4%
TEXAS 2018 PROJECTED		22.4%	40.7%	24.2%	12.6%	100.0%	49.6%	50.4%
UNITED STATES 2013 ESTIMATED		19.6%	40.0%	26.4%	13.9%	100.0%	49.2%	50.8%
UNITED STATES 2018 PROJECTED		19.5%	38.9%	25.9%	15.7%	100.0%	49.2%	50.8%

Source: The Nielsen Company



While the relative age of the community population can impact community health needs, so can the ethnicity and race of a population. The following *Exhibit 3* shows the population of the Hospital’s community by ethnicity, illustrating the Hispanic versus non-Hispanic residents. In total, the population breakdown for the Community is comparable to the state of Texas benchmark of 39% with Hispanic residents in the community comprising more than 40 percent of the total population in 2013. Additionally, the Hispanic population is projected to grow 14.4% from 2013 to 2018 as compared to the 3.9% growth in the non-Hispanic population.

Exhibit 3
Midland Memorial Hospital
Estimated 2013 Population vs Projected 2018 Population with Percent Difference

Zip Code	City	Estimated 2013			Projected 2018			% Difference		% of 2018 Total	
		Hispanic	Non-Hispanic	Total	Hispanic	Non-Hispanic	Total	Hispanic	Non-Hispanic	Hispanic	Non-Hispanic
79705	Midland	11,087	23,646	34,733	12,904	24,509	37,413	16.4%	3.6%	34.5%	65.5%
79701	Midland	18,146	11,513	29,659	20,570	11,488	32,058	13.4%	-0.2%	64.2%	35.8%
79707	Midland	8,060	26,867	34,927	9,848	28,496	38,344	22.2%	6.1%	25.7%	74.3%
79703	Midland	10,355	10,892	21,247	12,111	10,628	22,739	17.0%	-2.4%	53.3%	46.7%
79706	Midland	9,092	11,554	20,646	10,862	12,120	22,982	19.5%	4.9%	47.3%	52.7%
79720	Big Spring	12,995	20,920	33,915	13,144	21,828	34,972	1.1%	4.3%	37.6%	62.4%
79782	Stanton	2,026	2,596	4,622	2,224	2,862	5,086	9.8%	10.2%	43.7%	56.3%
79714	Andrews	8,225	8,004	16,229	9,835	8,529	18,364	19.6%	6.6%	53.6%	46.4%
PROVIDER SERVICE AREA		79,986	115,992	195,978	91,498	120,460	211,958	14.4%	3.9%	43.2%	56.8%
TEXAS (1,000s)		10,268	16,029	26,297	11,631	16,702	28,333	13.3%	4.2%	41.1%	58.9%
UNITED STATES (1,000s)		54,578	260,284	314,862	61,050	264,272	325,322	11.9%	1.5%	18.8%	81.2%

Source: The Nielsen Company

Exhibit 4 shows the population of the community by race by illustrating three different categories, white, black, and other residents. In total, the population breakdown for the community shows a larger percentage of white residents in comparison with Texas and the United States. The black population in the community constitutes a smaller percentage of residents in comparison to the data for Texas and the United States. The table illustrates that, in 2013, 75.8% of the people in the community are white, 6.1% of the people in the community are black and 18.1% of the people in the community are in the “Other” category.



**Exhibit 4
Midland Memorial Hospital
Estimated 2013 Population vs Projected 2018 Population with Percent Difference**

Zip Code	City	Estimated 2013				Projected 2018				% Difference				% of 2018 Total		
		White	Black	Other	Total	White	Black	Other	Total	White	Black	Other	Total	White	Black	Other
79705	Midland	27,312	3,255	4,166	34,733	29,253	3,389	4,771	37,413	7.1%	4.1%	14.5%	7.7%	78.2%	9.1%	12.8%
79701	Midland	19,081	3,072	7,506	29,659	20,834	3,023	8,201	32,058	9.2%	-1.6%	9.3%	8.1%	65.0%	9.4%	25.6%
79707	Midland	28,640	1,521	4,766	34,927	30,674	1,730	5,940	38,344	7.1%	13.7%	24.6%	9.8%	80.0%	4.5%	15.5%
79703	Midland	15,810	1,163	4,274	21,247	16,413	1,290	5,036	22,739	3.8%	10.9%	17.8%	7.0%	72.2%	5.7%	22.1%
79706	Midland	16,359	349	3,938	20,646	17,592	411	4,979	22,982	7.5%	17.8%	26.4%	11.3%	76.5%	1.8%	21.7%
79720	Big Spring	24,695	2,369	6,851	33,915	25,178	2,762	1,030	28,970	2.0%	16.6%	-85.0%	-14.6%	86.9%	9.5%	3.6%
79782	Stanton	3,886	70	666	4,622	4,268	73	745	5,086	9.8%	4.3%	11.9%	10.0%	83.9%	1.4%	14.6%
79714	Andrews	12,789	238	3,202	16,229	14,301	258	3,805	18,364	11.8%	8.4%	18.8%	13.2%	77.9%	1.4%	20.7%
PROVIDER SERVICE AREA		148,572	12,037	35,369	195,978	158,513	12,936	34,507	205,956	6.7%	7.5%	-2.4%	5.1%	77.0%	6.3%	16.8%
TEXAS (1,000s)		18,254	3,138	4,905	26,297	19,238	3,438	5,657	28,333	5.4%	9.6%	15.3%	7.7%	67.9%	12.1%	20.0%
UNITED STATES (1,000s)		225,086	40,007	49,769	314,862	228,212	41,797	55,313	325,322	1.4%	4.5%	11.1%	3.3%	70.1%	12.8%	17.0%

Source: The Nielsen Company



Socioeconomic Characteristics of the Community

The socioeconomic characteristics of a geographic area influence the way residents access health care services and perceive the need for health care services within society. The economic status of an area may be assessed by examining multiple variables within the community. The following exhibits are a compilation of data that includes household income and poverty, labor force, employees by types of industry, employment rates, and educational attainment for the community. These standard measures will be used to compare the socioeconomic status of the community to the state of Texas and the United States.

Income and Employment

Exhibit 5 presents the average and median income for households in each county. In total, the measures are projected to increase an average of 1.6% and 1.1% respectively. However, some individual counties are expected to a decrease in average household income as low as 2.6%, whereas, the average household income is anticipated to increase for other zip codes from 3.5% to 12.6%.

Exhibit 5
Midland Memorial Hospital
Estimated Family Income and Wealth for 2013 and 2018 with Percent Difference

Zip Code	City	Estimated 2013		Projected 2018		% Difference	
		Avg. Household Income	Median Household Income	Avg. Household Income	Median Household Income	Avg. Household Income	Median Household Income
79705	Midland	\$ 92,866	\$ 59,687	\$ 90,903	\$ 57,976	-2.1%	-2.9%
79701	Midland	\$ 54,061	\$ 38,016	\$ 52,629	\$ 36,965	-2.6%	-2.8%
79707	Midland	\$ 97,842	\$ 67,269	\$ 96,389	\$ 65,845	-1.5%	-2.1%
79703	Midland	\$ 55,036	\$ 48,462	\$ 53,957	\$ 47,163	-2.0%	-2.7%
79706	Midland	\$ 60,575	\$ 49,124	\$ 59,455	\$ 47,841	-1.8%	-2.6%
79720	Big Spring	\$ 55,234	\$ 41,111	\$ 62,196	\$ 45,536	12.6%	10.8%
79782	Stanton	\$ 56,518	\$ 42,662	\$ 60,562	\$ 45,653	7.2%	7.0%
79714	Andrews	\$ 70,178	\$ 48,878	\$ 72,609	\$ 50,864	3.5%	4.1%
PROVIDER SERVICE AREA		\$ 67,789	\$ 49,401	\$ 68,588	\$ 49,730	1.6%	1.1%
TEXAS		\$ 68,955	\$ 48,646	\$ 71,829	\$ 49,975	4.2%	2.7%
UNITED STATES		\$ 69,637	\$ 49,297	\$ 71,917	\$ 49,815	3.3%	1.1%

Source: The Nielsen Company



Exhibit 6 presents the average annual resident unemployment rates for the counties included in the defined community. As Exhibit 6 illustrates, unemployment rates in some counties peaked in 2009 and 2010 and all counties saw a decrease in the unemployment rate in 2011. As a whole the unemployment rate for these four counties is stronger than that of Texas and that of the United States.

Exhibit 6
Midland Memorial Hospital
Unemployment Rates (%)
2007 - 2011

County	2007	2008	2009	2010	2011
Midland County	2.9	2.9	5.5	5.4	4.4
Howard County	4.1	4.6	7.3	7.5	7.1
Martin County	3.6	3.6	4.7	5.7	5.4
Andrews County	3.2	3.4	7.0	6.0	5.0
Texas	4.4	4.9	7.5	8.2	8.0
United States	4.6	5.8	9.3	9.6	8.9

Source: FDIC



Exhibit 7 summarizes employment by major industry for the four counties.

**Exhibit 7
Midland Memorial Hospital
Employment by Major Industry
2010**

Major Industries	Midland County	%	Howard County	%	Martin County	%	Andrews County	%
Goods-producing								
Natural Resources and Mining	12,046	17.9%	863	7.1%	199	14.8%	1,330	24.9%
Construction	3,480	5.2%	597	4.9%	-	0.0%	563	10.5%
Manufacturing	2,595	3.9%	837	6.9%	-	0.0%	138	2.6%
Unclassified	-	0.0%	-	0.0%	170	12.6%	1	0.0%
Service-providing								
Trade, Transportation, and Utilities	13,417	19.9%	1,974	16.3%	282	21.0%	813	15.2%
Information	1,139	1.7%	64	0.5%	-	0.0%	35	0.7%
Financial Activities	3,222	4.8%	407	3.4%	36	2.7%	316	5.9%
Professional and Business Services	7,316	10.9%	270	2.2%	12	0.9%	262	4.9%
Education and Health Services	6,299	9.3%	1,851	15.3%	127	9.4%	164	3.1%
Leisure and Hospitality	6,872	10.2%	1,082	9.0%	-	0.0%	327	6.1%
Other Services	2,223	3.3%	315	2.6%	105	7.8%	157	2.9%
Federal Government	651	1.0%	935	7.7%	18	1.3%	24	0.4%
State Government	524	0.8%	758	6.3%	23	1.7%	26	0.5%
Local Government	7,590	11.3%	2,126	17.6%	372	27.7%	1,192	22.3%
Total Employment	67,374	100%	12,079	100%	1,344	100%	5,348	100%



Exhibit 8 lists the major employers by county:

Exhibit 8
Midland Memorial Hospital
Employment by Top Employers (> 100 Employees)

Top Employers	County			
	Midland	Howard	Martin	Andrews
Basic Energy Services	100-499			
City of Midland	100-499			
Compressor Systems Incorporated	500-999			
Concho Resources	500-999			
Midland Independent School District	1000+			
Midland Memorial Hospital	1000+			
PB Tech Prep	500-999			
Rig Movers	500-999			
Big Spring State Hospital		500-999		
Scenic Mountain Medical Center		100-499		
Veteran Hospital		500-999		
Stanton ISD			100-499	
Waste Control Specialists LLC.				100-499
Quail Energy Services LLC.				100-499
Permian Residential Care Center				100-499
Permian Regional Medical Center				100-499
Kirby West Manufacturing				100-499
Key Energy Services				100-499
Dennis Porter Incorporated				100-499
Basic Energy Services				100-499
Andrews Senior High School				100-499

Source: Texas Workforce Commission

Source: Texas Economic Development Division

Major industries within the community include health care, services, and manufacturing. The largest employers for the counties selected in the defined community are Compressor Systems Inc., Midland Memorial Hospital, PB Tech Prep, Rig Movers, Big Spring State Hospital, and Veteran Hospital.



Poverty

Exhibit 9 presents the percentage of total population in poverty (including under age 18) and median household income for households in each county versus the state of Texas and the United States.

Exhibit 9
Midland Memorial Hospital
Poverty Estimate: Percentage of Total Population in Poverty and Median Household Income
2010 & 2011

Table with 7 columns: County, 2010 All Persons, 2010 Under Age 18, Median Household Income, 2011 All Persons, 2011 Under Age 18, Median Household Income. Rows include Midland County, Howard County, Martin County, Andrews County, Texas, and United States.

Source: U.S. Census Bureau, Small Areas Estimates Branch

In 2011, a family of two adults and two children was considered to live in poverty if their annual household income fell below \$22,350 and Texas is consistently ranked as a state with the most families living in poverty in the country. In 2010 and 2011, a greater number of all persons and persons under age of 18 in Howard County live below the poverty line in assessment to the Texas and the United States figures. A similar trend shows in 2010 and 2011 for all persons and persons under age 18 in Martin County when compared to the national figures as well. Poverty rates for Midland County and Andrews County rank favorably when compared to both the state of Texas and national averages. Additionally, Howard County and Martin County have a median income lower than the state and national average while the median household income for Midland County and Andrews County exceed the state and national average.



Uninsured

Exhibit 10 presents health insurance coverage status by age (under 65 years) and income (at or below 400 percent) of poverty for each county versus Texas and the United States. The table demonstrates that all of the counties are comparable in insurance coverage with the state trend for insurance coverage which is above the national average for percentage uninsured for both the all income levels population and individuals at or below the poverty line population. The national percent of uninsured people for all income levels is 17.5% while the counties range from 23.9% to 27.3% for the same category. Andrews County is the only county that exceeds the Texas level of 26.3% uninsured for all income levels. For people at or below 400% of the federal poverty level, all of the counties exceed the percentage uninsured when compared to the national figure of 23.9%. Similar to all income levels, Andrews County is the only county that exceeds the Texas state level of 34.2% uninsured in for the at or below 400% of federal poverty line populace.

Exhibit 10
Midland Memorial Hospital
Health Insurance Coverage Status by Age (Under 65 years) and Income (At or Below 400%) of Poverty
2010

County	All Income Levels				At or Below 400% of FPL			
	Under 65 Uninsured	Percent Uninsured	Under 65 Insured	Percent Insured	Under 65 Uninsured	Percent Uninsured	Under 65 Insured	Percent Insured
Midland County	29,402	24.4%	91,205	75.6%	25,564	33.2%	51,508	66.8%
Howard County	5,863	23.9%	18,702	76.1%	5,306	28.5%	13,292	71.5%
Martin County	1,069	25.5%	3,123	74.5%	965	31.4%	2,113	68.6%
Andrews County	3,579	27.3%	9,516	72.7%	3,142	34.9%	5,870	65.1%
Texas (1,000s)	5,821	26.3%	16,277	73.7%	5,216	34.2%	10,043	65.8%
United States (1,000s)	45,640	17.5%	215,786	82.5%	40,139	23.9%	127,906	76.1%

Source: U.S. Census Bureau, SAHIE/ State and County by Demographic and Income Characteristics



Education

Exhibit 11 presents educational attainment by age cohort for individuals in each county versus Texas and the United States.

**Exhibit 11
Midland Memorial Hospital
Educational Attainment - Total Population
2011**

State/ County	Age Cohort				
	18-24	25-34	35-44	45-64	65+
<u>Completing High School</u>					
Midland County	30.4%	85.4%	81.4%	82.5%	75.9%
Howard County	24.6%	65.1%	70.8%	77.5%	71.7%
Martin County	37.7%	77.4%	69.3%	79.9%	58.2%
Andrews County	29.7%	73.1%	77.7%	76.9%	59.6%
Texas	30.9%	82.3%	81.5%	82.3%	72.1%
United States	28.4%	87.3%	87.3%	87.7%	77.8%
<u>Bachelor's Degree or More</u>					
Midland County	5.6%	22.8%	22.6%	25.3%	22.4%
Howard County	5.6%	9.3%	6.5%	13.2%	12.0%
Martin County	4.4%	15.0%	15.5%	8.8%	12.7%
Andrews County	1.7%	16.2%	16.2%	12.5%	11.7%
Texas	7.1%	26.1%	27.8%	27.3%	20.7%
United States	17.7%	31.2%	31.4%	28.6%	21.3%

Source: U.S. Census Bureau, Current Population Survey

Education levels obtained by community residents may impact the local economy. Higher levels of education generally lead to higher wages, less unemployment and job stability. These factors may indirectly influence community health. As noted in Exhibit 11, the amount of people in the community completing high school is below both state and national rates. Only Midland County averages a higher percentage of high school graduates than the Texas state average. All counties are below the national average for high school graduates. Each county averages fewer residents with a ‘bachelor’s degree or more’ than the state and national figures.



Health Status of the Community

This section of the assessment reviews the health status of the residents of Midland, Howard, Martin and Andrews Counties. As in the previous section, comparisons are provided with the state of Texas. This in-depth assessment of the mortality and morbidity data, health outcomes, health factors and mental health indicators of the county residents that make up the community will enable the Hospital to identify priority health issues related to the health status of its residents.

Good health can be defined as a state of physical, mental, and social well-being, rather than the absence of disease or infirmity. According to *Healthy People 2020*, the national health objectives released by the U.S. Department of Health and Human Services, individual health is closely linked to community health. Community health, which includes both the physical and social environment in which individuals live, work, and play, is profoundly affected by the collective behaviors, attitudes, and beliefs of everyone who lives in the community. Healthy people are among a community’s most essential resources.

Numerous factors have a significant impact on an individual’s health status: lifestyle and behavior, human biology, environmental and socioeconomic conditions, as well as access to adequate and appropriate health care and medical services.

Studies by the American Society of Internal Medicine conclude that up to 70 percent of an individual’s health status is directly attributable to personal lifestyle decisions and attitudes. Persons who do not smoke, who drink in moderation (if at all), use automobile seat belts (car seats for infants and small children), maintain a nutritious low-fat, high-fiber diet, reduce excess stress in daily living and exercise regularly have a significantly greater potential of avoiding debilitating diseases, infirmities and premature death.

The interrelationship among lifestyle/behavior, personal health attitude, and poor health status is gaining recognition and acceptance by both the general public and health care providers. Some examples of lifestyle/behavior and related health care problems include the following:

Lifestyle	Primary Disease Factor
Smoking	Lung cancer Cardiovascular disease Emphysema Chronic bronchitis
Alcohol/drug abuse	Cirrhosis of liver Motor vehicle crashes Unintentional injuries Malnutrition Suicide Homicide Mental illness
Poor nutrition	Obesity Digestive disease Depression
Driving at excessive speeds	Trauma Motor vehicle crashes



Lifestyle	Primary Disease Factor
Lack of exercise	Cardiovascular disease Depression
Overstressed	Mental illness Alcohol/drug abuse Cardiovascular disease

Health problems should be examined in terms of morbidity as well as mortality. Morbidity is defined as the incidence of illness or injury and mortality is defined as the incidence of death. Due to limited morbidity data, this health status report relies heavily on death and death rate statistics for leading causes in death the residents of Midland County, Howard County, Martin County, and Andrews County, and the state of Texas. Such information provides useful indicators of health status trends and permits an assessment of the impact of changes in health services on a resident population during an established period of time. Community attention and health care resources may then be directed to those areas of greatest impact and concern.

County Health Synopses (Leading Causes of Death & Health Outcomes and Factors)

A number of different health factors shape a community’s health outcomes. The leading cause of resident deaths compares the county rates of death to the State of Texas rates of death. Additional details related to the leading causes of death for each of the counties in the Hospital’s community are included in Exhibits 12 – 13. The County Health Rankings model includes four types of health factors: health behaviors, clinical care, social and economic and the physical environment. These factors, detailed in Exhibits 14 – 17.1, compare the health factors of each of the counties in the community to Texas and national benchmarks.

A synopsis for each of the counties in the Hospital’s community, noting significant deviations from Texas and national benchmarks, is provided below.

Midland County Health Synopsis:

The following is a summary of causes of death that deviate significantly from national benchmarks for Midland County (see also Exhibit 13).

- Chronic Lower Respiratory Disease - Midland County 30.9% higher than national benchmark
- Accidents and Injuries - Midland County 10.4% higher than national benchmark
- Cerebrovascular Disease - Midland County 30.6% higher than national benchmark
- Diabetes Mellitus - Midland County 11.9% higher than national benchmark
- Alzheimer’s Disease – Midland County 47.2% higher than national benchmark
- Septicemia – Midland County 42.1% higher than national benchmark
- Influenza and Pneumonia – Midland County 51.1% higher than national benchmark
- Intentional Self-Harm – Midland County 31.6% higher than national benchmark
- Chronic Liver Disease and Cirrhosis – Midland County 46.6% higher than national benchmark



The following is a summary of health factors that deviate significantly from national benchmarks for Midland County (see also Exhibit 14 and 14.1).

- Mortality / Premature Death
 - Year of potential life lost before age 75 per 100,000 population – Midland County 7,380; national benchmark 5,466
- Health Behaviors / Adult Smoking
 - Percent of population that smoke at least 100 cigarettes annually and currently smoke - Midland County 21%; national benchmark 14%
- Health Behaviors / Adult Obesity
 - Percent of adults that report a BMI \geq 30 – Midland County 27%; national benchmark 21%
- Health Behaviors / Excessive Drinking
 - Percent of adults that report excessive drinking in the past 30 days – Midland County 13%; national benchmark 8%
- Health Behaviors / Motor Vehicle Crash Death Rate
 - Motor vehicle deaths per 100K population – Midland County 19.0; national benchmark 12.0
- Health Behaviors / Sexually Transmitted Infections
 - Chlamydia rate per 100K population – Midland County 578.0; national benchmark 84
- Health Behaviors / Teen Birth Rate
 - Per 1,000 female population, ages 15-19 – Midland County 72.0; national benchmark 22.0
- Clinical Care / Uninsured Adults
 - Percent of population under 65 without health insurance – Midland County 24%; national benchmark 11%
- Clinical Care / Primary Care Physicians
 - Ratio of population to primary care physicians – Midland County 1,595 to 1; national benchmark 631 to 1
- Clinical Care / Diabetic Screening
 - Percent of diabetic Medicare enrollees that receive HbA1c screening – Midland County 79%; national benchmark 89%
- Clinical Care / Mammography Screening
 - Percent of female Medicare enrollees that receive mammography screening – Midland County 61%; national benchmark 74%



- Social & Economic Factors / Violent Crime Rate
 - Violent crime rate per 100,000 population – Midland County 370; national benchmark 73
- Social & Economic Factors / Children in Poverty
 - Percent of children under age 18 in poverty – Midland County 22%; national benchmark 13%
- Social & Economic Factors / Children in Single-Parent Households
 - Percent of children that live in household headed by a single parent – Midland County 31%; national benchmark 20%
- Physical Environment / Limited Access to Healthy Foods
 - Percent of population in poverty with limited access to healthy food outlets – Midland County 80%; national benchmark 0%

Howard County Health Synopsis:

The following is a summary of causes of death that deviate significantly from national benchmarks for Howard County (see also Exhibit 13.1).

- Diseases of the Heart – Howard County 11.7% higher than national benchmark
- Malignant Neoplasms – Howard County 14.9% higher than national benchmark
- Chronic Lower Respiratory Disease – Howard County 59.0% higher than national benchmark
- Accidents and Injuries – Howard County 37.4% higher than national benchmark
- Diabetes Mellitus – Howard County 23.2% higher than national benchmark
- Septicemia – Howard County 66.3% higher than national benchmark
- Influenza and Pneumonia – Howard County 41.5% higher than national benchmark

The following is a summary of health factors that deviate significantly from national benchmarks for Howard County (see also Exhibit 15 and 15.1).

- Mortality / Premature Death
 - Year of potential life lost before age 75 per 100,000 population – Howard County 10,201; national benchmark 5,466
- Health Behaviors / Adult Obesity
 - Percent of adults that report a BMI \geq 30 – Howard County 31%; national benchmark 25%
- Health Behaviors / Motor Vehicle Crash Death Rate
 - Motor vehicle deaths per 100K population – Howard County 21.0; national benchmark 12.0



- Health Behaviors / Sexually Transmitted Infections
 - Chlamydia rate per 100K population – Howard County 482.0; national benchmark 84
- Health Behaviors / Teen Birth Rate
 - Per 1,000 female population, ages 15-19 – Howard County 70.0; national benchmark 22.0
- Clinical Care / Uninsured Adults
 - Percent of population under 65 without health insurance – Howard County 27%; national benchmark 11%
- Clinical Care / Primary Care Physicians
 - Ratio of population to primary care physicians – Howard County 2,173 to 1; national benchmark 631 to 1
- Clinical Care / Preventable Hospital Stays
 - Hospitalization rate for ambulatory-care sensitive conditions per 1,000 Medicare – Howard County 93.0; national benchmark 49.0
- Clinical Care / Diabetic Screening
 - Percent of diabetic Medicare enrollees that receive HbA1c screening – Howard County 80%; national benchmark 89%
- Clinical Care / Mammography Screening
 - Percent of female Medicare enrollees that receive mammography screening – Howard County 46%; national benchmark 74%
- Social & Economic Factors / Violent Crime Rate
 - Violent crime rate per 100,000 population – Howard County 609; national benchmark 73
- Social & Economic Factors / Children in Poverty
 - Percent of children under age 18 in poverty – Howard County 31%; national benchmark 13%
- Social & Economic Factors / Children in Single-Parent Households
 - Percent of children that live in household headed by a single parent – Howard County 39%; national benchmark 20%
- Physical Environment / Limited Access to Health Foods
 - Percent of population in poverty with limited access to healthy food outlets – Howard County 33%; national benchmark 0%



Martin County Health Synopsis:

The following is a summary of causes of death that deviate significantly from national benchmarks for Martin County (see also Exhibit 13.2).

- Diseases of the Heart – Martin County 18.6% higher than national benchmark

The following is a summary of health factors that deviate significantly from national benchmarks for Martin County (see also Exhibit 16 and 16.1).

- Mortality / Premature Death
 - Year of potential life lost before age 75 per 100,000 population – Martin County 10,056; national benchmark 5,466
- Health Behaviors / Adult Obesity
 - Percent of adults that report a BMI \geq 30 – Martin County 29%; national benchmark 25%
- Health Behaviors / Motor Vehicle Crash Death Rate
 - Motor vehicle deaths per 100K population – Martin County 57.0; national benchmark 12.0
- Health Behaviors / Sexually Transmitted Infections
 - Chlamydia rate per 100K population – Martin County 377.0; national benchmark 84
- Health Behaviors / Teen Birth Rate
 - Per 1,000 female population, ages 15-19 – Martin County 64.0; national benchmark 22.0
- Clinical Care / Uninsured Adults
 - Percent of population under 65 without health insurance – Martin County 29%; national benchmark 11%
- Clinical Care / Primary Care Physicians
 - Ratio of population to primary care physicians – Martin County 2,237 to 1; national benchmark 631 to 1
- Social & Economic Factors / Violent Crime Rate
 - Violent crime rate per 100,000 population – Martin County 98; national benchmark 73
- Social & Economic Factors / Children in Poverty
 - Percent of children under age 18 in poverty – Martin County 24%; national benchmark 13%
- Social & Economic Factors / Children in Single-Parent Households
 - Percent of children that live in household headed by a single parent – Martin County 11%; national benchmark 20%



- Physical Environment / Limited Access to Health Foods
 - Percent of population in poverty with limited access to healthy food outlets – Martin County 25%; national benchmark 0%

Andrews County Health Synopsis:

The following is a summary of causes of death that deviate significantly from national benchmarks for Andrews County (see also Exhibit 13.3).

- Diseases of the Heart – Andrews County 15.7% higher than national benchmark
- Malignant Neoplasms – Andrews County 54.4% lower than national benchmark

The following is a summary of health factors that deviate significantly from national benchmarks for Andrews County (see also Exhibit 17 and 17.1).

- Mortality / Premature Death
 - Year of potential life lost before age 75 per 100,000 population – Andrews County 8,801; national benchmark 5,466
- Health Behaviors / Adult Obesity
 - Percent of adults that report a BMI \geq 30 – Andrews County 30%; national benchmark 25%
- Health Behaviors / Motor Vehicle Crash Death Rate
 - Motor vehicle deaths per 100K population – Andrews County 22.0; national benchmark 12.0
- Health Behaviors / Sexually Transmitted Infections
 - Chlamydia rate per 100K population – Andrews County 506.0; national benchmark 84
- Health Behaviors / Teen Birth Rate
 - Per 1,000 female population, ages 15-19 – Andrews County 80.0; national benchmark 22.0
- Clinical Care / Uninsured Adults
 - Percent of population under 65 without health insurance – Andrews County 27%; national benchmark 11%
- Clinical Care / Primary Care Physicians
 - Ratio of population to primary care physicians – Andrews County 1,952 to 1; national benchmark 631 to 1
- Clinical Care / Preventable Hospital Stays
 - Hospitalization rate for ambulatory-care sensitive conditions per 1,000 Medicare – Andrews County 99.0; national benchmark 49.0



- Clinical Care / Diabetic Screening
 - Percent of diabetic Medicare enrollees that receive HbA1c screening – Andrews County 78%; national benchmark 89%
- Clinical Care / Mammography Screening
 - Percent of female Medicare enrollees that receive mammography screening – Andrews County 55%; national benchmark 74%
- Social & Economic Factors / Violent Crime Rate
 - Violent crime rate per 100,000 population – Andrews County 519; national benchmark 73
- Social & Economic Factors / Children in Poverty
 - Percent of children under age 18 in poverty – Andrews County 19%; national benchmark 13%
- Social & Economic Factors / Children in Single-Parent Households
 - Percent of children that live in household headed by a single parent – Andrews County 41%; national benchmark 20%
- Physical Environment / Limited Access to Health Foods
 - Percent of population in poverty with limited access to healthy food outlets – Andrews County 100%; national benchmark 0%

Leading Causes of Death

Exhibit 12 reflects the leading causes of death for the four counties within the community and compares the rates, per hundred thousand, to the state of Texas average rates, per hundred thousand.

Exhibit 12
Midland Memorial Hospital
Selected Causes of Resident Deaths: Number and Rate (2011)

	Midland County	%	Howard County	%	Martin County	%	Andrews County	%
Total Deaths, All Causes	1,051	100.0%	382	100.0%	43	100.0%	115	100.0%
Diseases of the Heart	235	22.4%	84	22.0%	13	30.2%	34	29.6%
Malignant Neoplasms	196	18.6%	82	21.5%		0.0%	17	14.8%
Chronic Lower Respiratory Diseases	76	7.2%	41	10.7%		0.0%		0.0%
Cerebrovascular Disease	69	6.6%	12	3.1%		0.0%		0.0%
Accidents and Injuries	55	5.2%	22	5.8%		0.0%	15	13.0%
Alzheimer's Disease	57	5.4%		0.0%		0.0%		0.0%
Diabetes Mellitus	30	2.9%	11	2.9%		0.0%		0.0%
Nephritis, Nephrotic Syndrome, Nephrosis	19	1.8%		0.0%		0.0%		0.0%
Intentional Self-Harm	22	2.1%		0.0%		0.0%		0.0%
Influenza and Pneumonia	38	3.6%	10	2.6%		0.0%		0.0%
Chronic Liver Disease and Cirrhosis	23	2.2%		0.0%		0.0%		0.0%
Septicemia	23	2.2%	13	3.4%		0.0%		0.0%
Other Causes	208	19.8%	107	28.0%	30	69.8%	49	42.6%

Source: Texas Department of State Health Services



Exhibit 13 compares the number of deaths for Midland County residents, with U.S. Crude Rates and identifies causes of death that statistically differ from U.S. rates.

Exhibit 13
Midland Memorial Hospital
Comparison of Rates for Selected Causes of Death: Rate per 100,000 Residents: Midland County
2011

Selected Cause of Death	Midland County			TX Adjusted Rate	2011 US Adjusted Rate	County Difference from US
	Number of Deaths	Crude Rate	Adjusted Rate			
Total Deaths, All Causes	1,051	800.2	835.0	777.8	747.0	-10.5%
Diseases of the Heart	235	179.0	188.8	182.7	179.1	-5.1%
Malignant Neoplasms	196	149.0	152.0	166.0	172.8	13.7%
Chronic Lower Respiratory Diseases	76	58.0	61.1	43.3	42.2	-30.9%
Cerebrovascular Disease	69	53.0	56.3	44.9	39.1	-30.6%
Accidents and Injuries	55	42.0	42.4	38.9	38.0	-10.4%
Alzheimer's Disease	57	43.0	47.5	27.4	25.1	-47.2%
Diabetes Mellitus	30	23.0	23.6	21.7	20.8	-11.9%
Nephritis, Nephrotic Syndrome, Nephrosis	19	15.0	15.9	18.5	15.3	-3.8%
Intentional Self-Harm	22	17.0	17.7	11.8	12.1	-31.6%
Influenza and Pneumonia	38	29.0	30.9	14.8	15.1	-51.1%
Chronic Liver Disease and Cirrhosis	23	18.0	17.6	11.7	9.4	-46.6%
Septicemia	23	18.0	18.3	14.9	10.6	-42.1%

Source: The Texas Department of State Health Services

Exhibit 13.1 compares the number of deaths for Howard County residents, with U.S. Crude Rates and identifies causes of death that statistically differ from U.S. rates.

Exhibit 13.1
Midland Memorial Hospital
Comparison of Rates for Selected Causes of Death: Rate per 100,000 Residents: Howard County
2011

Selected Cause of Death	Howard County			TX Adjusted Rate	2011 US Adjusted Rate	County Difference from US
	Number of Deaths	Crude Rate	Adjusted Rate			
Total Deaths, All Causes	382	1140.7	949.0	777.8	747.0	-21.3%
Diseases of the Heart	84	251.0	202.8	182.7	179.1	-11.7%
Malignant Neoplasms	82	245.0	203.0	166.0	172.8	-14.9%
Chronic Lower Respiratory Diseases	41	122.0	103.0	43.3	42.2	-59.0%
Cerebrovascular Disease	12	36.0	28.6	44.9	39.1	36.7%
Accidents and Injuries	22	66.0	60.7	38.9	38.0	-37.4%
Alzheimer's Disease						0.0%
Diabetes Mellitus	11	33.0	27.1	21.7	20.8	-23.2%
Nephritis, Nephrotic Syndrome, Nephrosis						0.0%
Intentional Self-Harm						0.0%
Influenza and Pneumonia	10	30.0	25.8	14.8	15.1	-41.5%
Chronic Liver Disease and Cirrhosis						0.0%
Septicemia	13	39.0	31.5	14.9	10.6	-66.3%

Source: The Texas Department of State Health Services



Exhibit 13.2 compares the number of deaths for Martin County residents, with U.S. Crude Rates and identifies causes of death that statistically differ from U.S. rates.

Exhibit 13.2
Midland Memorial Hospital
Comparison of Rates for Selected Causes of Death: Rate per 100,000 Residents: Martin County
2011

Selected Cause of Death	Martin County			TX Adjusted Rate	2011 US Adjusted Rate	County Difference from US
	Number of Deaths	Crude Rate	Adjusted Rate			
Total Deaths, All Causes	43	801.0	758.0	777.8	747.0	-1.5%
Diseases of the Heart	13	242.0	220.1	182.7	179.1	-18.6%
Malignant Neoplasms				166.0	172.8	0.0%
Chronic Lower Respiratory Diseases				43.3	42.2	0.0%
Cerebrovascular Disease				44.9	39.1	0.0%
Accidents and Injuries				38.9	38.0	0.0%
Alzheimer's Disease				27.4	25.1	0.0%
Diabetes Mellitus				21.7	20.8	0.0%
Nephritis, Nephrotic Syndrome, Nephrosis				18.5	15.3	0.0%
Intentional Self-Harm				11.8	12.1	0.0%
Influenza and Pneumonia				14.8	15.1	0.0%
Chronic Liver Disease and Cirrhosis				11.7	9.4	0.0%
Septicemia				14.9	10.6	0.0%

Source: The Texas Department of State Health Services

Exhibit 13.3 compares the number of deaths for Hockley County residents, with U.S. Crude Rates and identifies causes of death that statistically differ from U.S. rates.

Exhibit 13.3
Midland Memorial Hospital
Comparison of Rates for Selected Causes of Death: Rate per 100,000 Residents: Andrews County
2011

Selected Cause of Death	Andrews County			TX Adjusted Rate	2011 US Adjusted Rate	County Difference from US
	Number of Deaths	Crude Rate	Adjusted Rate			
Total Deaths, All Causes	115	797.9	731.0	777.8	747.0	2.2%
Diseases of the Heart	34	236.0	212.5	182.7	179.1	-15.7%
Malignant Neoplasms	17	118.0	111.9	166.0	172.8	54.4%
Chronic Lower Respiratory Diseases				43.3	42.2	0.0%
Cerebrovascular Disease				44.9	39.1	0.0%
Accidents and Injuries	15	104.0	95.3	38.9	38.0	-60.1%
Alzheimer's Disease				27.4	25.1	0.0%
Diabetes Mellitus				21.7	20.8	0.0%
Nephritis, Nephrotic Syndrome, Nephrosis				18.5	15.3	0.0%
Intentional Self-Harm				11.8	12.1	0.0%
Influenza and Pneumonia				14.8	15.1	0.0%
Chronic Liver Disease and Cirrhosis				11.7	9.4	0.0%
Septicemia				14.9	10.6	0.0%

Source: The Texas Department of State Health Services



Health Outcomes and Factors

An analysis of various health outcomes and factors for a particular community can, if improved, help make that community a healthier place to live, learn, work and play. A better understanding of the factors that affect the health of the community will assist with how to improve the community's habits, culture and environment. This portion of the community health needs assessment utilizes information from County Health Rankings, a key component of the Mobilizing Action Toward Community Health (MATCH) project, a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute.

The County Health Rankings model is grounded in the belief that programs and policies implemented at the local, state and federal levels have an impact on the variety of factors that, in turn, determine the health outcomes for communities across the nation. The model provides a ranking method that ranks all 50 states and the counties within each state, based on the measurement of two types of health outcomes for each county: how long people live (mortality) and how healthy people feel (morbidity). These outcomes are the result of a collection of health factors and are influenced by programs and policies at the local, state, and federal levels.

Counties in each of the 50 states are ranked according to summaries of a variety of health measures. Those having high ranks, *e.g.* 1 or 2, are considered to be the "healthiest". Counties are ranked relative to the health of other counties in the same state on the following summary measures:

- Health Outcomes—rankings are based on an equal weighting of one length of life (mortality) measure and four quality of life (morbidity) measures.
- Health Factors—rankings are based on weighted scores of four types of factors:
 - Health behaviors (six measures)
 - Clinical care (five measures)
 - Social and economic (seven measures)
 - Physical environment (four measures)

A more detailed discussion about the ranking system, data sources and measures, data quality and calculating scores and ranks can be found at the website for County Health Rankings (www.countyhealthrankings.org).

As part of the analysis of the needs assessment for the community, the four counties that comprise the majority of the community will be used to compare the relative health status of each county to the state of Texas as well as to a national benchmark. A better understanding of the factors that affect the health of the community will assist with how to improve the community's habits, culture, and environment.

The following tables, from County Health Rankings, summarize the 2012 health outcomes for the four counties that comprise the majority of the Community for the Hospital. Each measure is described and includes a confidence interval or error margin surrounding it.



Midland County

Health Outcomes--rankings are based on an equal weighting of one length of life (mortality) measure and four quality of life (morbidity) measures.

Exhibit 14
Midland Memorial Hospital
Midland County Health Rankings - Health Outcomes

Table with 5 columns: Measure, Midland County, Error Margin, National Benchmark, TX, Rank (of 221). Rows include Mortality (Premature death) and Morbidity (Poor or fair health, Poor physical health days, Poor mental health days, Low birthweight).

Source: Countyhealthrankings.org

A number of different health factors shape a community's health outcomes. The County Health Rankings model includes four types of health factors: health behaviors, clinical care, social and economic and the physical environment.



The following table summarizes the health factors for Midland County.

Exhibit 14.1
Midland Memorial Hospital
Midland County Health Rankings - Health Factors

	Midland County	Error Margin	National Benchmark	TX	Rank (of 221)
<i>Health Behaviors</i>					85
Adult smoking - Percent of adults that report smoking at least 100 cigarettes and that they currently smoke	21%	14-31%	14%	19%	
Adult obesity - Percent of adults that report a BMI >= 30	27%	24-30%	25%	29%	
Physical inactivity - Percent of adults age 20 and over reporting no leisure time physical activity	30%	27-33%	21%	25%	
Excessive drinking - Percent of adults that report excessive drinking in the past 30 days	13%	8-19%	8%	16%	
Motor vehicle crash death rate - Motor vehicle deaths per 100K population	19	16-22	12	17	
Sexually transmitted infections - Chlamydia rate per 100K population	578		84	435	
Teen birth rate - Per 1,000 female population, ages 15-19	72	69-75	22	63	
<i>Clinical Care</i>					35
Uninsured adults - Percent of population under age 65 without health insurance	24%	22-26%	11%	26%	
Primary care physicians - Ratio of population to primary care physicians	1,595:1		631:1	1,378:1	
Preventable hospital stays - Hospitalization rate for ambulatory-care sensitive conditions per 1,000 Medicare enrollees	50.0	46-54	49	73	
Diabetic screening - Percent of diabetic Medicare enrollees that receive HbA1c screening	79.0%	74-84%	89.0%	81.0%	
Mammography screening - Percent of female Medicare enrollees that receive mammography screening	61.0%	56-66%	74.0%	62.0%	
<i>Social & Economic Factors</i>					51
High school graduation - Percent of ninth grade cohort that graduates in 4 years	81%		0%	84%	
Some college - Percent of adults aged 25-44 years with some post-secondary education	57%	54-60%	68%	56%	
Children in poverty - Percent of children under age 18 in poverty	22%	18-27%	13%	26%	
Inadequate social support - Percent of adults without social/emotional support	17%	13-23%	14%	23%	
Children in single-parent households - Percent of children that live in household headed by single parent	31%	27-35%	20%	32%	
Violent crime rate - Violent crime rate per 100,000 population	370		73	503	
<i>Physical Environment</i>					81
Air pollution-particulate matter days - Annual number of unhealthy air quality days due to fine particulate matter	-		-	1	
Air pollution-ozone days - Annual number of unhealthy air quality days due to ozone	-		-	18	
Access to healthy foods - Healthy food outlets include grocery stores and produce stands/farmers' markets	80%		-	62%	
Access to recreational facilities - Rate of recreational facilities per 100,000 population	11		16	7	

Source: Countyhealthrankings.org



Howard County

Health Outcomes--rankings are based on an equal weighting of one length of life (mortality) measure and four quality of life (morbidity) measures.

**Exhibit 15
Midland Memorial Hospital
Howard County Health Rankings - Health Outcomes**

	Howard County	Error Margin	National Benchmark	TX	Rank (of 221)
<i>Mortality</i>					179
Premature death - Years of potential life lost before age 75 per 100,000 population (age-adjusted)	10,201	8,989-11,413	5,466	7,186	
<i>Morbidity</i>					201
Poor or fair health - Percent of adults reporting fair or poor health (age-adjusted)	-		10%	19%	
Poor physical health days - Average number of physically unhealthy days reported in past 30 days (age-adjusted)	4.3	1.6-6.9	2.6	3.6	
Poor mental health days - Average number of mentally unhealthy days reported in past 30 days (age-adjusted)	3.2	1.3-5.1	2.3	3.3	
Low birthweight - Percent of live births with low birthweight (<2500 grams)	10.4%	9.3-11.4%	6.0%	8.2%	

Source: Countyhealthrankings.org

A number of different health factors shape a community’s health outcomes. The County Health Rankings model includes four types of health factors: health behaviors, clinical care, social and economic and the physical environment.



The following table summarizes the health factors for Howard County.

Exhibit 15.1
Midland Memorial Hospital
Howard County Health Rankings - Health Factors

	Howard County	Error Margin	National Benchmark	TX	Rank (of 221)
<i>Health Behaviors</i>					190
Adult smoking - Percent of adults that report smoking at least 100 cigarettes and that they currently smoke	-		14.0%	19.0%	
Adult obesity - Percent of adults that report a BMI >= 30	31.0%	24-39%	25.0%	29.0%	
Physical inactivity - Percent of adults age 20 and over reporting no leisure time physical activity	29%	22-38%	21.0%	25.0%	
Excessive drinking - Percent of adults that report excessive drinking in the past 30 days	-		8.0%	16.0%	
Motor vehicle crash death rate - Motor vehicle deaths per 100K population	21	15-27	12	17	
Sexually transmitted infections - Chlamydia rate per 100K population	566		84	435	
Teen birth rate - Per 1,000 female population, ages 15-19	92	85-99	22	63	
<i>Clinical Care</i>					142
Uninsured adults - Percent of population under age 65 without health insurance	27%	25-30%	11%	26%	
Primary care physicians - Ratio of population to primary care physicians	2,173:1		631:1	1,378:1	
Preventable hospital stays - Hospitalization rate for ambulatory-care sensitive conditions per 1,000 Medicare enrollees	93.0	83-103	49	73	
Diabetic screening - Percent of diabetic Medicare enrollees that receive HbA1c screening	80.0%	71-88%	89.0%	81.0%	
Mammography screening - Percent of female Medicare enrollees that receive mammography screening	46.0%	38-53%	74.0%	62.0%	
<i>Social & Economic Factors</i>					166
High school graduation - Percent of ninth grade cohort that graduates in 4 years	90%		0%	84%	
Some college - Percent of adults aged 25-44 years with some post-secondary education	40%	35-44%	68%	56%	
Children in poverty - Percent of children under age 18 in poverty	31%	23-39%	13%	26%	
Inadequate social support - Percent of adults without social/emotional support	0%		14%	23%	
Children in single-parent households - Percent of children that live in household headed by single parent	39%	31-47%	20%	32%	
Violent crime rate - Violent crime rate per 100,000 population	609		73	503	
<i>Physical Environment</i>					109
Air pollution-particulate matter days - Annual number of unhealthy air quality days due to fine particulate matter	-		-	1	
Air pollution-ozone days - Annual number of unhealthy air quality days due to ozone	-		-	18	
Access to healthy foods - Healthy food outlets include grocery stores and produce stands/farmers' markets	33%		-	62%	
Access to recreational facilities - Rate of recreational facilities per 100,000 population	-		16	7	

Source: Countyhealthrankings.org



Martin County

Health Outcomes--rankings are based on an equal weighting of one length of life (mortality) measure and four quality of life (morbidity) measures.

**Exhibit 16
Midland Memorial Hospital
Martin County Health Rankings - Health Outcomes**

	Martin County	Error Margin	National Benchmark	TX	Rank (of 221)
<i>Mortality</i>					170
Premature death - Years of potential life lost before age 75 per 100,000 population (age-adjusted)	10,056	6,617-13,495	5,466	7,186	
<i>Morbidity</i>					18
Poor or fair health - Percent of adults reporting fair or poor health (age-adjusted)			10%	19%	
Poor physical health days - Average number of physically unhealthy days reported in past 30 days (age-adjusted)			2.6	3.6	
Poor mental health days - Average number of mentally unhealthy days reported in past 30 days (age-adjusted)			2.3	3.3	
Low birthweight - Percent of live births with low birthweight (<2500 grams)	6.0%	3.9-8.1%	6.0%	8.2%	

Source: Countyhealthrankings.org

A number of different health factors shape a community’s health outcomes. The County Health Rankings model includes four types of health factors: health behaviors, clinical care, social and economic and the physical environment.



The following table summarizes the health factors for Martin County.

Exhibit 16.1
Midland Memorial Hospital
Martin County Health Rankings - Health Factors

	Martin County	Error Margin	National Benchmark	TX	Rank (of 221)
<i>Health Behaviors</i>					142
Adult smoking - Percent of adults that report smoking at least 100 cigarettes and that they currently smoke			14.0%	19.0%	
Adult obesity - Percent of adults that report a BMI >= 30	29.0%	22-37%	25.0%	29.0%	
Physical inactivity - Percent of adults age 20 and over reporting no leisure time physical activity	27%	19-36%	21.0%	25.0%	
Excessive drinking - Percent of adults that report excessive drinking in the past 30 days			8.0%	16.0%	
Motor vehicle crash death rate - Motor vehicle deaths per 100K population	57	31-83	12	17	
Sexually transmitted infections - Chlamydia rate per 100K population	377		84	435	
Teen birth rate - Per 1,000 female population, ages 15-19	64	51-77	22	63	
<i>Clinical Care</i>					120
Uninsured adults - Percent of population under age 65 without health insurance	29%	27-32%	11%	26%	
Primary care physicians - Ratio of population to primary care physicians	2,237:1		945:1	1,378:1	
Preventable hospital stays - Hospitalization rate for ambulatory-care sensitive conditions per 1,000 Medicare enrollees			49	73	
Diabetic screening - Percent of diabetic Medicare enrollees that receive HbA1c screening			89.0%	81.0%	
Mammography screening - Percent of female Medicare enrollees that receive mammography screening			74.0%	62.0%	
<i>Social & Economic Factors</i>					16
High school graduation - Percent of ninth grade cohort that graduates in 4 years	100%		0%	84%	
Some college - Percent of adults aged 25-44 years with some post-secondary education	43%	25-61%	68%	56%	
Children in poverty - Percent of children under age 18 in poverty	24%	17-31%	13%	26%	
Inadequate social support - Percent of adults without social/emotional support			14%	23%	
Children in single-parent households - Percent of children that live in household headed by single parent	11%	4-18%	20%	32%	
Violent crime rate - Violent crime rate per 100,000 population	98		73	503	
<i>Physical Environment</i>					184
Air pollution-particulate matter days - Annual number of unhealthy air quality days due to fine particulate matter	-		-	1	
Air pollution-ozone days - Annual number of unhealthy air quality days due to ozone	-		-	18	
Access to healthy foods - Healthy food outlets include grocery stores and produce stands/farmers' markets	25%		-	62%	
Access to recreational facilities - Rate of recreational facilities per 100,000 population	-		16	7	

Source: Countyhealthrankings.org



Andrews County

Health Outcomes--rankings are based on an equal weighting of one length of life (mortality) measure and four quality of life (morbidity) measures.

Exhibit 17
Midland Memorial Hospital
Andrews County Health Rankings - Health Outcomes

Table with 5 columns: Andrews County, Error Margin, National Benchmark, TX, Rank (of 221). Rows include Mortality (Premature death) and Morbidity (Poor or fair health, Poor physical health days, Poor mental health days, Low birthweight).

Source: Countyhealthrankings.org

A number of different health factors shape a community's health outcomes. The County Health Rankings model includes four types of health factors: health behaviors, clinical care, social and economic and the physical environment.



The following table summarizes the health factors for Andrews County.

Exhibit 17.1
Midland Memorial Hospital
Andrews County Health Rankings - Health Factors

	Andrews County	Error Margin	National Benchmark	TX	Rank (of 221)
<i>Health Behaviors</i>					93
Adult smoking - Percent of adults that report smoking at least 100 cigarettes and that they currently smoke			14.0%	19.0%	
Adult obesity - Percent of adults that report a BMI >= 30	30.0%	23-38%	25.0%	29.0%	
Physical inactivity - Percent of adults age 20 and over reporting no leisure time physical activity	28%	20-36%	21.0%	25.0%	
Excessive drinking - Percent of adults that report excessive drinking in the past 30 days	4.00%	1-11%	8.0%	16.0%	
Motor vehicle crash death rate - Motor vehicle deaths per 100K population	22	12-32	12	17	
Sexually transmitted infections - Chlamydia rate per 100K population	506		84	435	
Teen birth rate - Per 1,000 female population, ages 15-19	80	71-89	22	63	
<i>Clinical Care</i>					116
Uninsured adults - Percent of population under age 65 without health insurance	27%	25-29%	11%	26%	
Primary care physicians - Ratio of population to primary care physicians	1,952:1		631:1	1,378:1	
Preventable hospital stays - Hospitalization rate for ambulatory-care sensitive conditions per 1,000 Medicare enrollees	99.0	82-115	49	73	
Diabetic screening - Percent of diabetic Medicare enrollees that receive HbA1c screening	78.0%	65-90%	89.0%	81.0%	
Mammography screening - Percent of female Medicare enrollees that receive mammography screening	55.0%	41-69%	74.0%	62.0%	
<i>Social & Economic Factors</i>					86
High school graduation - Percent of ninth grade cohort that graduates in 4 years	86%		0%	84%	
Some college - Percent of adults aged 25-44 years with some post-secondary education	47%	37-57%	68%	56%	
Children in poverty - Percent of children under age 18 in poverty	19%	14-25%	13%	26%	
Inadequate social support - Percent of adults without social/emotional support			14%	23%	
Children in single-parent households - Percent of children that live in household headed by single parent	41%	30-53%	20%	32%	
Violent crime rate - Violent crime rate per 100,000 population	519		73	503	
<i>Physical Environment</i>					25
Air pollution-particulate matter days - Annual number of unhealthy air quality days due to fine particulate matter	-		-	1	
Air pollution-ozone days - Annual number of unhealthy air quality days due to ozone	-		-	18	
Access to healthy foods - Healthy food outlets include grocery stores and produce stands/farmers' markets	100%		-	62%	
Access to recreational facilities - Rate of recreational facilities per 100,000 population	7		16	7	

Source: Countyhealthrankings.org



Health Care Resources

The availability of health resources is a critical component to the health of a county’s residents and a measure of the soundness of the area’s health care delivery system. An adequate number of health care facilities and health care providers are vital for sustaining a community’s health status. Fewer health care facilities and health care providers can impact the timely delivery of services. A limited supply of health resources, especially providers, results in the limited capacity of the health care delivery system to absorb charity and indigent care as there are fewer providers upon which to distribute the burden of indigent care. This section will address the availability of health care resources to the residents of the four counties in which the community resides.

Hospitals and Other Licensed Facilities and Providers

The Hospital has 212 acute beds and is one of the acute care hospitals located in the community. Residents of the community also take advantage of services provided by hospitals in neighboring counties, as well as services offered by other facilities and providers.

Exhibit 18 summarizes health care providers and services available to the residents of the four counties in the community:

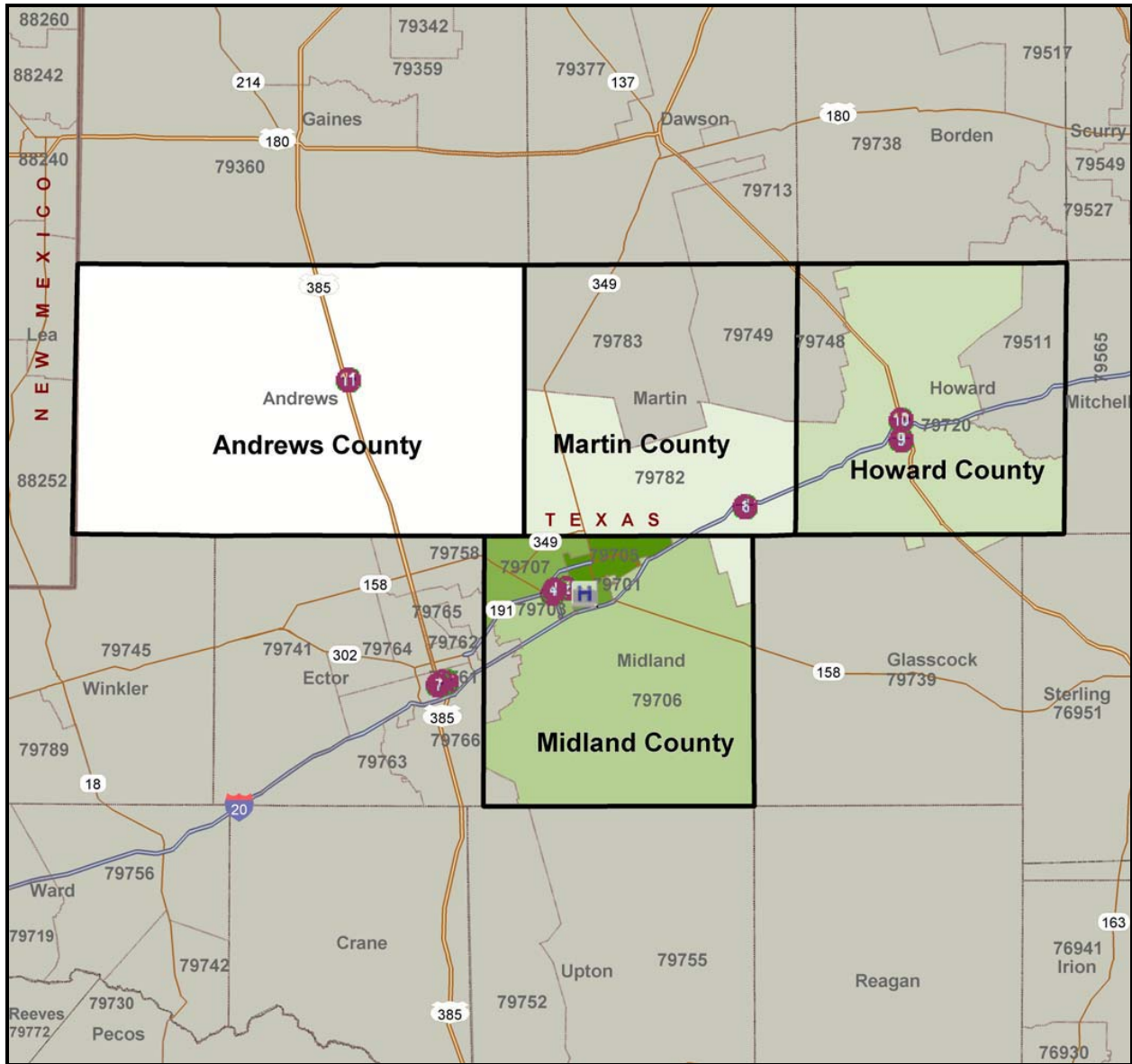
Exhibit 18
Midland Memorial Hospital
Summary of Acute Care Hospitals (2012)

Hospital	Address	Facility Type	Miles from ***	Bed Size	Annual Discharges	Annual Patient Revenue (000's)
1 Midland Memorial Hospital	2200 West Illinois Avenue, Midland, Texas 79701	Acute Care	***	230	10,524	\$ 637,178,112
2 Continue Care Hospital at Midland Memorial	4214 Andrews Highway, Midland, Texas 79703	Long Term	2.3	29	280	\$ 26,982,588
3 Ocean's Healthcare	207 Tradewinds Boulevard, Midland, Texas 79706	Acute Care	3.6	9	22	\$ 16,155,605
4 Healthsouth Rehabilitation Of Midland/Odessa	1800 Heritage Boulevard, Midland, Texas 79707	Rehabilitation	3.6	60	1,202	\$ 30,784,320
5 Basin Healthcare Center	900 E 4th Street, Odessa, Texas 79761	Acute Care	18.7	14	425	\$ 52,849,912
6 Odessa Regional Medical Center	520 E 6th Street, Odessa, Texas 79761	Acute Care	19.2	204	6,473	\$ 507,041,024
7 Medical Center Hospital	500 W 4th Street, Odessa, Texas 79761	Acute Care	19.6	297	14,816	\$ 696,067,264
8 Martin County Hospital	610 N Saint Peter Street, Stanton, Texas 79782	Critical Access	21.4	25	69	\$ 8,716,295
9 Scenic Mountain Medical Center	1601 W 11th Place, Big Spring, Texas 79720	Acute Care	40.1	75	2,805	\$ 182,691,968
10 Big Spring State Hospital	1901 N US Highway 87, Big Spring, Texas 79720	Psychiatric	42.2	118	105	\$ 4,802,876
11 Permian Regional Medical Center	720 Hospital Drive, Andrews, Texas 79714	Acute Care	44.3	44	1,068	\$ 39,310,596

Source: Costreportdata.com



The following map depicts the location of the area hospitals and other health service providers listed in Exhibit 18. Identifying number icons on the map correspond to the numbers in Exhibit 18:



The following is a brief description of the health care services available at each of these facilities:

Continue Care Hospital at Midland Memorial Midland – Located in Midland, Texas, Continue Care Hospital at Midland Memorial is approximately a 5 minute drive Northwest of Midland Memorial Hospital. Consisting of 29 beds, this small hospital provides services that include: cardiac, medically complex treatment, neurology, pulmonary, renal and wound care.

Ocean’s Healthcare – Located in Midland, Texas, Ocean’s Healthcare is approximately a 10 minute drive West of Midland Memorial Hospital. Consisting of 9 beds, this small psychiatric facility specializes in psychiatric and geriatric services.



Healthsouth Rehabilitation of Midland/Odessa – Located in Midland, Texas, Healthsouth Rehabilitation of Midland/Odessa is approximately a 10 minute drive West of Midland Memorial Hospital. Consisting of 60 beds, this medium-sized facility provides services specializing in rehabilitation and home care.

Basin Healthcare Center – Located in Odessa, Texas, Basin Healthcare Center is approximately a 25 minute drive southwest of Midland Memorial Hospital. Consisting of 14 beds, this small hospital provides services that include: emergency, diet and fitness, nutrition, laboratory, radiology, surgery and women’s services.

Odessa Regional Medical Center – Located in Odessa, Texas, Odessa Regional Medical Center is approximately a 25 minute drive southwest of Midland Memorial Hospital. Consisting of 204 beds, this large facility provides specialties and services that include: bariatric, cancer, cardiac, emergency, patient and family centered care, pediatric, surgical, rehabilitation and women’s services.

Medical Center Hospital – Located in Odessa, Texas, Medical Center Hospital is approximately a 25 minute drive southwest of Midland Memorial Hospital. Consisting of 297 beds, this large facility provides specialties and services that include: bariatric, cancer, cardiac, emergency, patient and family centered care, pediatric, trauma, surgical, rehabilitation, and women’s services.

Martin County Hospital – Located in Stanton, Texas, Martin County Hospital is approximately a 25 minute drive East of Midland Memorial Hospital. Consisting of 25 beds, this small hospital provides specialties and services that include: cardiac, emergency, home health, laboratory, pediatric dentistry, physical therapy, surgical and ultrasound services.

Scenic Mountain Medical Center – Located in Big Spring, Texas, Scenic Mountain Medical Center is approximately a 40 minute drive East of Midland Memorial Hospital. Consisting of 75 beds, this medium-sized facility provides specialties and services that include: cardiac, emergency, family medicine, laboratory, rehabilitation, surgical urology and women’s health.

Big Spring State Hospital – Located in Big Spring, Texas, Big Spring State Hospital is approximately a 40 minute drive East of Midland Memorial Hospital. Consisting of 118 beds, this large psychiatric-facility provides psychiatric services to adults 18 years of age and older with mental illnesses.

Permian Regional Medical Center – Located in Andrews, Texas, Permian Regional Medical Center is approximately a 45 minute drive Northwest of Midland Memorial Hospital. Consisting of 44 beds, this small medical center provides specialties and services that include: emergency, home health, intensive, laboratory, pharmacy, physical therapy, pulmonary, radiology and surgery.



Key Informant Interviews

Interviewing key informants (community stakeholders that represent the broad interest of the community with knowledge of or expertise in public health) is a technique employed to assess public perceptions of the county's health status and unmet needs. These interviews are intended to ascertain opinions among individuals likely to be knowledgeable about the community and influential over the opinions of others about health concerns in the community.

Methodology

Interviews with 23 key informants were conducted in the fall of 2013. Informants were determined based on their a.) specialized knowledge or expertise in public health, b.) their affiliation with local government, schools and industry or c.) their involvement with underserved and minority populations.

Interviews were conducted both at the Hospital and in locations more convenient for the informant.

All interviews were conducted by BKD personnel using a standard questionnaire. A copy of the interview instrument is included in *Appendix B*. A summary of their opinions is reported without judging the truthfulness or accuracy of their remarks. Community leaders provided comments on the following issues:

- Health and quality of life for residents of the primary community
- Barriers to improving health and quality of life for residents of the primary community
- Opinions regarding the important health issues that affect community residents and the types of services that are important for addressing these issues
- Delineation of the most important health care issues or services discussed and actions necessary for addressing those issues

Interview data was initially recorded in narrative form. Themes in the data were identified and representative quotes have been drawn from the data to illustrate the themes. Informants were assured that personal identifiers such as name or organizational affiliations would not be connected in any way to the information presented in this report. Therefore, quotes included in the report may have been altered slightly to preserve confidentiality.

This technique does not provide a quantitative analysis of the leaders' opinions, but reveals community input for some of the factors affecting the views and sentiments about overall health and quality of life within the community.

Key Informant Profiles

Key informants from the community (see *Appendix A* for a list of key informants) worked for the following types of organizations and agencies:

- Social service agencies
- Local school system
- Local city and county government



- Religious institutions
- Public health agencies
- Industry
- Medical providers

Key Informant Interview Results

As stated earlier, the interview questions for each key informant were identical. The questions on the interview instrument are grouped into four major categories for discussion:

1. General opinions regarding health and quality of life in the community
2. Underserved populations and communities of need
3. Barriers
4. Most important health and quality of life issues

A summary of the leaders' responses by each of these categories follows. Paraphrased quotes are included to reflect some commonly held opinions and direct quotes are employed to emphasize strong feelings associated with the statements. This section of the report summarizes what the key informants said without assessing the credibility of their comments.

1. General opinions regarding health and quality of life in the community

The key informants were asked to rate the health and quality of life in their respective county. They were also asked to provide their opinion whether the health and quality of life had improved, declined or stayed the same over the past few years. Lastly, key informants were asked to provide support for their answers.

The responses ranged from "fair" to "very good"; however, most of the key informants described the community's health as "average." When asked whether there are groups of people within the community who may experience lower quality of life, several informants noted that there are groups of people in the community who have insurance, live healthy lifestyles and have healthy eating habits, whereas other groups of people in the community experience financial struggles, cannot afford insurance, live unhealthy lifestyles and have poor eating habits.

When asked whether the health and quality of life had improved, declined or stayed the same, most of the key informants noted the health and quality of life had improved or at least remained the same over the last few years. However, some key informants noted the quality of life and health in the community has gotten worse or declined over the last few years. Key informants mentioned a variety of sources for the reasons why the health and quality of life had improved, stayed the same or declined. The primary causes and recurring responses include future health outlooks and expectations within the community, an increase in the number of people moving into the area and an increase in medical services and providers. Most of the responses for why the health and quality of life in the community remained the same were the result of barriers or factors preventing people from improving their quality of life. The primary causes and recurring responses included culture and demographics, personal outlook on health, lack of access or knowledge of resources and the need for more primary care physicians.



Many key informants noted that the community had made progress in implementing new programs meant to improve the community's health and quality of life. The progress was attributable to a variety of organizations and collaborative efforts that focused on improving the health and lifestyle of the community. Preventative and education programs have helped spread awareness of the consequences of poor health choices. The increase in clinics, specialists and medical services has helped to provide and offer more types of care and increase the access to care for underserved populations. Several of the key informants were optimistic that these efforts would have a positive effect on the community's quality of life.

Many key informants also noted that the community's culture had a negative impact on people's health choices. Unhealthy habits such as smoking, alcohol and drug use, and eating unhealthy foods are ingrained in many peoples' lifestyles. New programs have helped to change the culture, but more is still needed to be done. Additionally, key informants noted the younger generations are moving closer to the city, while the elder populations remain in the rural areas. Even though more facilities and services have been implemented that focus on the rural areas, the health and quality of life in rural areas has not improved as much as the urban areas as the elderly population in the rural areas continues to increase.

Overall, key informants value the attempts the community has made to improve health and quality of life for its residents, but feel that much more needs to be done. The regional culture, including healthy habits or lack thereof, was generally seen as the reason behind poor health and quality of life. Lack of access was seen as an issue for certain populations. Poor economic conditions and culture are seen as detriments to community health.

2. Underserved populations and communities of need

Key informants were asked to provide their opinions regarding specific populations or groups of people whose health or quality of life may not be as good as others. Key informants were also asked to provide their opinions as to why they thought these populations were underserved or in need. Each key informant was asked to consider the specific populations they serve or those with which they usually work. Responses to this question varied.

One underserved group identified by the key informants was the poor and indigent. This group includes people with lower income, uneducated or unskilled workers, uninsured, or homeless. The unemployed are able to obtain assistance, but the "working poor" are caught in the middle. An issue faced by this group is a lot of people are either "too old" or their incomes are "too high" to qualify for Medicaid, but they are too young to qualify for Medicare and do not have enough money to buy their own health insurance. These people suffer from a lack of access to necessary health care, especially preventative care, causing even greater health issues and greater problems for the community. Individuals who are discharged or should be in rehabilitation end up back in the hospitals because there is no continuity of care. Lifestyle choices for these individuals are also poor due to the lack of income and education.

Those struggling with mental and behavioral health issues were identified as another underserved group within the community. This is a problem for both adults and teens, and alcohol and drug use can exacerbate this problem. Key informants said some people lack the understanding of their issues, some people aren't aware of the resources available, and others that refuse to seek the treatment or do not want to abide by the rules or structure of the care. These people subsequently struggle with sustaining steady jobs, which ultimately hinders them from maintaining insurance and income. There is also a lack of care available for those with mental health needs and services. As well as individuals are uninsured and have no income to obtain the care needed.



Another underserved group identified was the minority and immigrant population. They are generally part of the lower income, unemployed, uneducated, uninsured, or homeless group that lacks access to care. Some individuals in this population are not able to take advantages of available opportunities for care and or assistance, such as Medicaid. Although the remaining people are able to get help, many avoid seeking care unless there are no other options while others lack the knowledge of available programs to provide them with assistance.

The elderly population was another group identified as a population that is underserved. There are a variety of factors identified that resulted in this group being underserved within the community. A lot of the elderly do not have access to resources due to a dependency on others, limited transportation means, or rural residency. Additionally, the cost of care and lack of income or funding from family hinders the people from seeking care. Key informants also noted that the care available for the elderly was not the greatest quality, partly due to the caregivers being minimum wage, low-income, or unskilled employees. Care that is provided for the community is limited and infrastructure of nursing home is not seen as sufficient.

Some other groups that were identified as underserved or that should receive more attention were teens and young adults, children in poverty and single parent households, alcohol and drug abuse, and obesity. Teens and young adults need more sexual education and education on safe sexual practices and consequences. Teenage pregnancy and Sexually Transmitted Infections (STIs) in teens and adolescents is increasing. Children were also identified for the outcomes and effect of poor family structure on the health of the children, the increase in childhood obesity, cultural influences, and the lack of education and awareness of health choices. Alcohol, drug abuse, and obesity were also recurring themes that were present in the underserved populations and community. Key informants also noted that eating habits in this group are very poor and serve to an ends of the continuance of their suffering health.

3. Barriers

Key informants were asked what barriers or problems keep community residents from obtaining necessary health services in their community. Responses from key informants include the lack of education and knowledge of available resources, lack of transportation, limited access to care, community culture, financial barriers, lack of physicians and facilities.

The most predominant barriers identified by key informants were the lack of education and knowledge of resources available to the community. Some people don't seek care or assistance because they don't know it is available, while others don't know how to seek and receive assistance and help. Additionally, some people choose not to seek assistance because don't have the knowledge or understanding of the process. Some people do not take advantage of available resources, such as health fairs or education programs because they don't understand the role their life choices play in their health.

The lack of transportation and limited access to care were also very common responses. Some people cannot afford their own vehicles, cannot afford to pay for gas, or are elderly and do not drive or have family to provide transportation assistance. Other related issues include transportation from work to care facilities and back to work, while some simply cannot afford to take off of work for care. Another identified barrier was the distance some people would have to travel to see specialists or receive certain types of care.



Lack of quality physicians and facilities are also a barrier. There is a need for more facilities with there being a presence of only one centralized hospital. The large influx of people moving into the area has created a high demand on for the hospital. Physicians that are proficient in multiple languages are also necessary in order for the cultural barrier to be resolved.

Financial barriers were also noted in responses from key informants. Key informants noted, in the community a lot of people cannot afford insurance, and even those people who can, don't want to spend money on primary care or preventative services. Some people have to choose between necessities and medical care. People also cannot afford and are not willing to pay for healthy foods or other resources available, such as preventative services, which provide health benefits.

As previously noted, individual's attitudes and culture, surrounding health and lifestyle choices, are seen as a barrier. Bad habits are passed down from generation to generation and there are not enough resources to bring about a change. Some people do not see their lifestyle choices as a barrier or health issue and are not inclined to change their way of living.

4. Most important health and quality of life issues

Key informants were asked to provide their opinion as to the most critical health and quality of life issues facing the community. The issues identified most frequently were:

1. Obesity and related health conditions, including obesity and heart diseases
2. Sex education and safe sexual practices for adolescents, including teen pregnancy, Sexually Transmitted Infections, and low birth-weight and premature babies in adolescents
3. Alcohol/drug abuse
4. Access to care/transportation
5. Health education and awareness, including knowledge of available resources
6. Sufficient access to medical professionals and specialists
7. Elderly
8. Childhood health
9. Mental and behavioral health care
10. Financial Concern

Other issues that were reported include the lack of dental care and dental services available to the community, primary care and dental providers who have stopped accepting Medicare patients. Poverty both discourages people from seeking preventative care and encourages unhealthy habits.



Key Findings

A summary of themes and key findings provided by the key informants follows:

- The community, as a whole, tends to have an average and good health and quality of life rating; however, many underserved populations and barriers were identified.
- Quality of health is not always caused by a lack of access. People's attitudes and choices lead to poor health. Residents are apathetic regarding wellness and health as a result of socioeconomic status and culture.
- Information and education on health issues is a problem. There is a significant need to inform, educate and counsel specific categories of the community.
- The Hospital is seen as a significant asset to the community, along with its collaboration and partnership with local and national agencies for the benefit of the community.
- There is a lack of mental and behavioral health services.
- Alcohol and drug abuse are seen as a health and quality of life issue.
- Transportation is an issue for people and prevents them from seeking necessary and preventative care.
- While there are many health services available to residents of the community, they are not always fully utilized due to cultural and financial barriers; the programs often suffer due to a lack of funding.



Community Health Input Questionnaire

The Hospital circulated community health input questionnaires in order to gather broad community input regarding health issues. The input process occurred during the months from October through December of 2013.

The community health input questionnaire was intended to gather information regarding the overall health of the community. The results are intended to provide information on different health and community factors. Requested community input included demographics and socioeconomic characteristics, behavioral risk factors, health conditions and access to health resources

Methodology

A web-based tool, Question Pro, was utilized to conduct the community input process electronically. The questionnaire was made available and distributed by the Hospital.

There were 337 questionnaires completed and returned. The ages of the respondents were older than the latest census data reported for the community, with over 51 percent of the respondents being 45 or older, compared to 37 percent in the community. Additionally, over 82 percent of the survey respondents were female, which is significantly higher than the percentage of the community. The respondents also tended to have higher education levels than the community as a whole.

Input Questionnaire

The instrument used for this input process was based largely on the Centers for Disease Control and Prevention (CDC) Behavioral Risk Factor Surveillance System (BRFSS), as well as various other public health surveys and customized questions. The final instrument was developed by the Hospital representatives in conjunction with BKD.



Community Health Input Results

The questionnaire was quite detailed in nature, including many specific questions regarding general health, satisfaction with specific and general providers, and demographic information. A compilation of the results is included in *Appendix C* for each question to allow for a more detailed analysis. Health needs indicated include:

Assessment of Personal Health

When asked to assess their personal health status, 23 percent of the respondents described their health as being “excellent”, and 64 percent stated that their overall health was “good.” 11 percent described their health status as being “fair” and only 2 percent described their current health status as “poor.”

When asked to rate their community as a “healthy community”, only 10 percent of the respondents indicated their community was healthy or very healthy. Nearly 30 percent of the respondents indicated their community was unhealthy or very unhealthy. The remaining 60 percent of the respondents indicated their community was somewhat healthy.

Health Care Access Issues

When asked whether they have insurance, only 35 percent of the respondents reported having health insurance. Of the respondents who reported having insurance, over 64 percent had health insurance that was provided by private insurance companies. Health care access issues are primarily related to cost. Respondents noted the following main reasons for not receiving medical care:

1. Deductible or co-pay was too high, could not afford insurance premiums/too expensive
2. Health care providers’ hours did not fit in schedule/could not get time off work
3. Couldn’t get an appointment
4. Health insurance did not cover procedures

Lifestyle Behavioral Risk Factors

Proper diet and nutrition seem to be a challenge as only approximately 14 percent of the respondents report always eating the daily recommended servings of fruits and vegetables. Almost 76 percent of respondents reported they sometimes, or always, eat fast food at least once a week. Approximately 39 percent of the respondents report that they never exercise, while only approximately 25 percent report exercising at least three times per week. Only approximately 3 percent of the respondents habitually smoke cigarettes, while 25 percent are exposed to secondhand smoke in their home or workplace. Almost 14 percent habitually consume at least 3 alcoholic drinks per day (female) or more than 5 per day (male). Almost none of the respondents indicated they regularly use illegal drugs. Use of seat belts is high (almost 95 percent) and when applicable, respondents’ children use seat belts and/or child safety seats.



Social and Mental Health

Almost 29 percent of the respondents rated their stress level as high or very high on a typical day. Approximately 47 percent of the respondents rated their stress level as moderate on a typical day. Over 28 percent reported that they did less than they would like due of mental health or emotional issues.

Almost 23 percent of respondents reported that their finances are stressful, over 24 percent reported their current employment is stressful, and over 14 percent reported their personal health is stressful. Most people responded with the following when asked how they cope with stress: pray, talk to friends, listen to music, exercise, watch television, talk to family, or read. Just over 1 percent reported they smoke, almost 3 percent reported they drink alcohol, and only 1 person reported they consume illegal drugs.

What do citizens say about the health of their community?

The five most important “health problems:”

1. Obesity and related health conditions (diabetes, heart disease and high blood pressure)
2. Cancer
3. Motor vehicle crash injuries
4. Aging problems
5. Mental health problems

The five most “risky behaviors:”

1. Alcohol abuse
2. Drug abuse
3. Poor eating habits
4. Lack of exercise
5. Tobacco use/ second hand smoke

The five most important factors for a “healthy community:”

1. Affordable and available health care
2. Affordable housing
3. Clean and safe environment
4. Healthy behaviors and lifestyles
5. Affordable and accessible healthy food sources



Additional items to consider in planning

Respondents were asked to provide input as to what items or programs they believe should be considered in planning for the next three years. The following items were recurring suggestions provided:

1. Increased wellness programs that include general health education, preventive procedures/screenings, affordable or free walk-in clinics, and health fairs.
2. Health education programs to increase the awareness of the following specific topics:
 - Nutrition and healthy eating habits
 - Exercise and fitness
 - Obesity and related health issues
 - Stress management
3. Increased hours and availability of primary care physicians, as well as increased number of primary care physicians and specialty physicians
4. Additional programs, services, and financial assistance for people with mental health issues to receive treatment and care.
5. A free on-site exercise and fitness center for use by employees and patients.



Prioritization of Identified Health Needs

Using findings obtained through the community health input questionnaire and collection of primary and secondary data, the Hospital completed an analysis of these inputs (see *Appendices*) to identify community health needs. The following data was analyzed to identify health needs for the community:

Leading Causes of Death

Leading causes of death for the community and the death rates for the leading causes of death for each county within the community were compared to U.S. adjusted death rates. Causes of death in which the county rate compared unfavorably to the U.S. adjusted death rate resulted in a health need for the community.

Health Outcomes and Factors

An analysis of the County Health Rankings health outcomes and factors data was prepared for each county within the community. County rates and measurements for health behaviors, clinical care, social and economic factors and the physical environment were compared to national benchmarks. County rankings in which the county rate compared unfavorably (by greater than 30 percent of the national benchmark) resulted in an identified health need.

Primary Data

Health needs identified through community surveys, focus groups and key informant interviews (if applicable) were included as health needs. Needs for vulnerable populations were separately reported on the analysis in order to facilitate the prioritization process.



As a result, the following summary list of needs was identified:

- Uninsured / Lack of access to services (cost)
- Obesity
- Diabetes
- Lack of primary care physicians
- Heart Disease
- Lack of mental health services
- Poor nutrition / Limited access to healthy foods
- Physical inactivity
- Lack of health education
- Language / Cultural barriers / Lifestyle
- Lack of specialty and dental health services
- Children / Childcare / Childhood Health
- Sex education and safe sexual practices
- Transportation
- Excessive alcohol / Drug use
- COPD/Respiratory Disease
- Cancer / Malignant Neoplasms
- Emergency Response Services
- Mammography screenings
- Cerebrovascular Disease
- Accidents and injuries



To facilitate prioritization of identified health needs, a ranking and prioritization process was used. Health needs were ranked based on the following seven factors. Each factor received a score between 0 and 5.

- 1) **How many people are affected by the issue or size of the issue?** For this factor ratings were based on the percentage of the community who are impacted by the identified need. The following scale was utilized. >25% of the community= 5; >15% and <25%=4; >10% and <15%=3; >5% and <10%=2 and <5%=1.
- 2) **What are the consequences of not addressing this problem?** Identified health needs which have a high death rate or have a high impact on chronic diseases received a higher rating for this factor.
- 3) **The impact of the problem on vulnerable populations.** Needs identified which pertained to vulnerable populations were rated for this factor.
- 4) **How important the problem is to the community.** Needs identified through community surveys and/or focus groups were rated for this factor.
- 5) **Prevalence of common themes.** The rating for this factor was determined by how many sources of data (Leading Causes of Death, Primary Causes for Inpatient Hospitalization, Health Outcomes and Factors and Primary Data) identified the need.

Each need was ranked based on the five prioritization metrics.



**Exhibit 19
Midland Memorial Hospital
Prioritization of Health Needs**

Health Need	How many people are affected by the issue?	What are the consequences of not addressing this problem?	What is the impact on vulnerable populations?	How Important is it to the community?	How many sources identified the need?	Total Score
1 Uninsured / Lack of Access to Services (Cost)	5	5	5	5	3	23
2 Obesity	3	5	4	4	4	20
3 Diabetes	3	5	4	4	4	20
4 Lack of Primary Care Physicians	5	4	4	3	3	19
5 Diseases of the Heart	3	5	4	4	3	19
6 Lack of Mental Health Services	5	4	3	4	2	18
7 Poor Nutrition & Available Health Foods	4	5	3	3	3	18
8 Physical Inactivity	3	5	3	4	3	18
9 Lack of Health Education	3	5	3	5	2	18
10 Language / Cultural Barriers / Lifestyle	5	5	3	3	1	17
11 Lack of Specialty and Dental Health Services	5	4	4	2	2	17
12 Children / Childcare / Childhood Health	4	5	2	3	3	17
13 Transportaion	5	4	3	3	1	16
14 Sex Education and Safe Sexual Practices	3	5	2	4	2	16
15 Excessive Alcohol / Drug use	2	5	2	3	3	15
16 Chronic Lower Respiratory Diseases	3	2	1	3	1	10
17 Cancer / Malignant Neoplasms	1	4	1	2	2	10
18 Emergency Response Services	2	4	1	1	1	9
19 Mammography Screenings	2	1	1	1	1	6
20 Cerebrovascular Disease	2	1	1	1	1	6



The Hospital's management reviewed the identified needs reported in *Exhibit 19*. Through discussion and debate, management agreed on priorities the Hospital should focus on for fiscal years 2014-2016.

The Hospital has determined the following to be priority areas that will be addressed through its implementation strategy.

1. Uninsured / Lack of access to services (cost)
2. Obesity
3. Diabetes
4. Lack of primary care physicians
5. Heart Disease
6. Lack of mental health services
7. Poor nutrition
8. Physical inactivity
9. Lack of health education
10. Lack of specialty health services



Texas Regional Healthcare Partnership Plan

In January 2012, Region 14 of the Texas Regional Healthcare Partnership issued the Texas Healthcare Transformation and Quality Improvement Program Regional Healthcare Partnership Plan for RHP 14. The Texas Healthcare Transformation and Quality Improvement Program was designed to encourage “activities that support hospitals’ collaborative efforts to improve access to care and the health of the patients and families they serve.” Consistent with that goal, the overarching goal and vision of the Texas Regional Healthcare Partnership is to move toward a realization of the triple aim:

1. Improving the patient experience of care (including quality and satisfaction)
2. Improving the health of populations; and
3. Reducing the per capita cost of health care.

In addition, addressing gaps in access to care (both physical and behavioral health services) is a key focus of the regional healthcare partnership.

The area covered by the report includes 16 counties and includes over 385,000 people. Approximately 60% of the regional population is either uninsured or enrolled in some form of publicly funded health coverage. The community served by the Hospital is located with the area covered by the report.

As described in the report, Region 14 is an area where patients face many challenges in accessing primary care, acute care, and mental and behavioral health services. Key health challenges include high numbers of medically underserved areas/populations, health professional shortages in primary care and mental health, lack of sufficient specialists to serve the patient population, high chronic disease burden, and high rates of potentially preventable hospitalization. Taken as a whole, Region 14 is older, poorer, and less well educated than the state average. As a result, over half of counties in Region 1 are in the bottom quartile of Texas counties in health outcomes.

The report identified eleven major community health needs. The needs identified are:

1. High rates of chronic disease, including cancer, diabetes, heart disease, cardiovascular disease, respiratory diseases, Alzheimer's, and obesity.
2. High costs associated with preventable hospitalization admissions and readmissions.
3. Shortages of health care professionals, including primary care physicians and mental health care providers.
4. Lack of primary care physicians specializing in gynecology or geriatrics.
5. Low utilization of preventative care services and screenings, especially by those with lower incomes.
6. Need to overcome patient access to care barriers. E.g., language, previous experiences, distant travel required for many residents to access cardiac, neonatal, and pediatric intensive care, screening sites, physical rehabilitation, and long-term care hospital services.
7. Need for improvement in prenatal and perinatal care.



8. Shortages in dental care.
9. Need for improvement in adolescent health, with focus on teen pregnancy, suicide, and obesity.
10. Increase palliative care services.
11. High rate of teen pregnancy.

The needs identified by the Region 14 Texas Regional Healthcare Partnership are similar to the needs identified in the Community Health Needs Assessment conducted by the Hospital. An excerpt from the Region 14 Texas Regional Healthcare Partnership is included as *Appendix D* to this report.



APPENDICES



SOURCES



Sources

2013.1 Nielson Demographic Update, The Nielson Company, July 2012

Regional Economic Conditions (RECON). 2006-2011, Federal Deposit Insurance Corporation, 21 Dec. 2012 <<http://www2.fdic.gov/recon/>>

United States Department of Labor: Bureau of Labor Statistics. 2010. U.S. Department of Census. 12 Dec. 2012 <<http://www.bls.gov/cew/>>

Standardized Occupational Components for Research and Analysis of Trends in Employment System. Texas Workforce Commission: Labor Market and Career Information, December 2012.

2011 Poverty and Median Income Estimates – Counties, U.S. Census Bureau, Small Areas Estimate Branch, December 2012.

2010 Poverty and Median Income Estimates – Counties, U.S. Census Bureau, Small Areas Estimate Branch, November 2011.

2010 Health Insurance Coverage Status for Counties and States: Interactive Tables. U.S. Census Bureau, Small Area Health Insurance Estimates. 31 Dec. 2012 <<http://www.census.gov/did/www/sahie/data/interactive/>>.

2009 Health Insurance Coverage Status for Counties and States: Interactive Tables. U.S. Census Bureau, Small Area Health Insurance Estimates. 31 Dec. 2012 <<http://www.census.gov/did/www/sahie/data/interactive/>>.

American FactFinder. United States Census Bureau. 2011 Educational Attainment. <<http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>>.

“Deaths: Final Data for 2010.” National Vital Statistics Report. Centers for Disease Control and Prevention, October 2012.

“Cause of Death: NCHS Rankable Causes, and Non-Rankable.” The Texas Department of State Health Services, Center for Health Statistics. 18 Jan. 2013.

County Health Rankings: A Healthier Nation, County by County. 2012. 21 Dec. 2012 <<http://www.countyhealthrankings.org>>.

2010 Cost Report Data. Online Medicare Cost Report Worksheets and Data Sets. <<http://www.costreportdata.com/index.php>>.

2012 Physician Specialty. U.S. Department of Health and Human Services: Health Resources and Services Administration. <www.arf.hrsa.gov/>.

HealthyPeople.gov. 2012. U.S. Department of Health and Human Services. 21 Dec. 2012 <<http://www.healthypeople.gov/>>.



Acknowledgements



Acknowledgements

Key Informants

Thank you to the following individuals who participated in our key informant interview process:

Bobby Burns, Midland Chamber of Commerce
Chief Price Robinson, Midland Police Department
Dr. Larry Wilson, Midland Memorial Hospital
Dr. Ryder Warren, Midland Independent School District
Drew Anderson, Warren Equipment
Grant Billingsley, Scharbauer Foundation
Guy McCrary, Permian Basin Area Foundation
Jay Hendricks, CBS Channel 7
Dr. Jeffrey Durgin, Midland Surgical Associates
Jerry Morales, Midland City Mayor
Larry Carroll, MHMR
Michael Austin, MCHS
Michael Trost, Midland City Council
Mike Bradford, Midland County
Pastor Roy Smith, True Life Christian Fellowship
Robert Isbell, Midland Fire Department
Russell Meyers, Midland Memorial Hospital
Scott Kidwell, Concho
Sheriff Gary Painter, Midland County Sheriff's Department
Stephanie Murphee, Red Cross
Steve Schorr, First Presbyterian Church
Stewart Doreen, Midland Reporter Telegram
Tammy Ross, Springboard Center



KEY INFORMANT INTERVIEW PROTOCOL



KEY INFORMANT INTERVIEW PROTOCOL

Community Health Needs Assessment for:

Midland Memorial Hospital

Interviewer’s Initials:

Date: Start Time: End Time:

Name: Title:

Agency/Organization:

of years living in County: # of years in current position:

E-mail address:

Introduction: Good morning/afternoon. My name is **[interviewer’s name]**. Thank you for taking time out of your busy day to speak with me. I’ll try to keep our time to approximately 40 minutes, but we may find that we run over – up to 50 minutes total - once we get into the interview. **(Check to see if this is okay).**

[Name of organization] is gathering local data as part of developing a plan to improve health and quality of life in County. Community input is essential to this process. A combination of surveys and key informant interviews are being used to engage community members. You have been selected for a key informant interview because of your knowledge, insight, and familiarity with the community. The themes that emerge from these interviews will be summarized and made available to the public; however, individual interviews will be kept strictly confidential.

To get us started, can you tell me briefly about the work that you and your organization do in the community?

Thank you. Next I’ll be asking you a series of questions about health and quality of life in County. As you consider these questions, keep in mind the broad definition of health adopted by the World Health Organization: 'Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity,' while sharing the local perspectives you have from your current position and from experiences in this community.

Questions:

1. In general, how would you rate health and quality of life in County?
2. In your opinion, has health and quality of life in County improved, stayed the same, or declined over the past few years?
3. Why do you think it has (based on answer from previous question: improved, declined, or stayed the same)?



4. What other factors have contributed to the (based on answer to question 2: improvement, decline **or** to health and quality of life staying the same)?
5. Are there people or groups of people in the County whose health or quality of life may not be as good as others?
 - a. Who are these persons or groups (whose health or quality of life is not as good as others)?
 - b. Why do you think their health/quality of life is not as good as others?
6. What barriers, if any, exist to improving health and quality of life in County?
7. In your opinion, what are the most critical health and quality of life issues in County?
8. What needs to be done to address these issues?
9. In your opinion, what else will improve health and quality of life in the County?
10. Is there someone (who) you would recommend as a “key informant” for this assessment?

Close: Thanks so much for sharing your concerns and perspectives on these issues. The information you have provided will contribute to develop a better understanding about factors impacting health and quality of life in County. Before we conclude the interview,

Is there anything you would like to add?

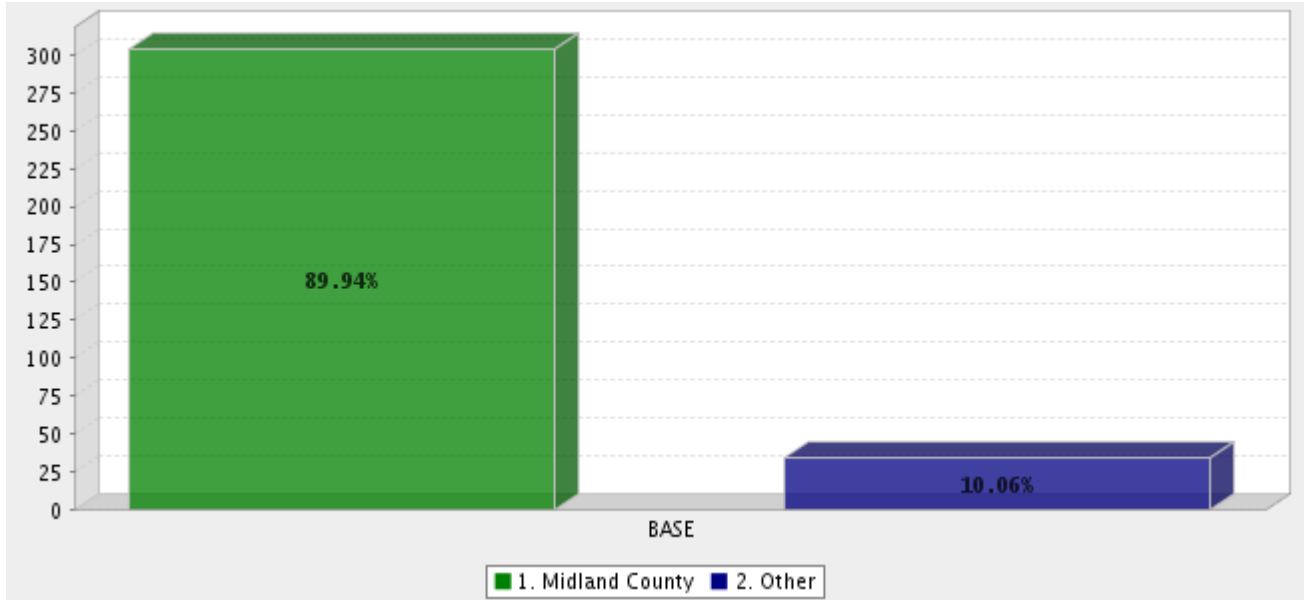
As a reminder, summary results will be made available by the **[Name of organization]** and used to develop a community-wide health improvement plan. Should you have any questions, please feel free to contact _____ at **[Name of organization]**. Here is his/her contact information [provide business card]. Thanks once more for your time. It’s been a pleasure to meet you.



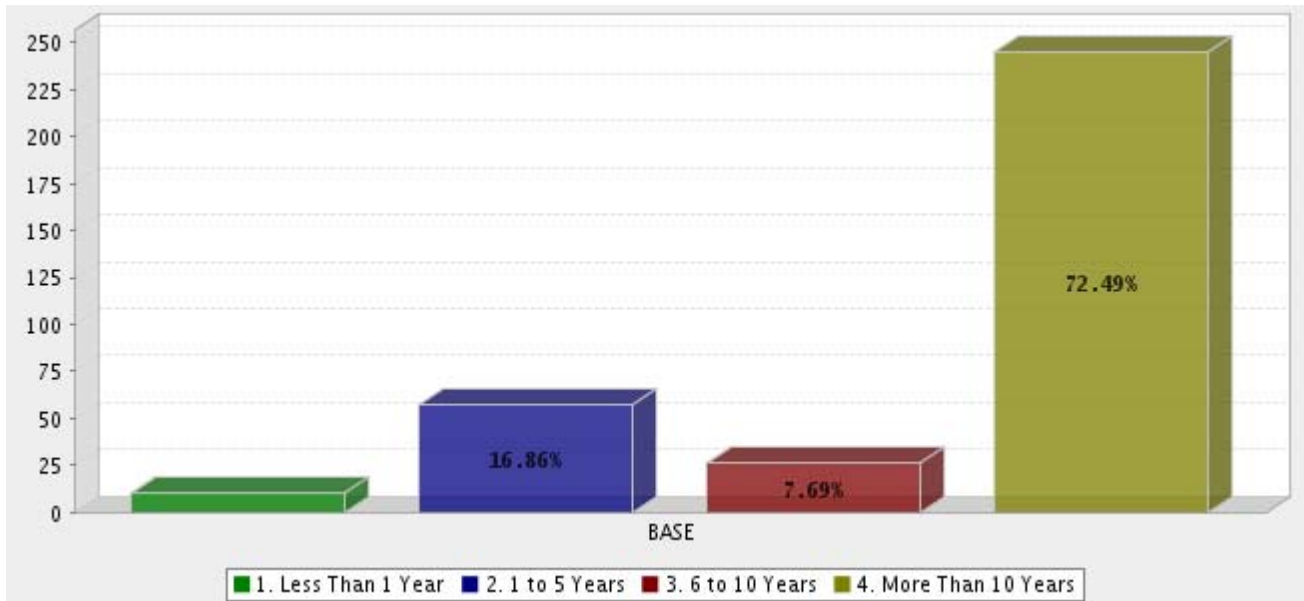
COMMUNITY HEALTH INPUT QUESTIONNAIRE DETAIL RESULTS



Select the county in which you live:

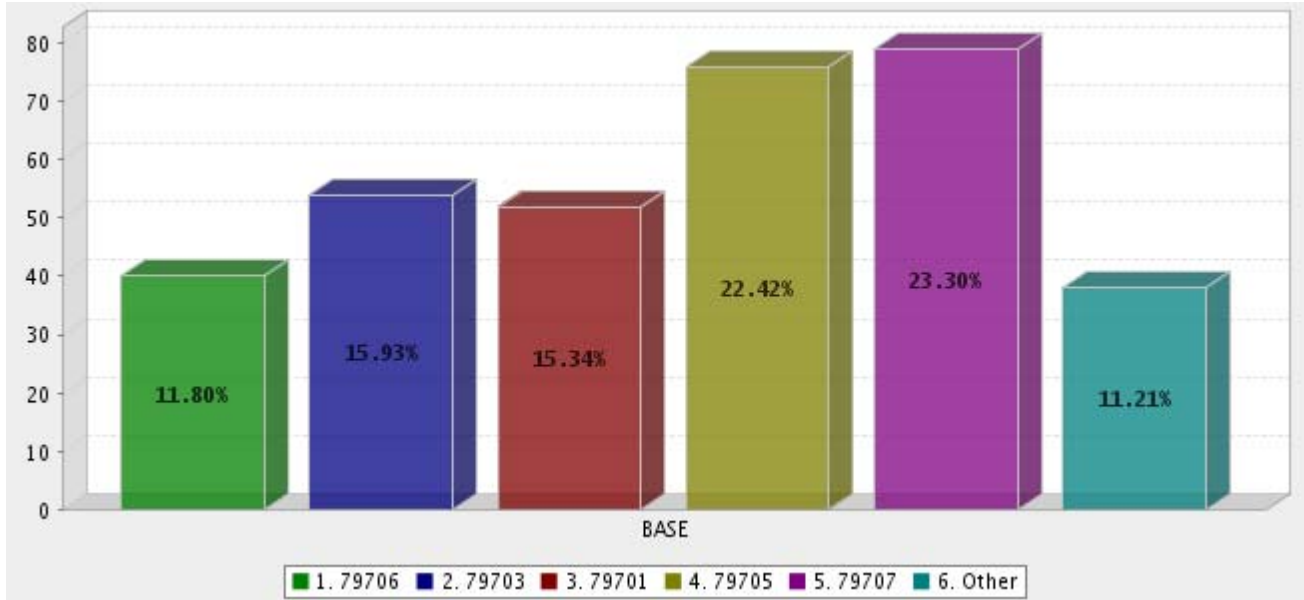


Length of time you have been a resident in your current county:

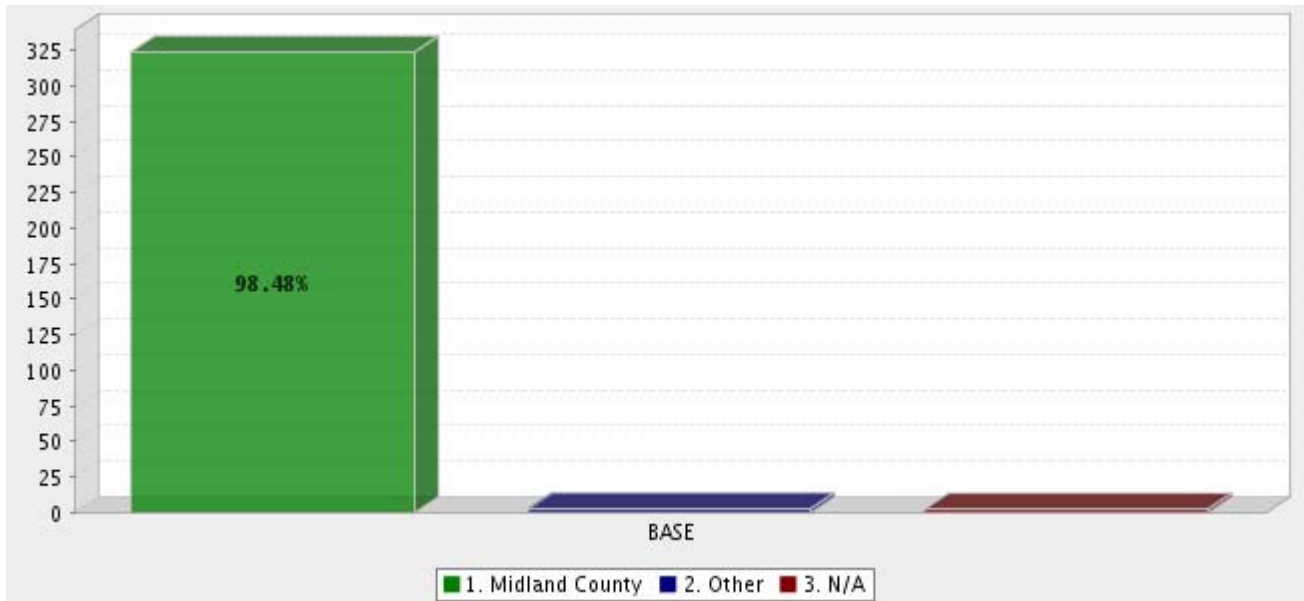




Your 5 digit zip code:

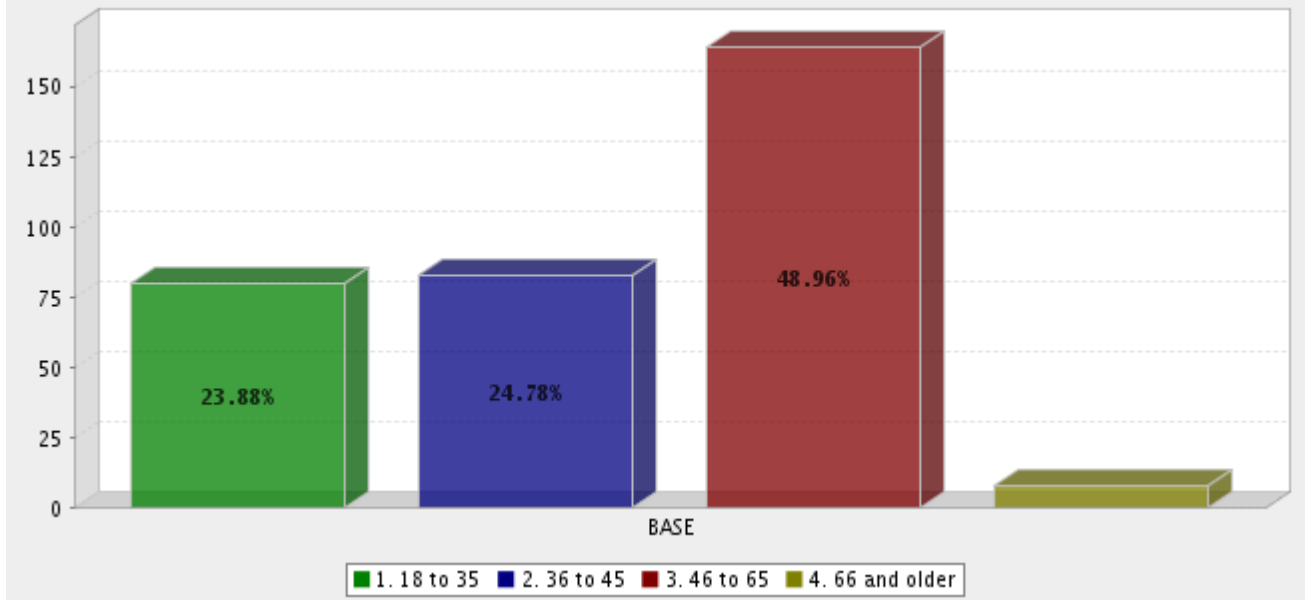


County in which you work:

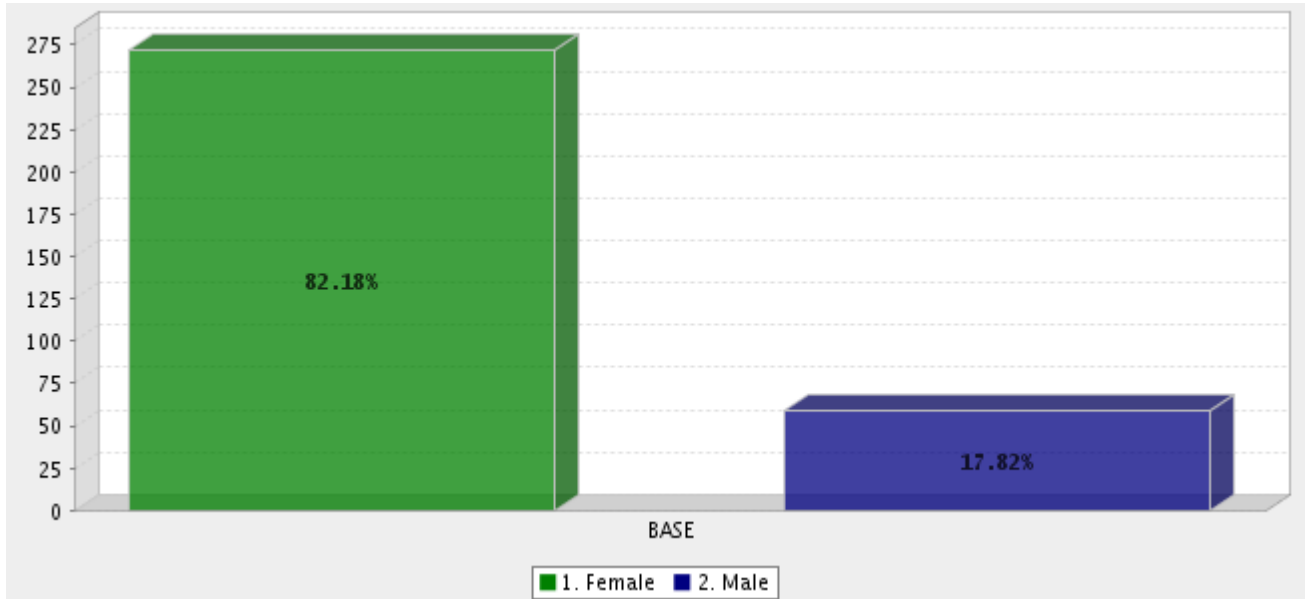




Your current age:

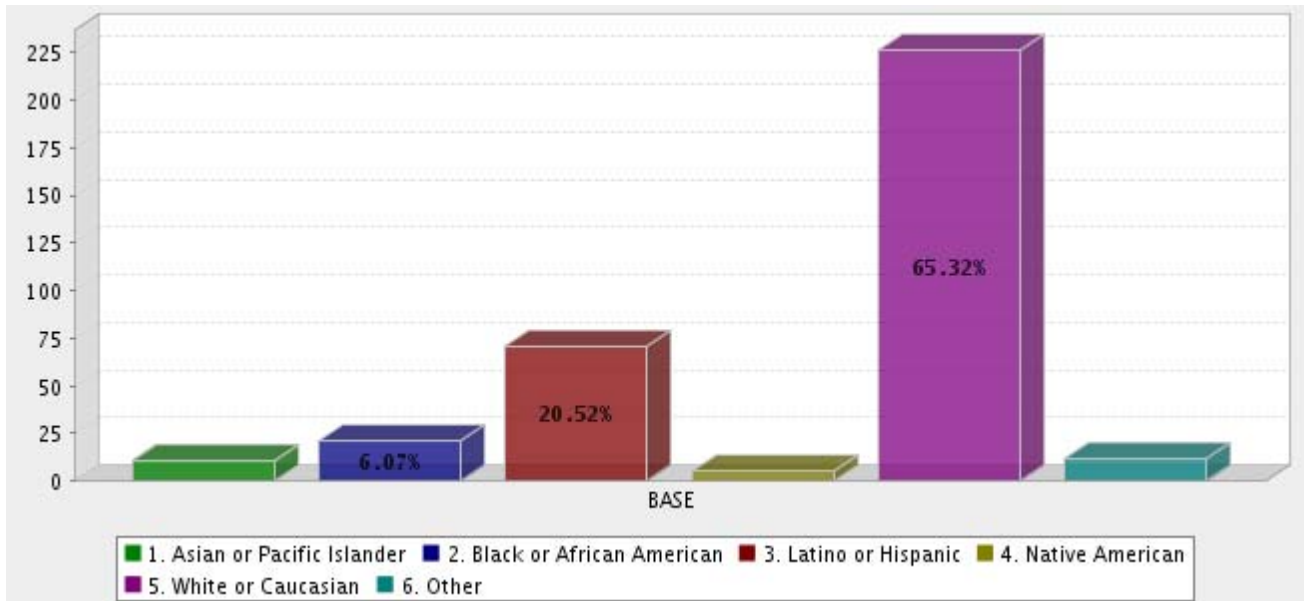


Your sex:

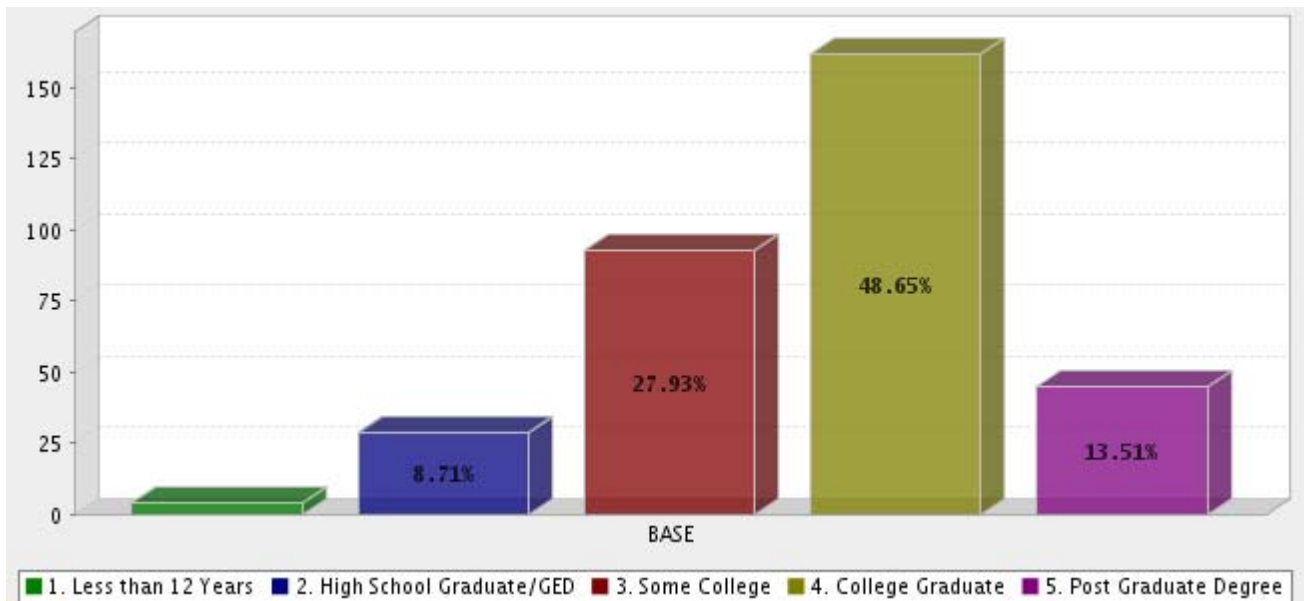




Your racial/ethnic identification (check all that apply):

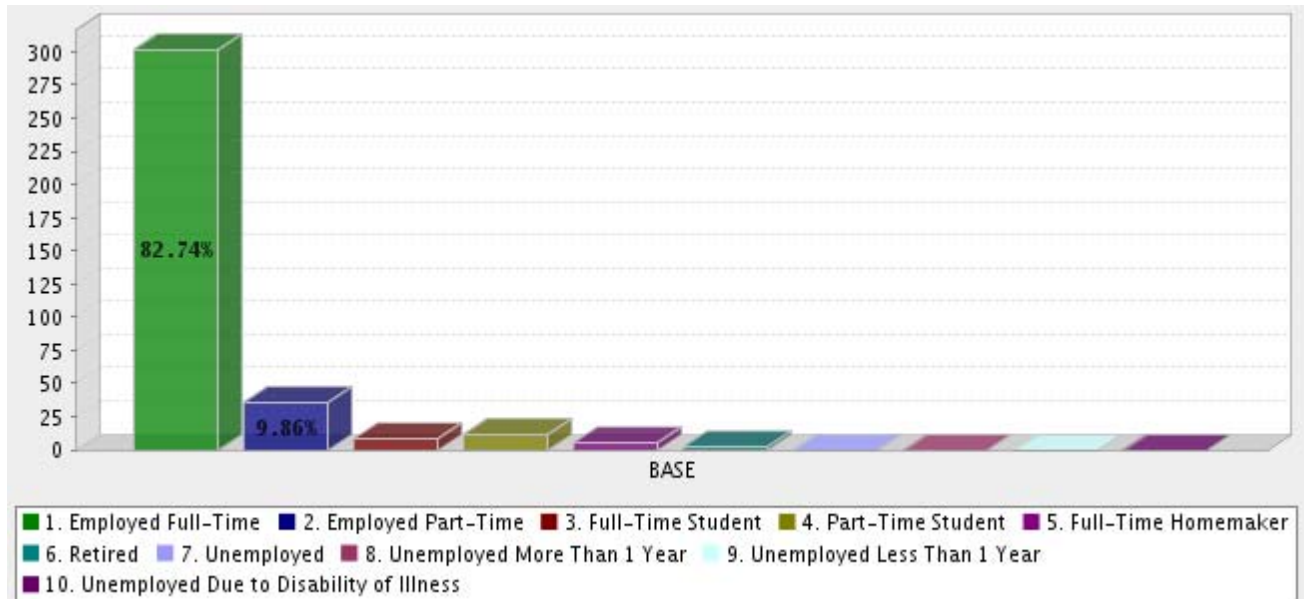


Your highest level of education completed (check one):

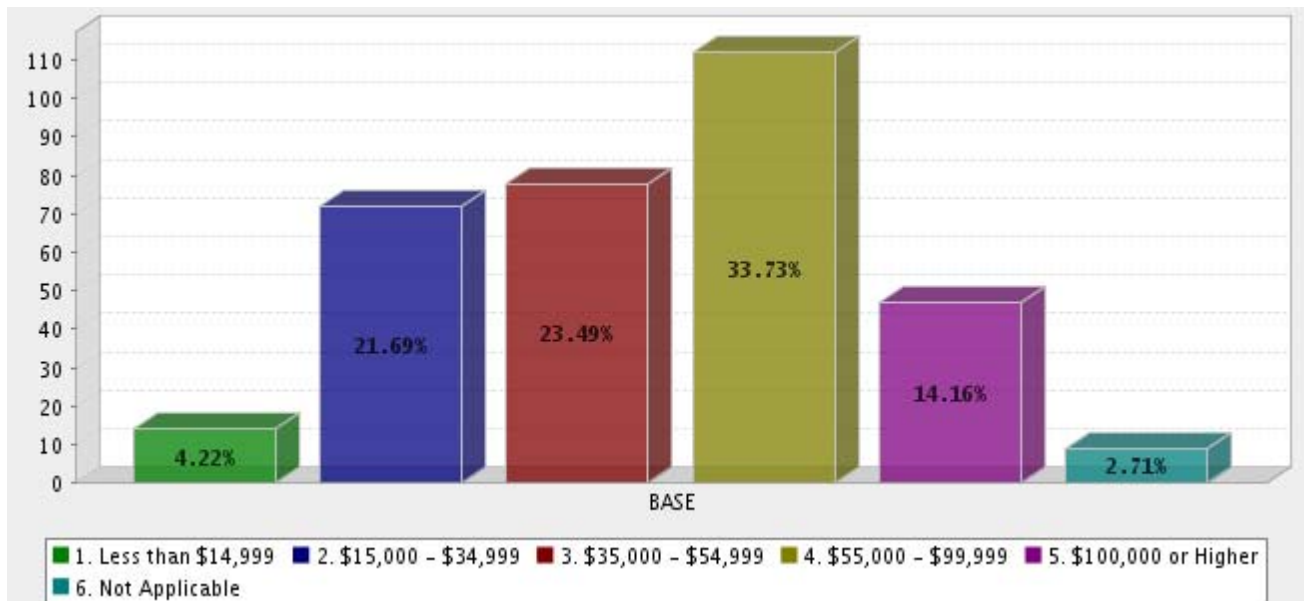




Your employment status (check all that apply):

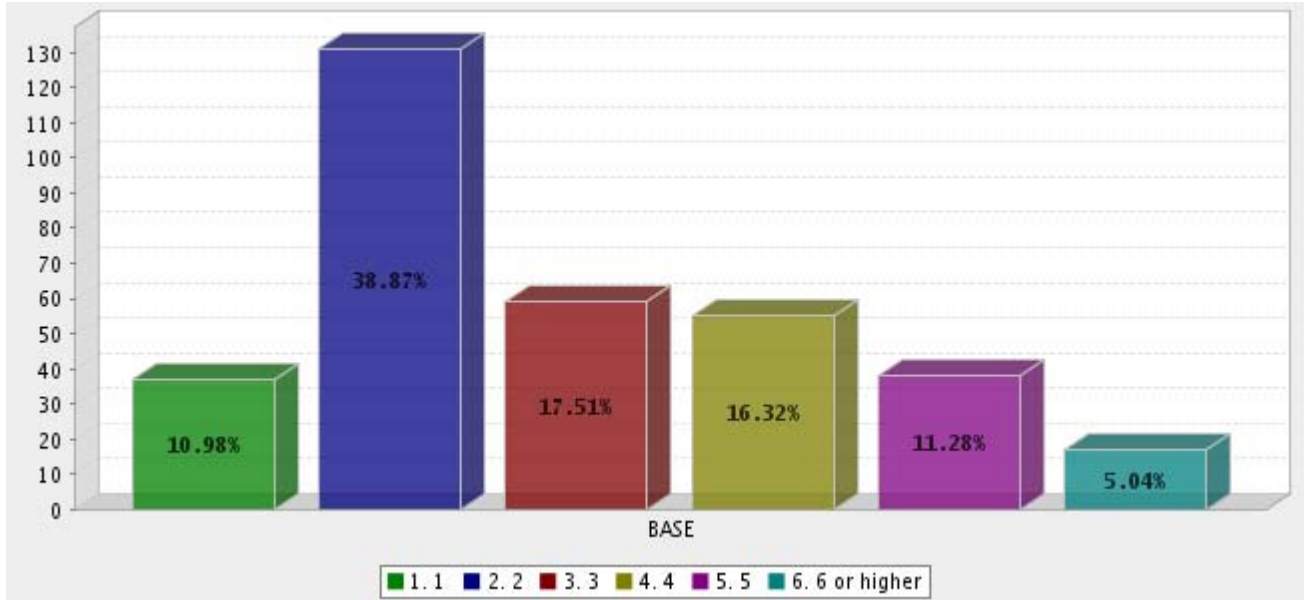


Your yearly income:

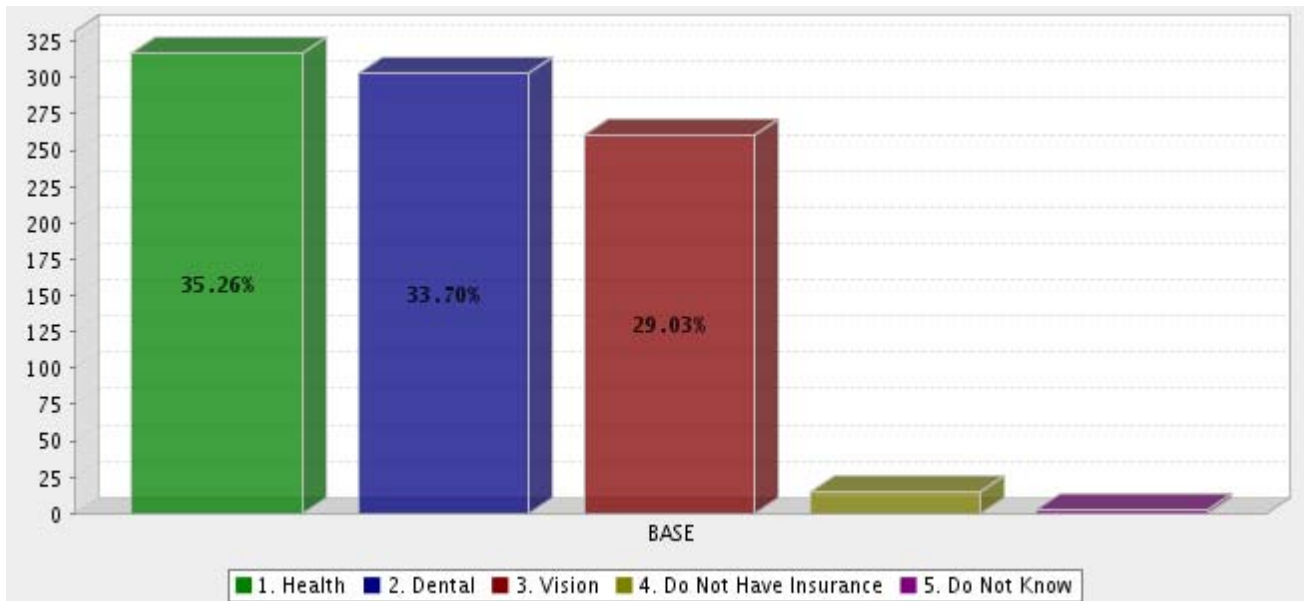




Number of people (including yourself) living in your household:

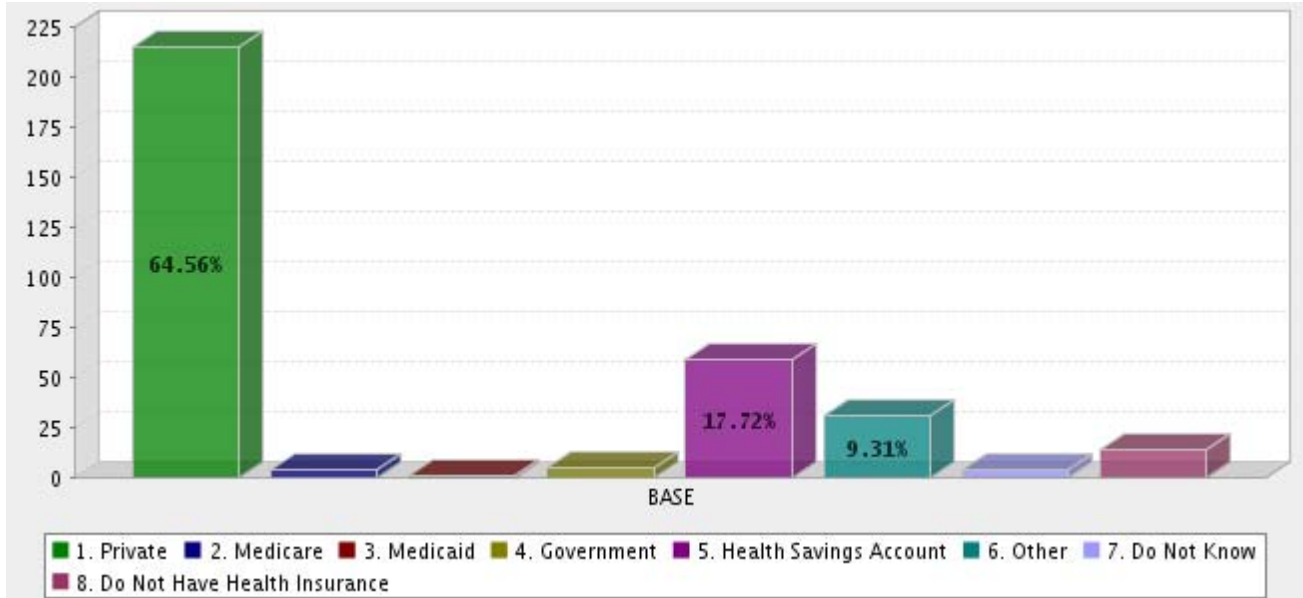


Select the type(s) of insurance you currently have (check all that apply):

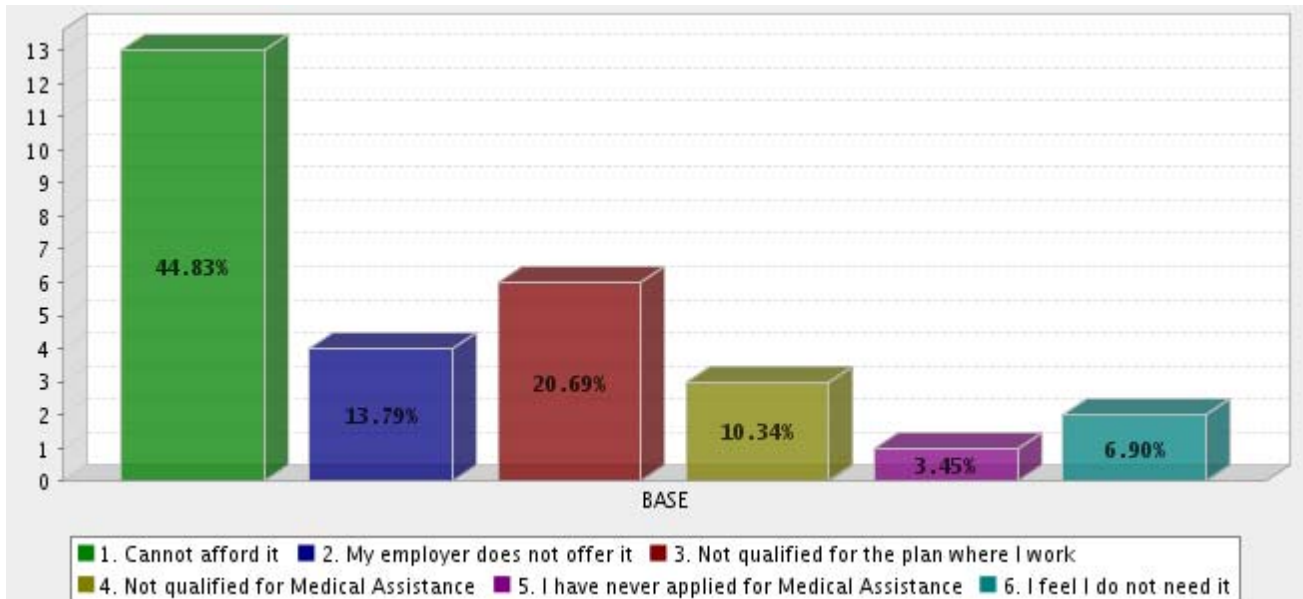




Select your primary source of health insurance (check one):

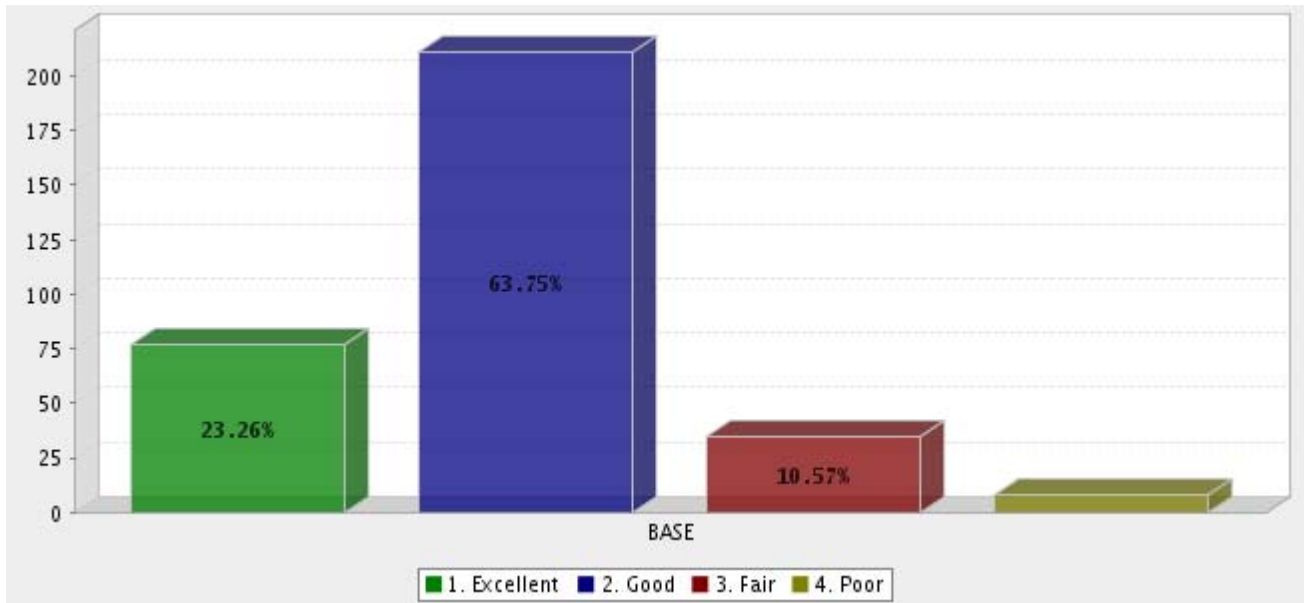


If you do not have health insurance, why not (check all that apply):

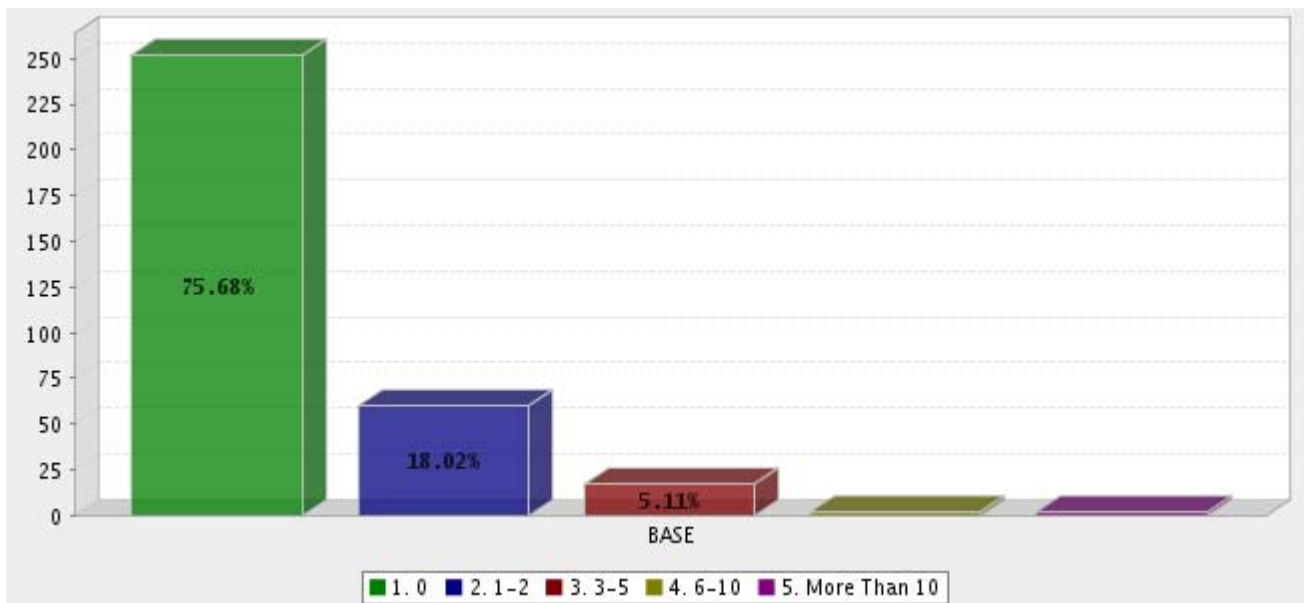




In general, how would you rate your current health status?

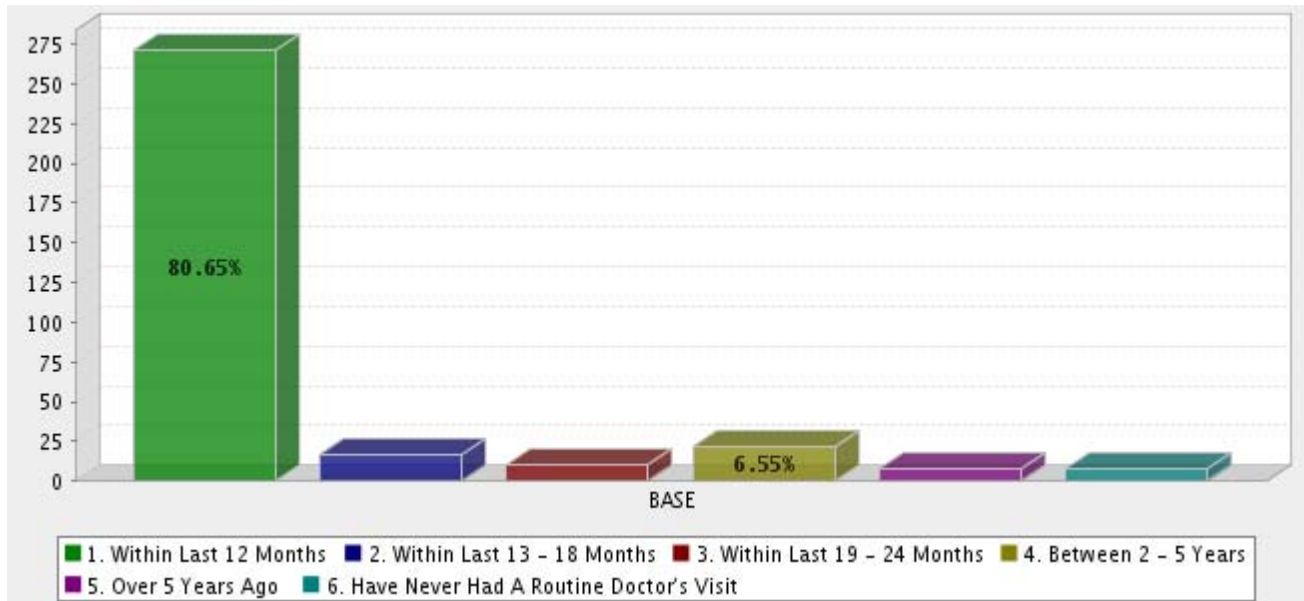


Number of days you have been too sick to work or carry out your usual activities during the past 30 days:

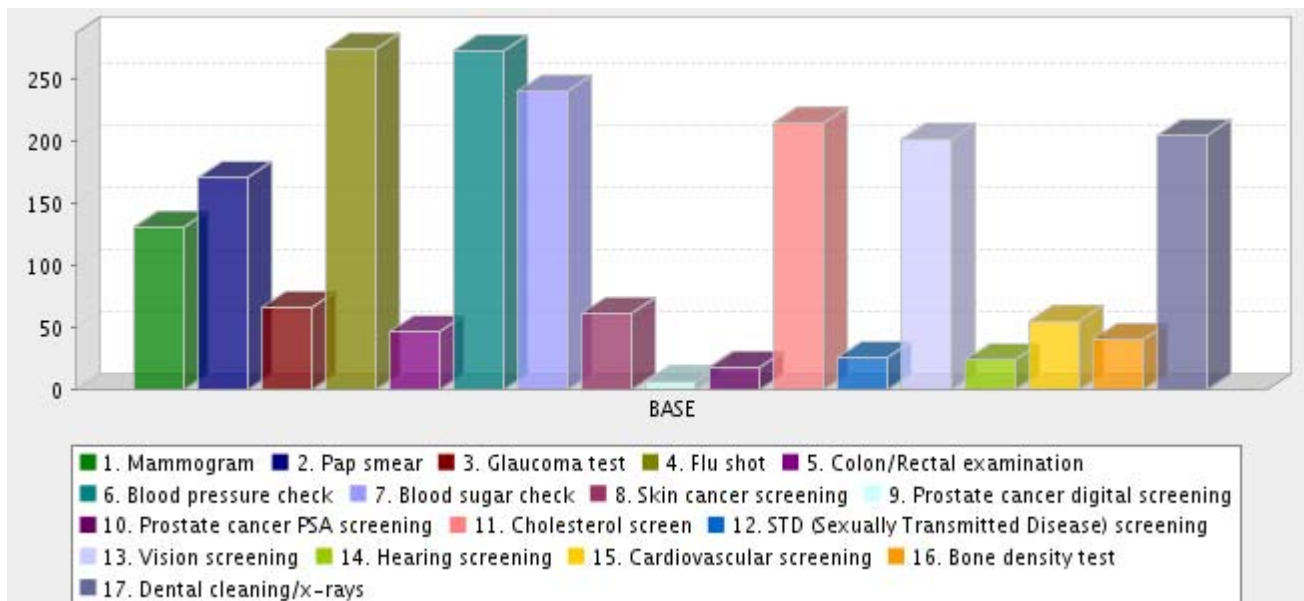




Your last routine doctor's visit was:

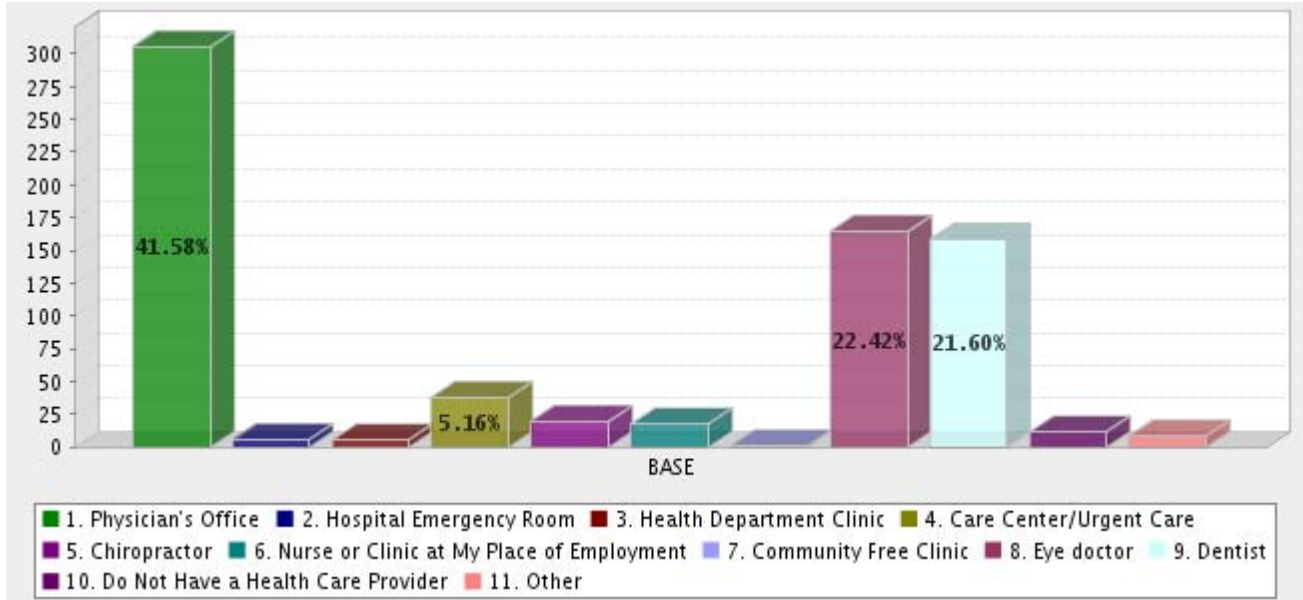


Select any of the following preventive procedures you have had in the last year (check all that apply):

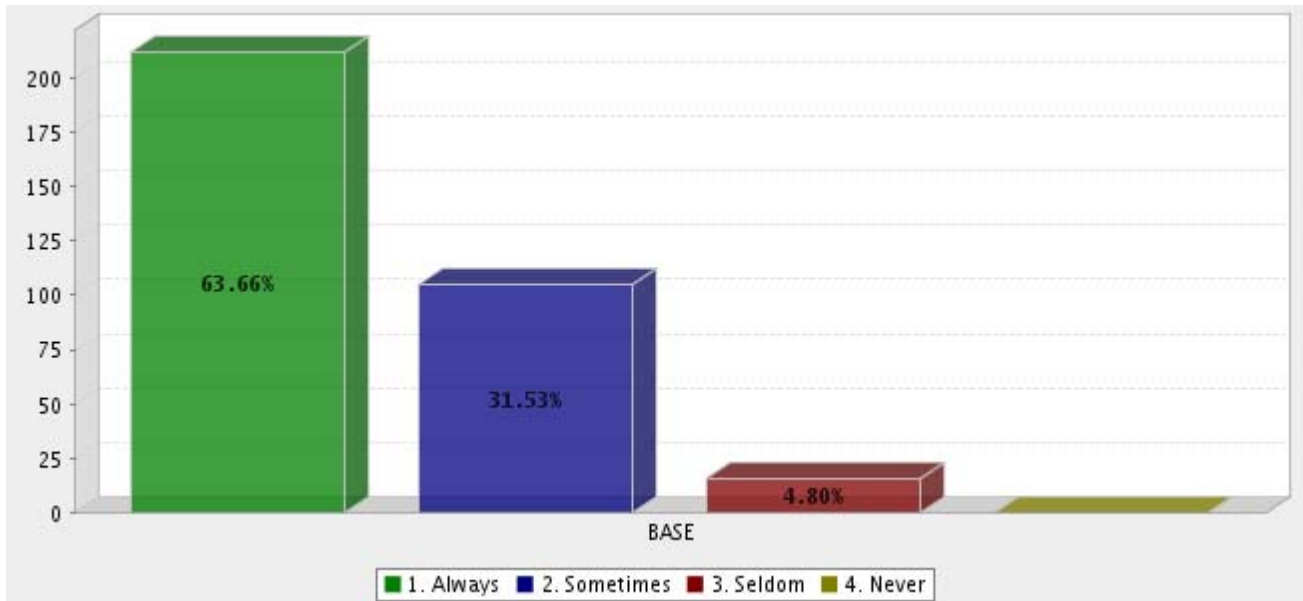




Where you go for routine health care (check all that apply):

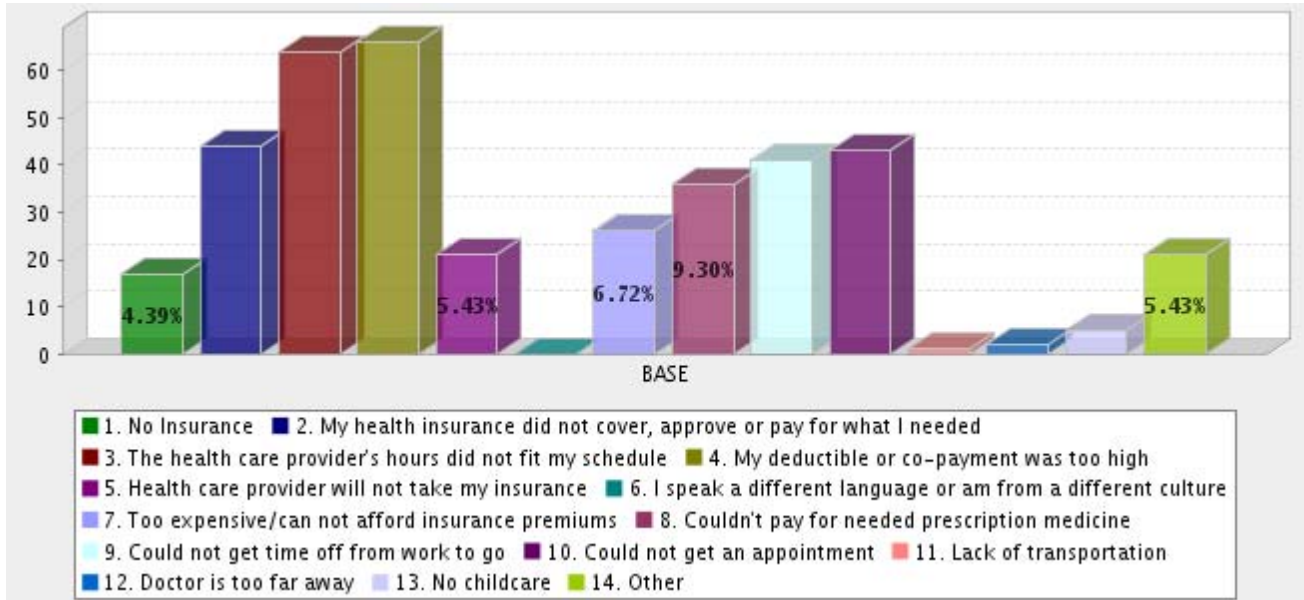


Are you able to visit a doctor/health care provider when needed?

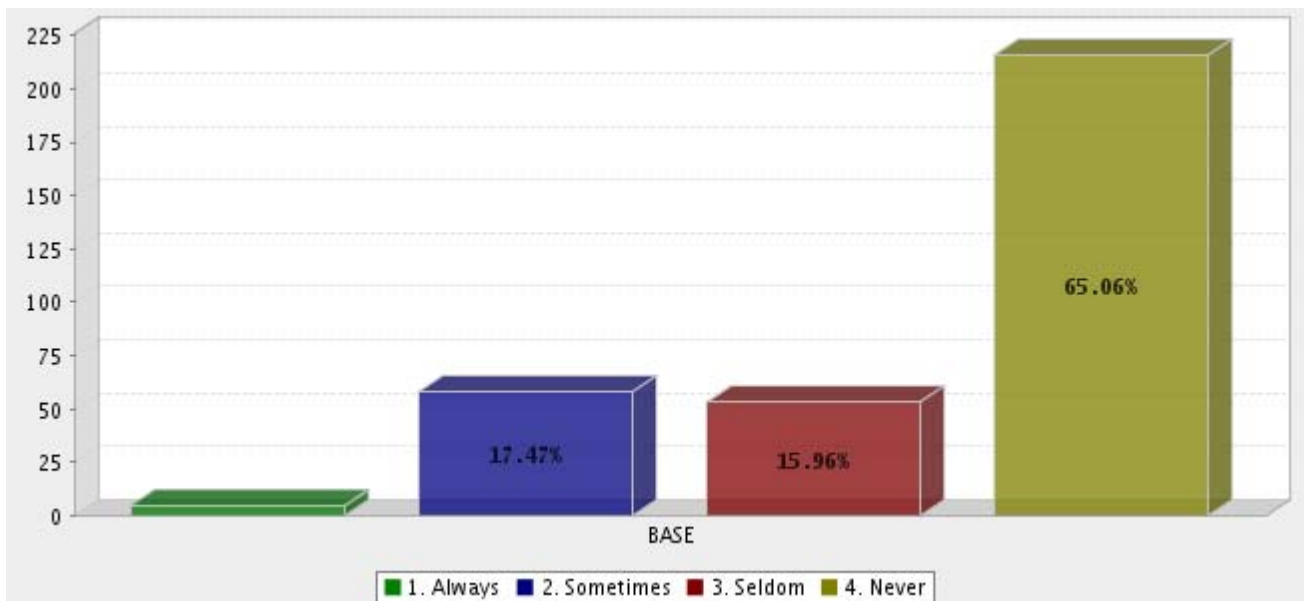




The following have stopped you from getting the health care you need (check all that apply):

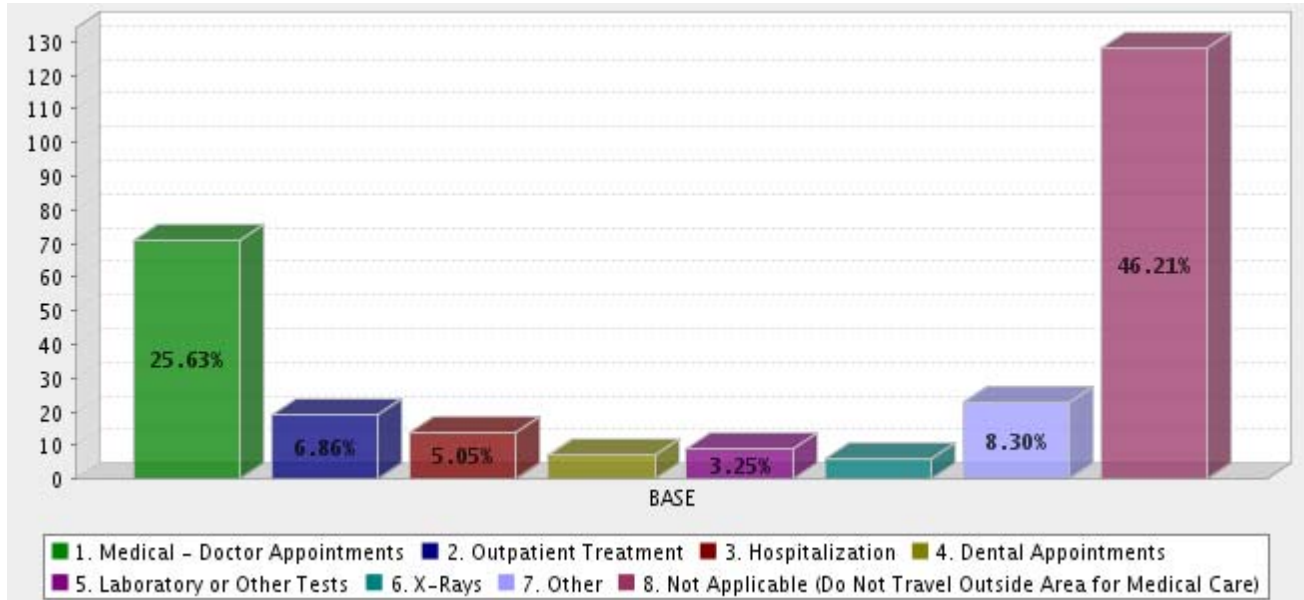


You travel outside of area for medical care:

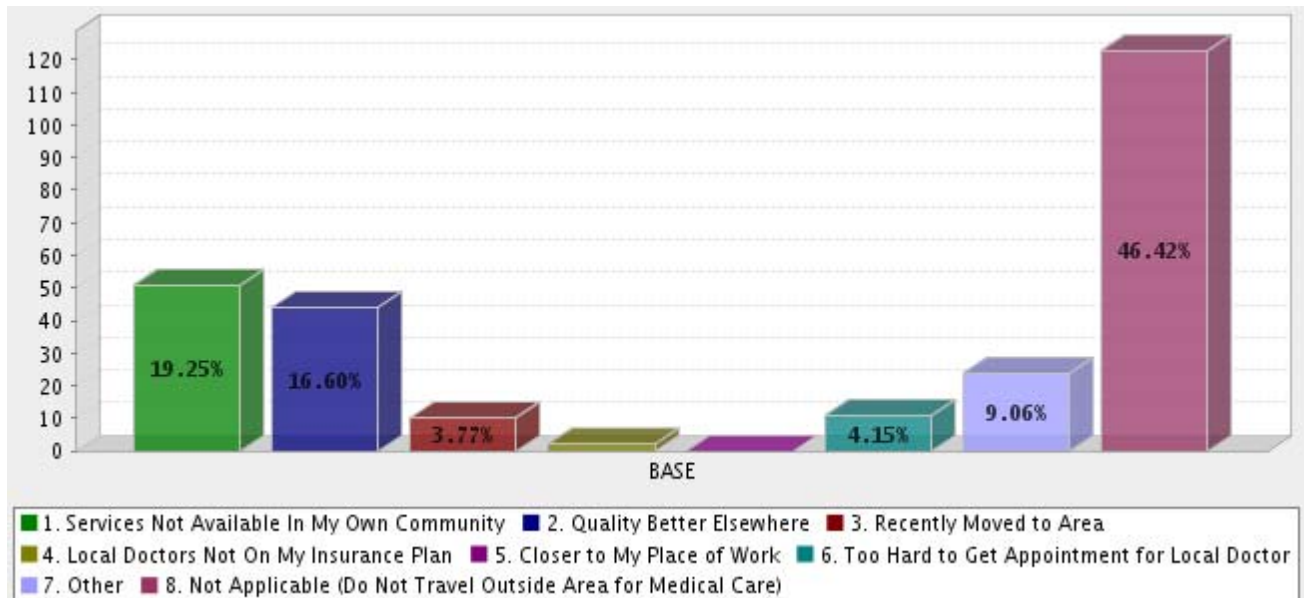




If you travel outside of area for medical care, select the service you seek (check all that apply):

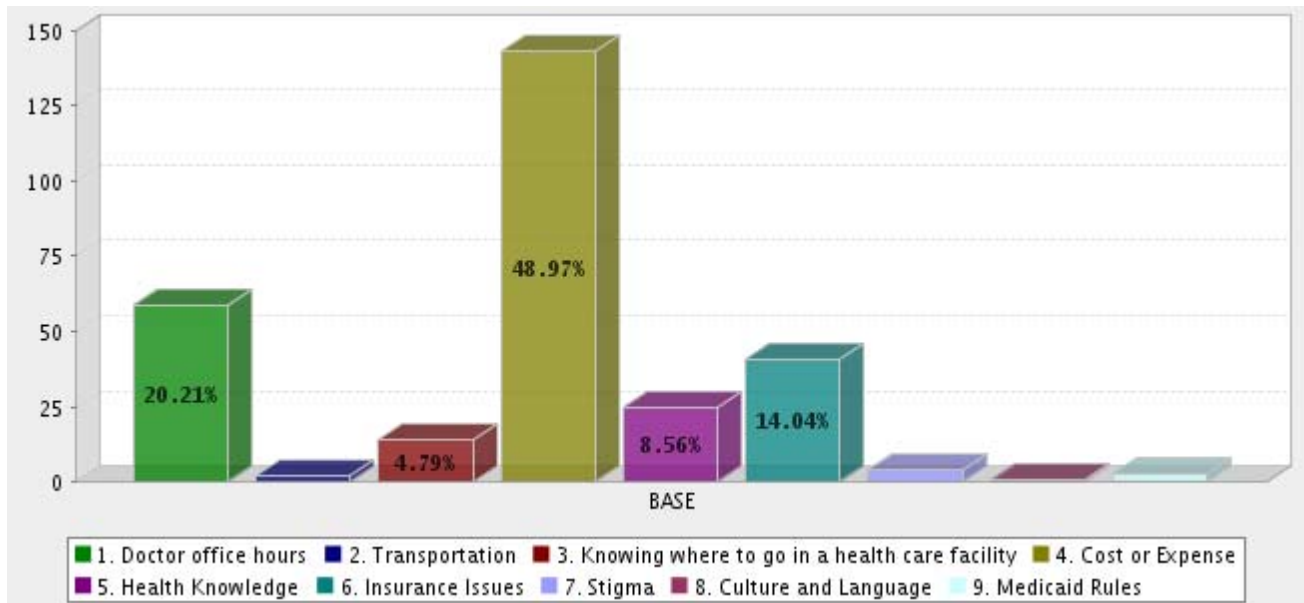


If you travel outside of the area for medical care, why (check all that apply):

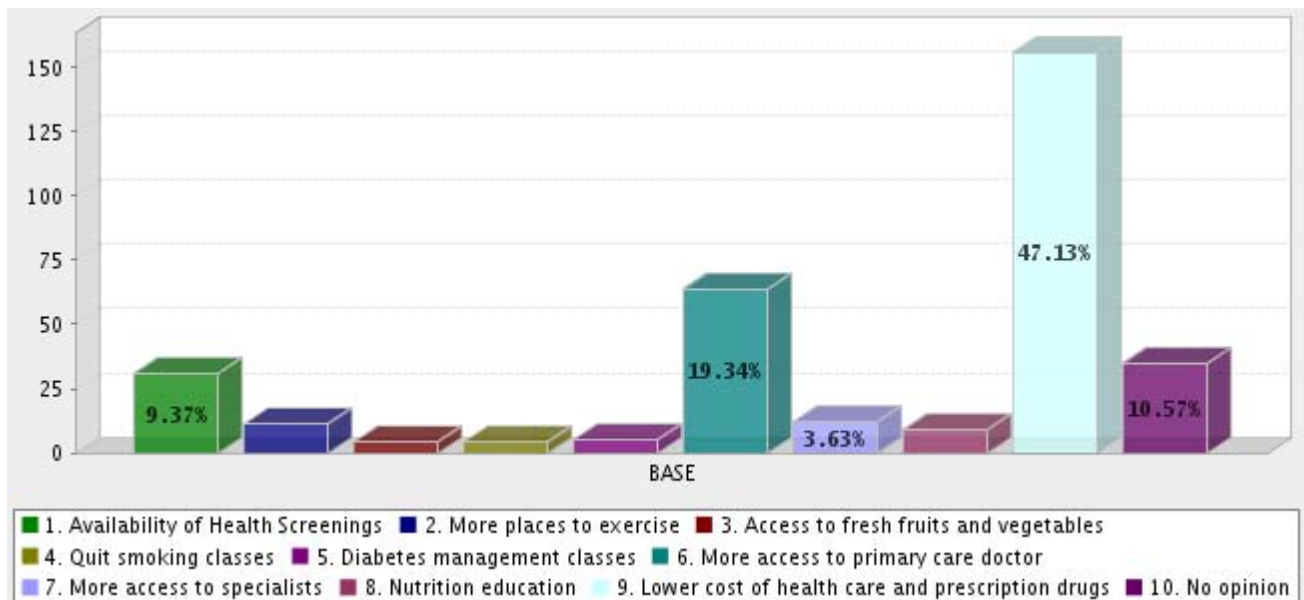




What is the biggest barrier to receiving health care in our community (check one):

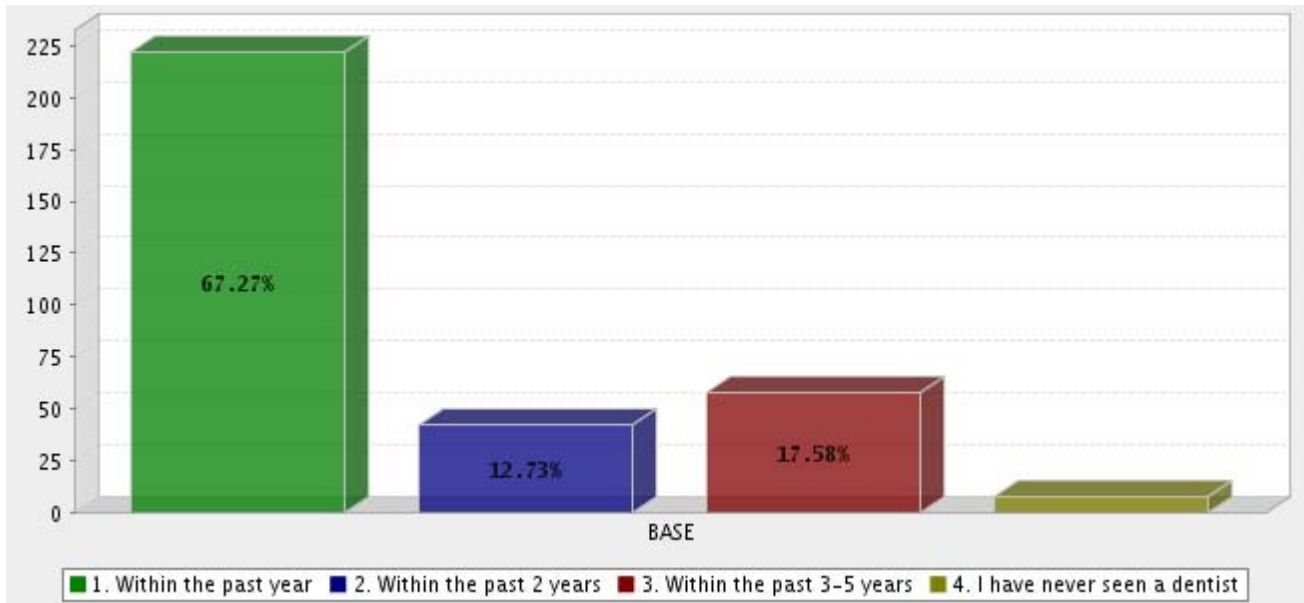


What is the best way to address the Health Needs of our Community (check one):

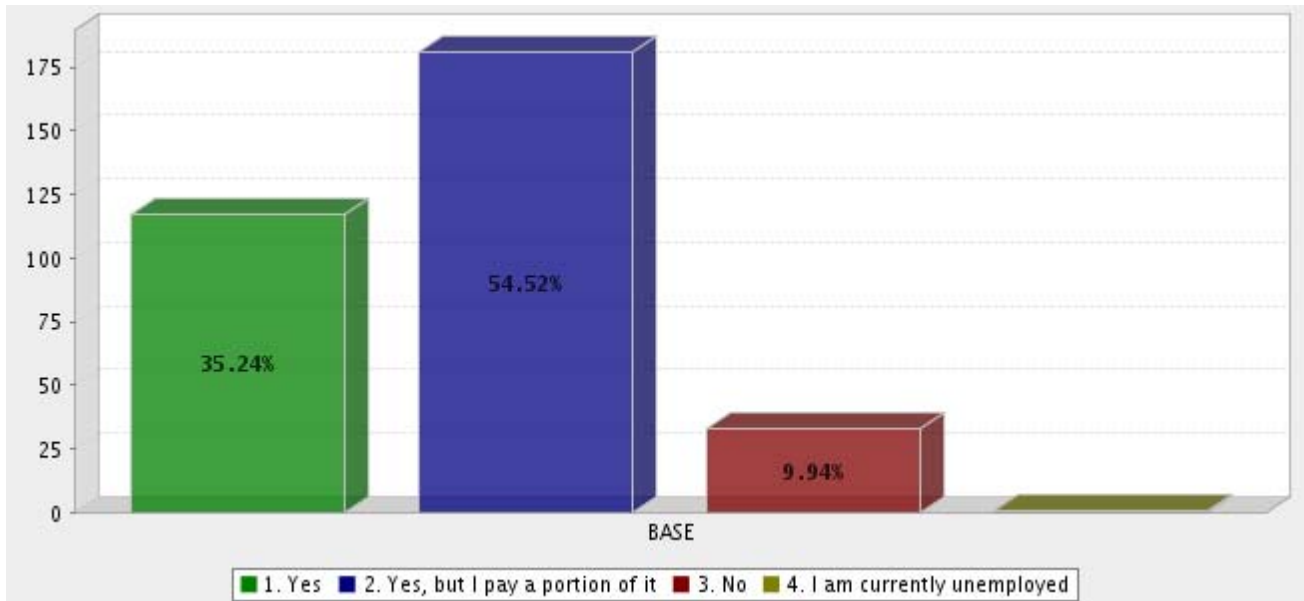




The last time you have seen a dentist was:

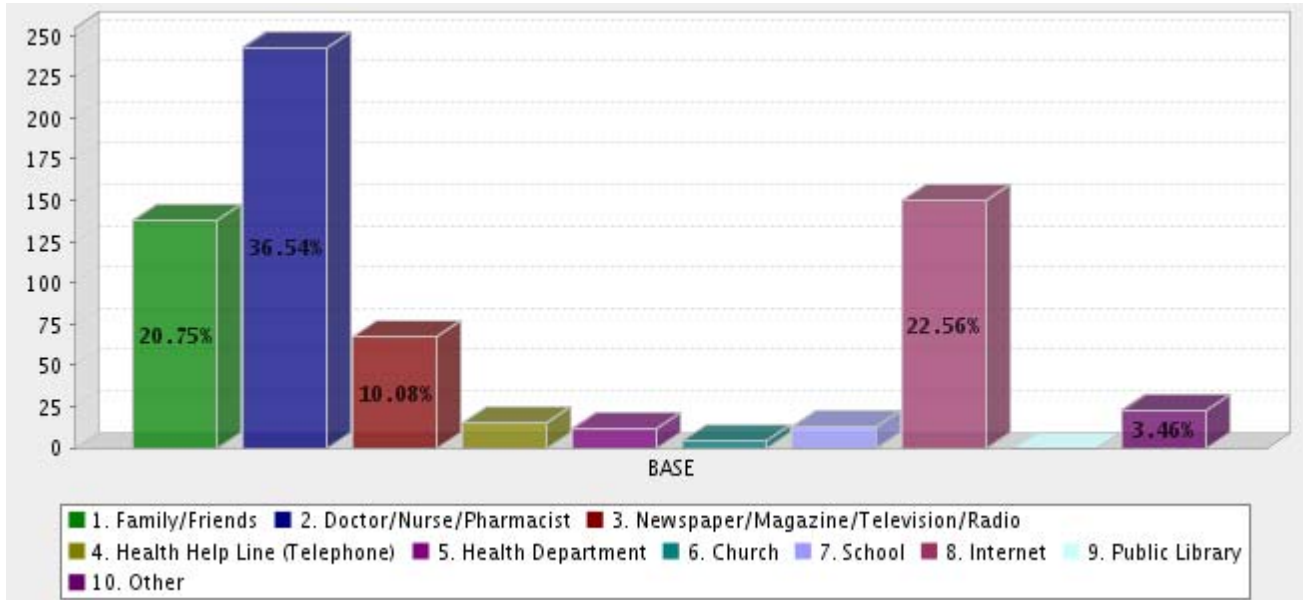


Your employer provides you dental health insurance:

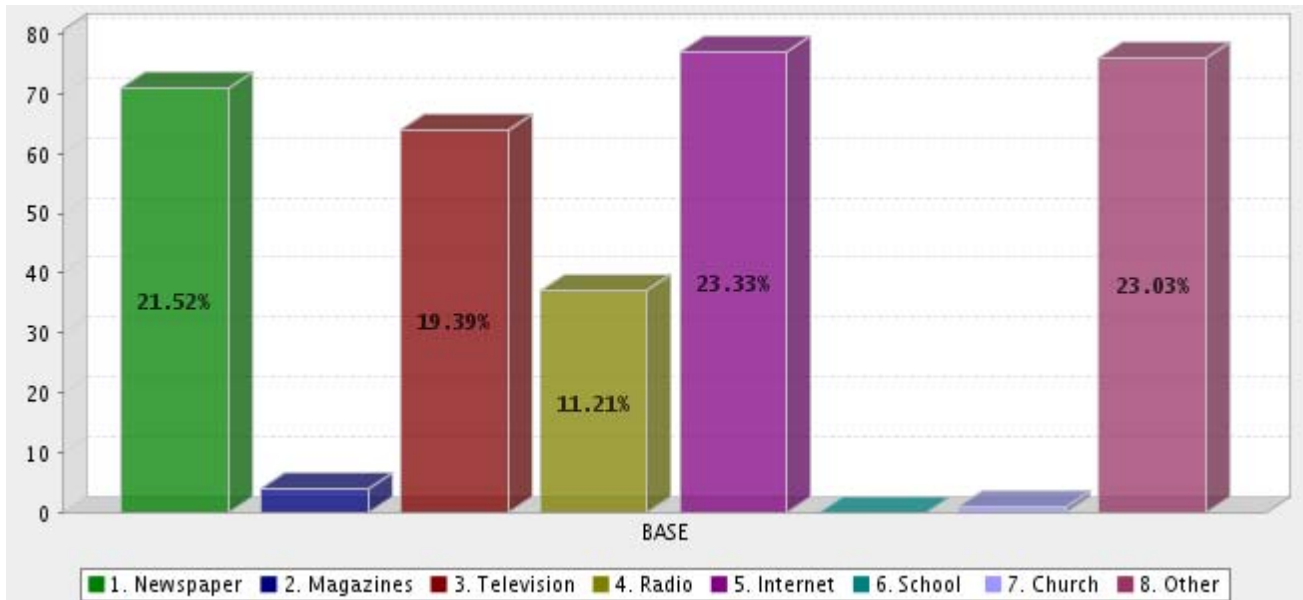




Sources where you obtain most health-related information (check all that apply):

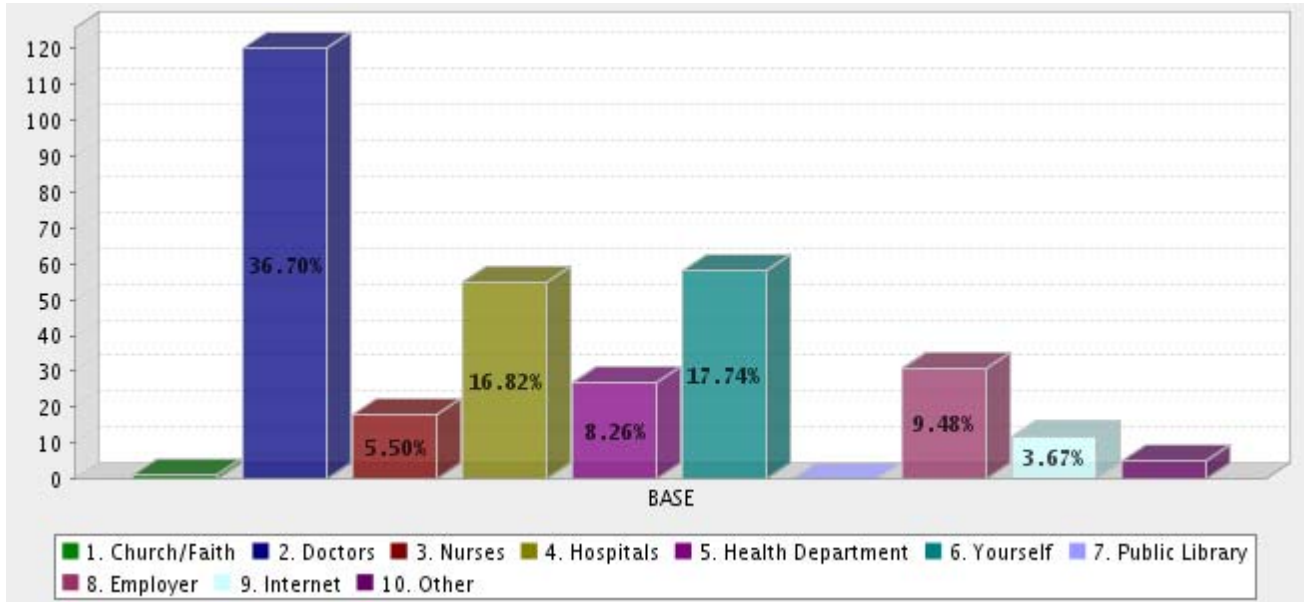


What is the source where you obtain information concerning LOCAL health events such as health and wellness, education events, screenings, health and dental services, and support groups (check one):



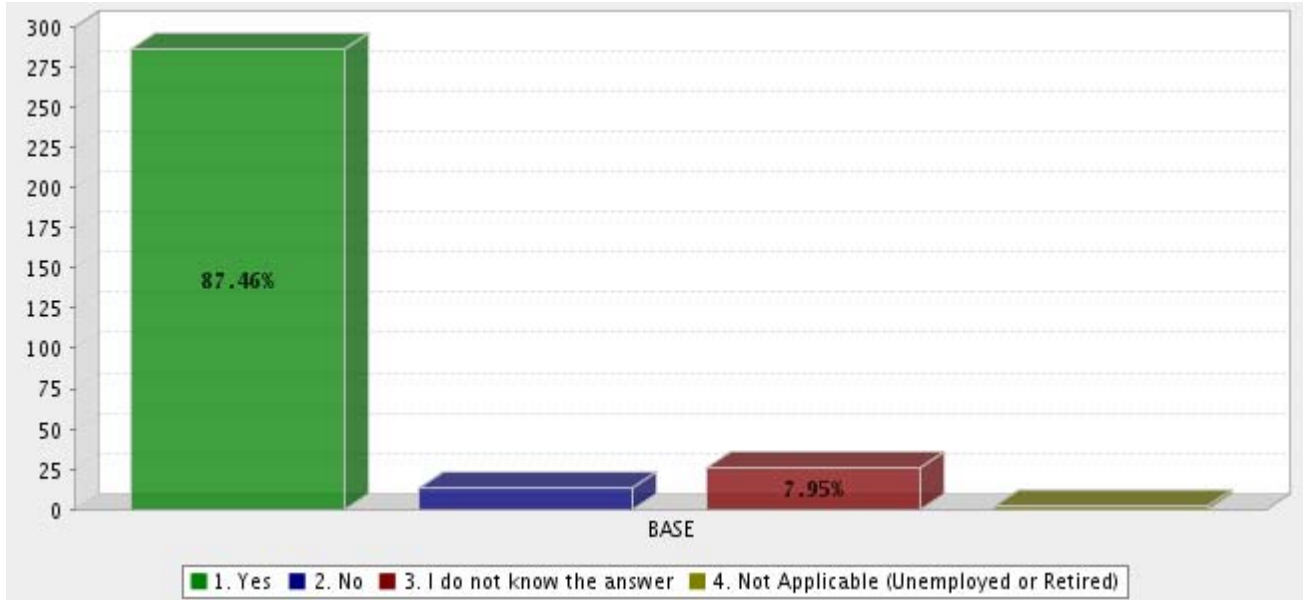


Person or entity you feel is most responsible for providing health information (check one):

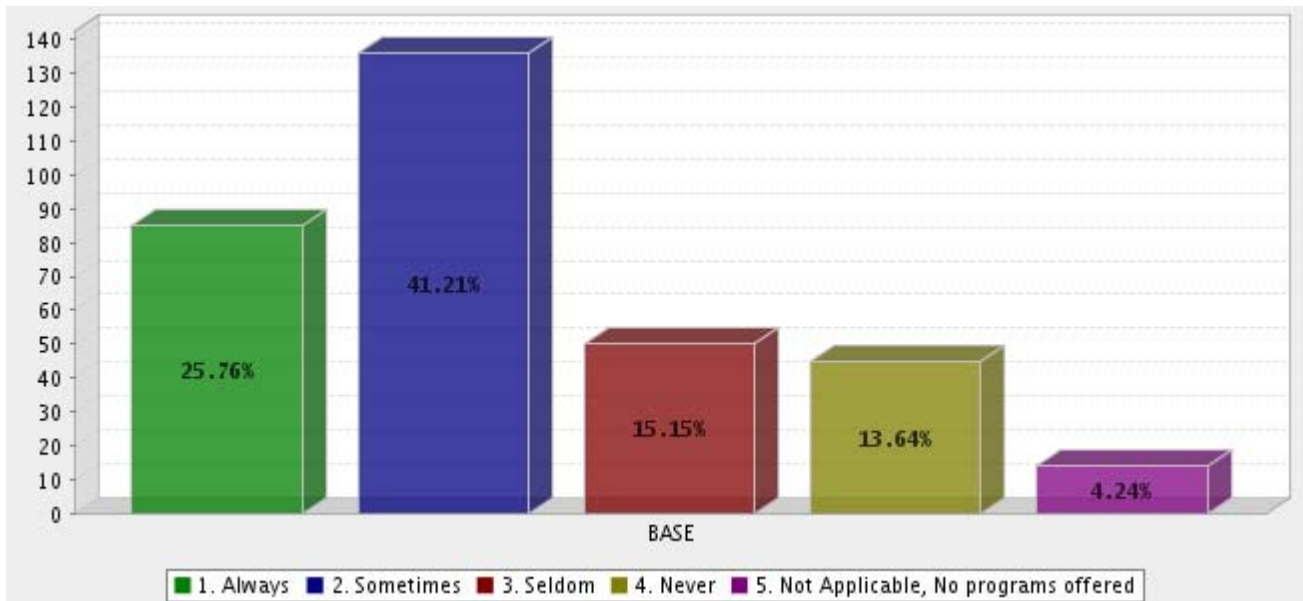




Your employer offers health promotion/wellness programs:

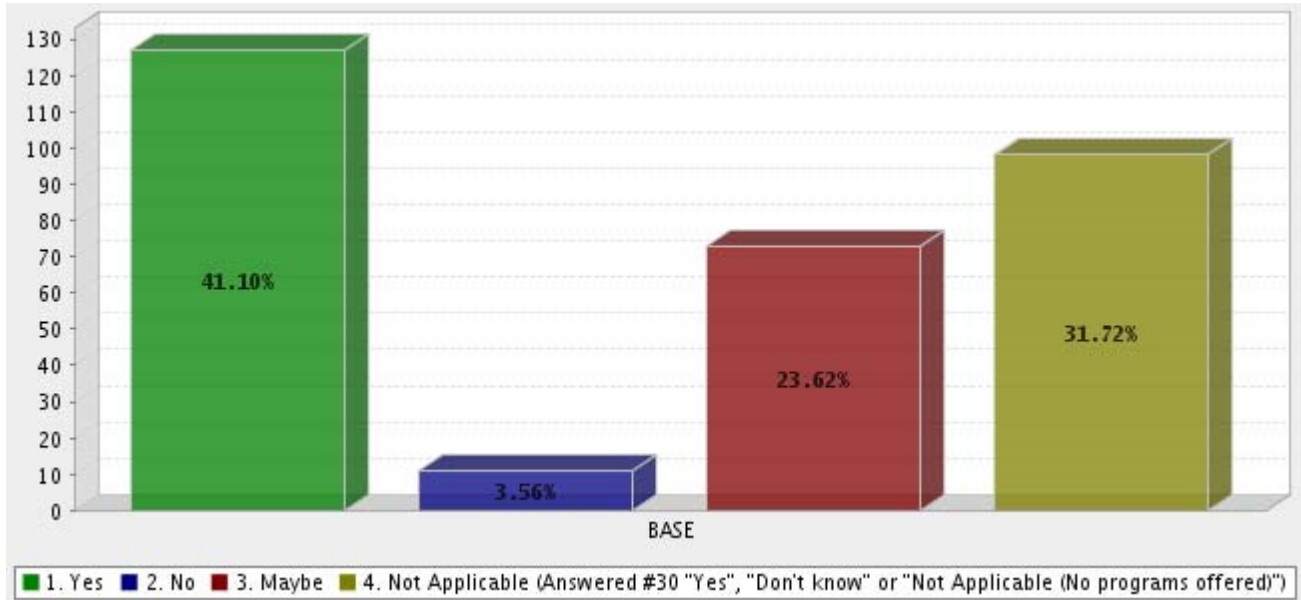


If your employer offers health promotion/wellness programs, you participate:

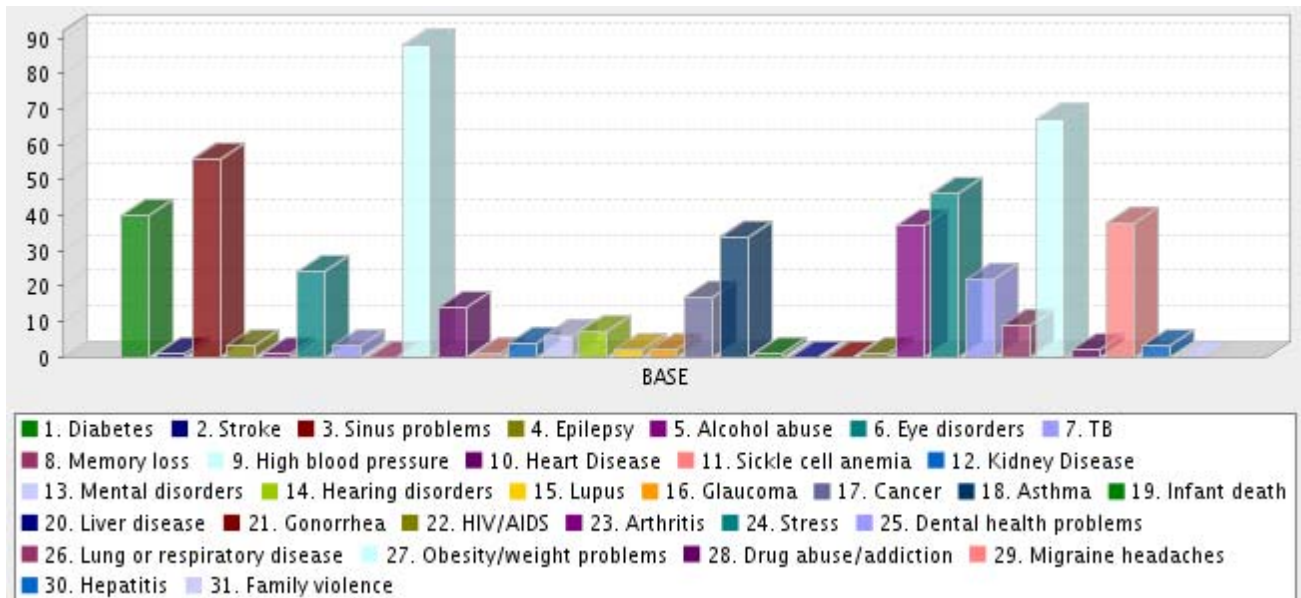




If your employer does not currently offer health promotion/wellness programs, but will offer them in the future, will you participate?

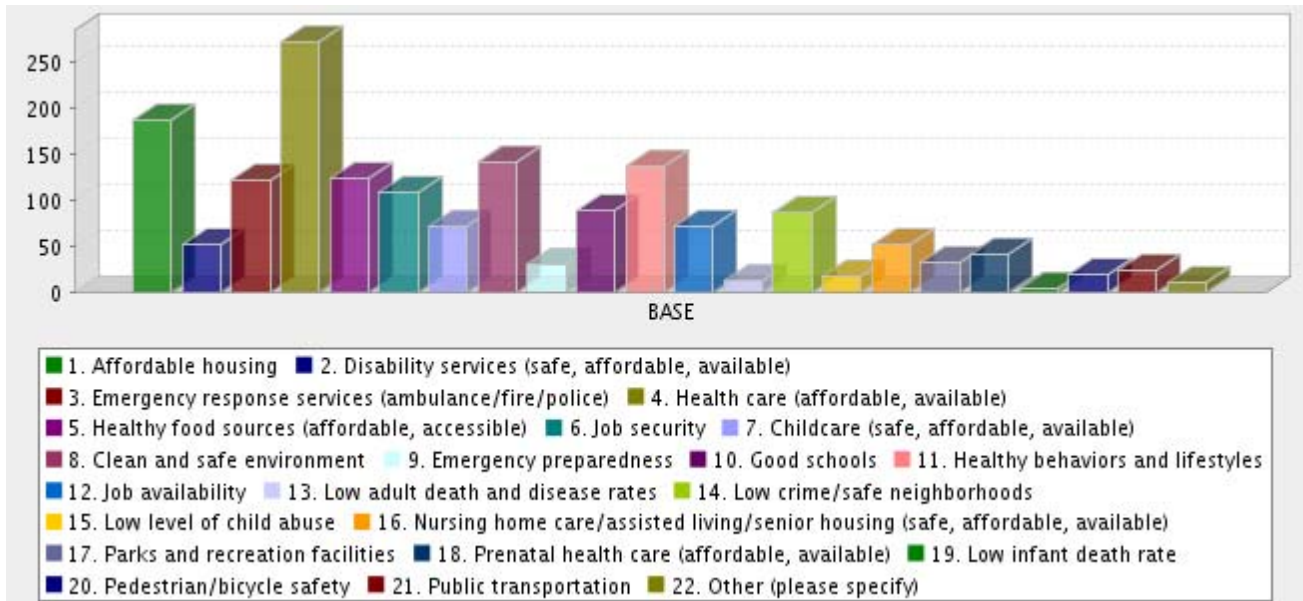


Please check if you have been diagnosed by a doctor with any of the following (check all that apply):



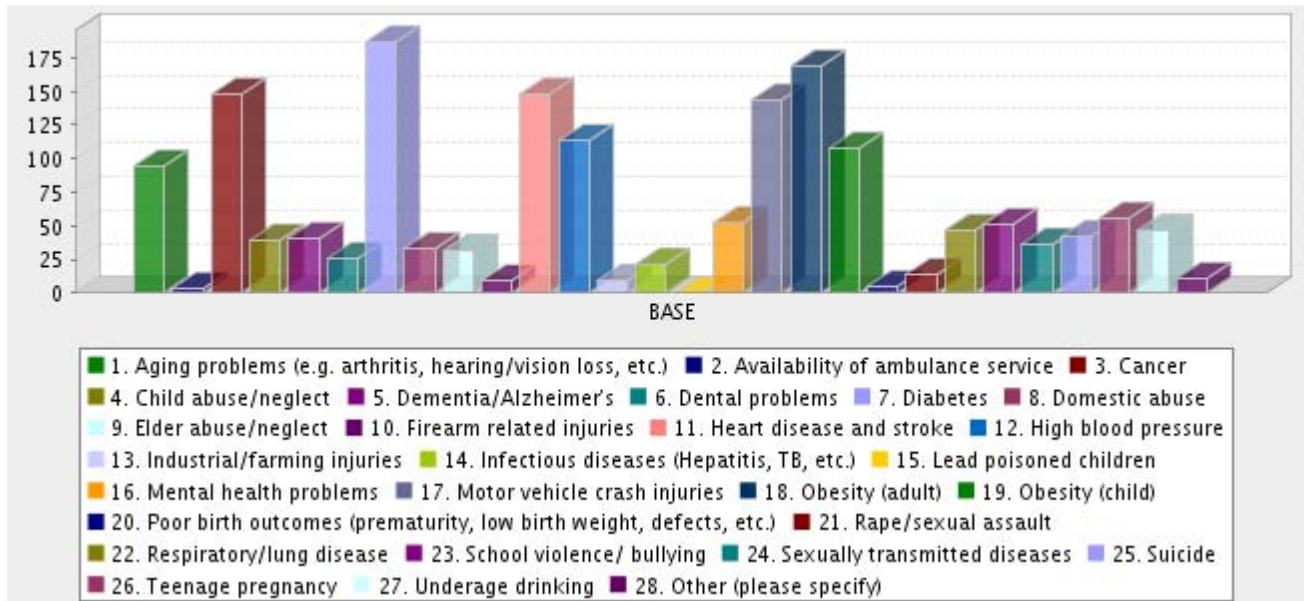


In the following list, please mark what you think are the FIVE MOST IMPORTANT FACTORS FOR A "HEALTHY COMMUNITY". (Those factors that most improve the quality of life in a community). CHECK ONLY FIVE:



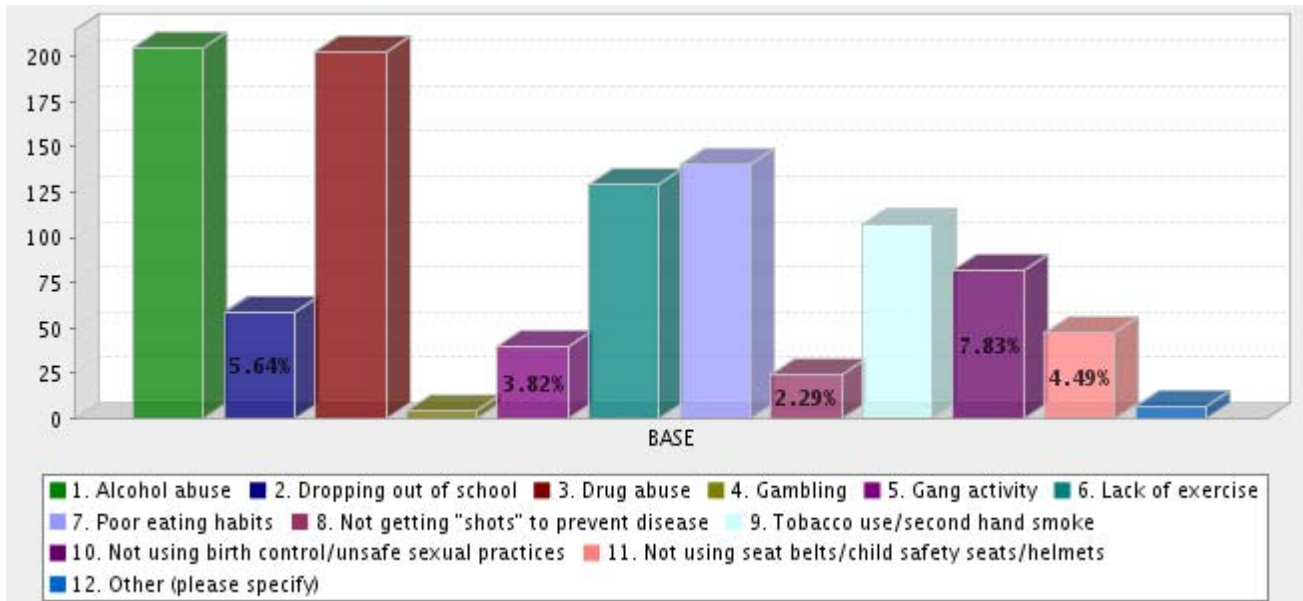


In the following list, please mark what you think are the FIVE MOST IMPORTANT "HEALTH PROBLEMS" in our community. (Those problems which have the greatest impact on overall community health). CHECK ONLY FIVE:



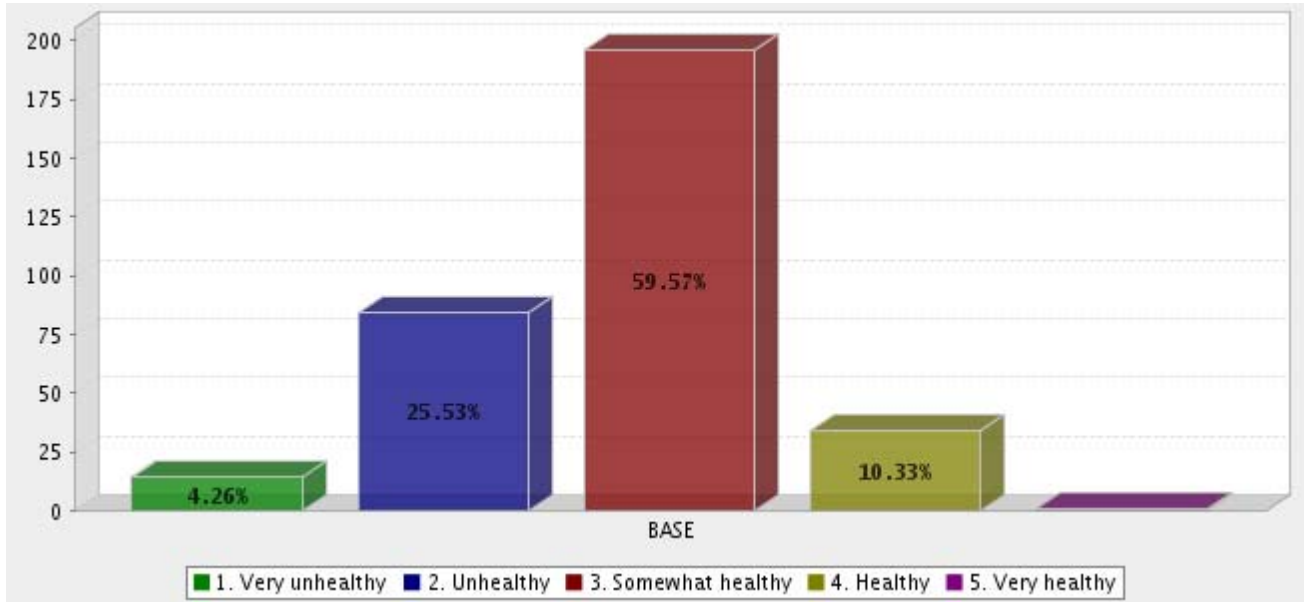


In the following list, please mark what you think are the THREE MOST IMPORTANT "RISKY BEHAVIORS" in our community. (Those behaviors which have the greatest impact on overall community health). CHECK ONLY THREE (3):

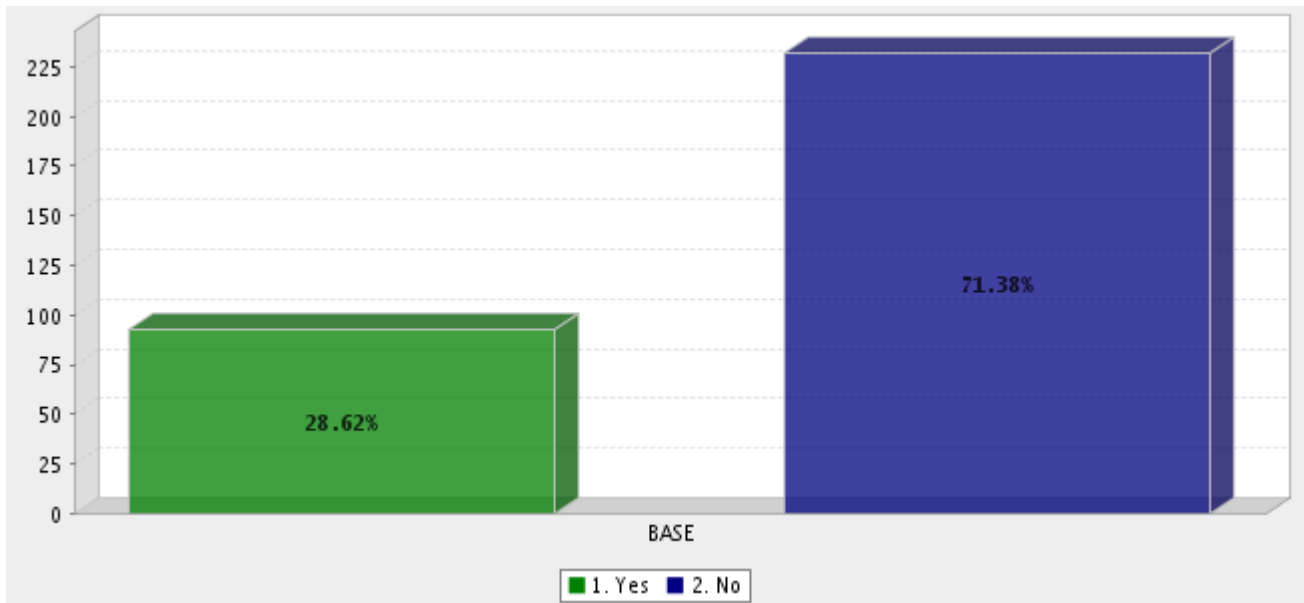




Please mark how you would rate your community as a "Healthy Community":

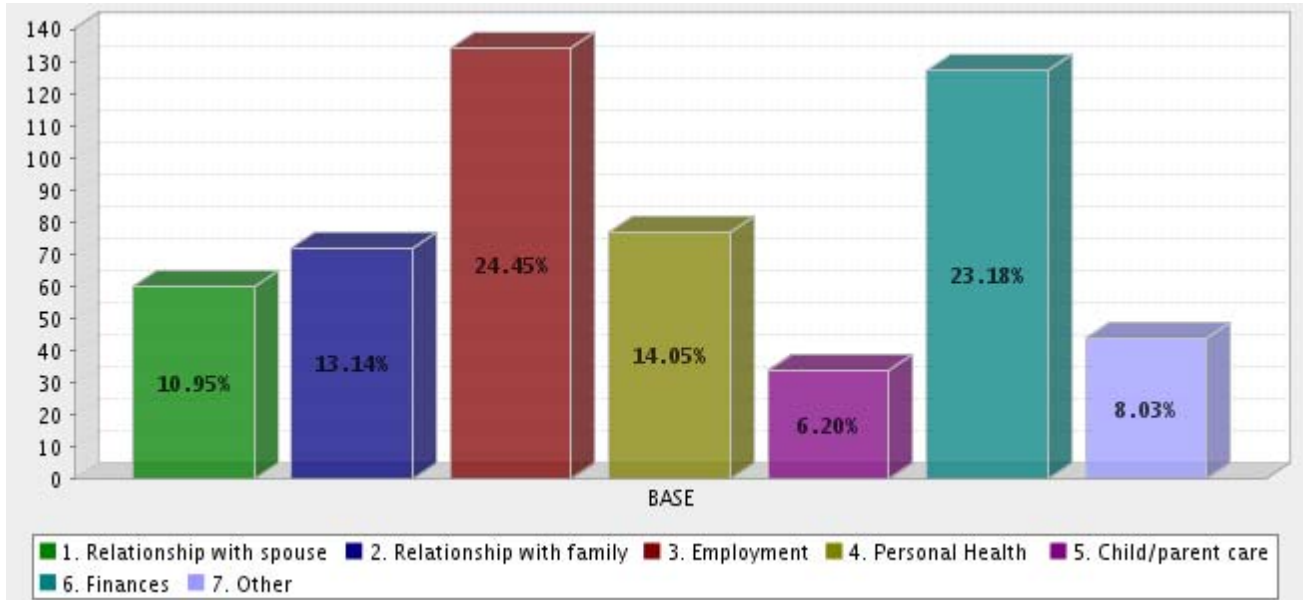


Please think about your daily activities during the past 4 weeks. You did less than you would have liked to due to mental or emotional problems:

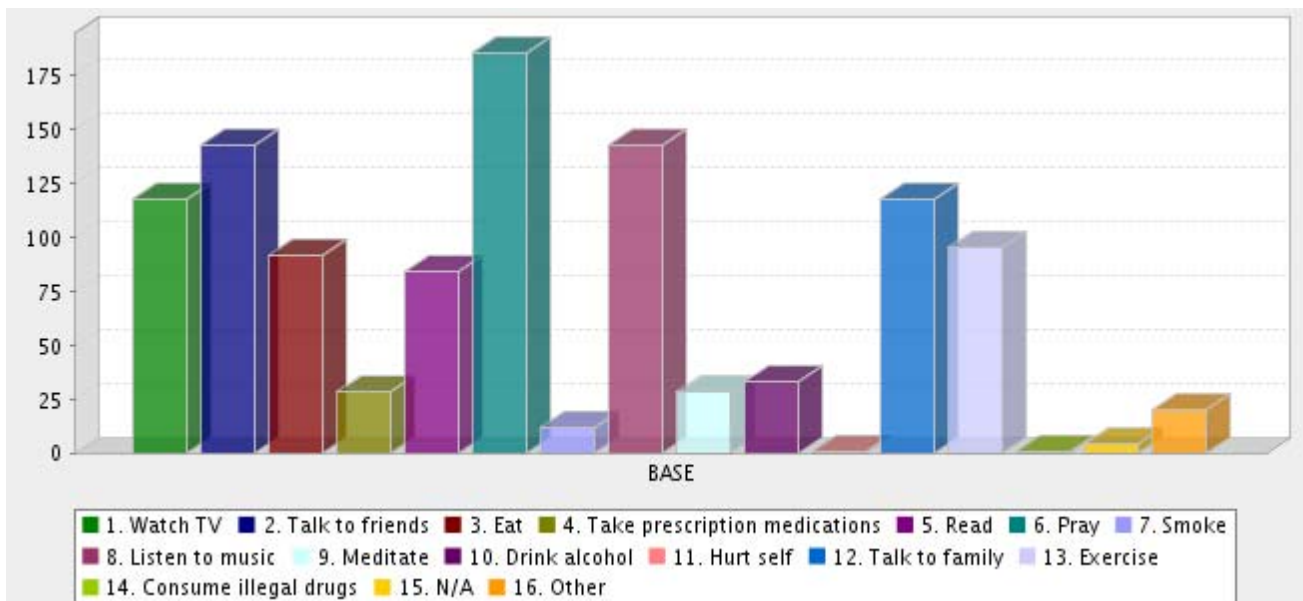




The following aspects of my life are really stressful right now (check all that apply):

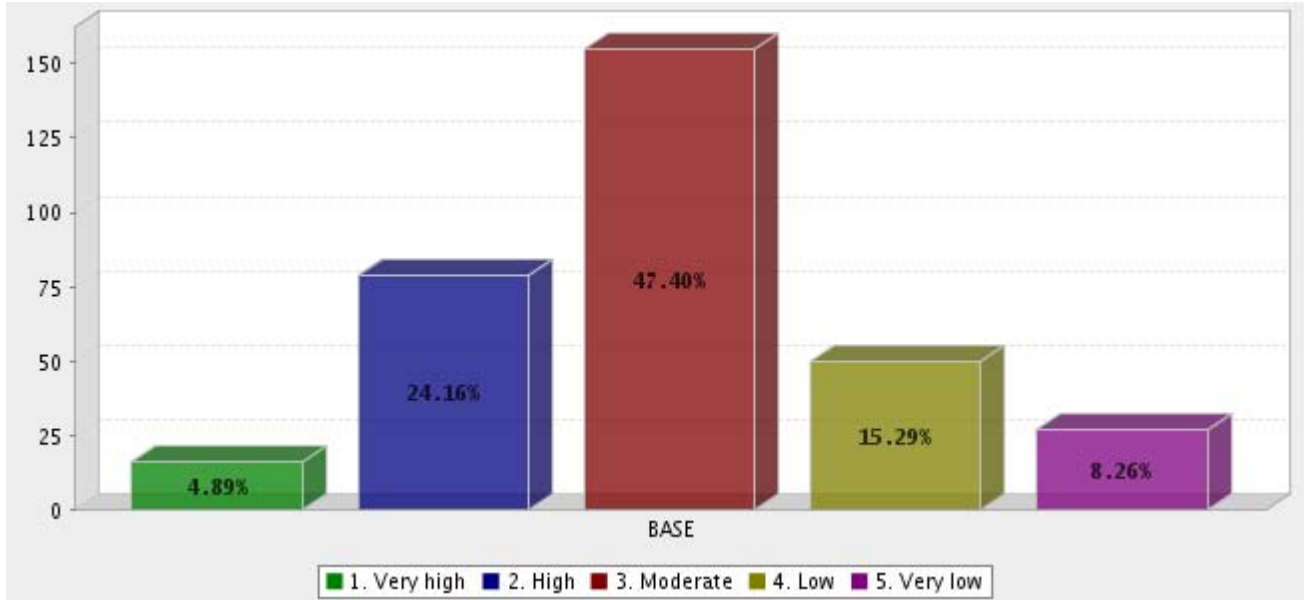


Please mark how you cope with stress (check all that apply):

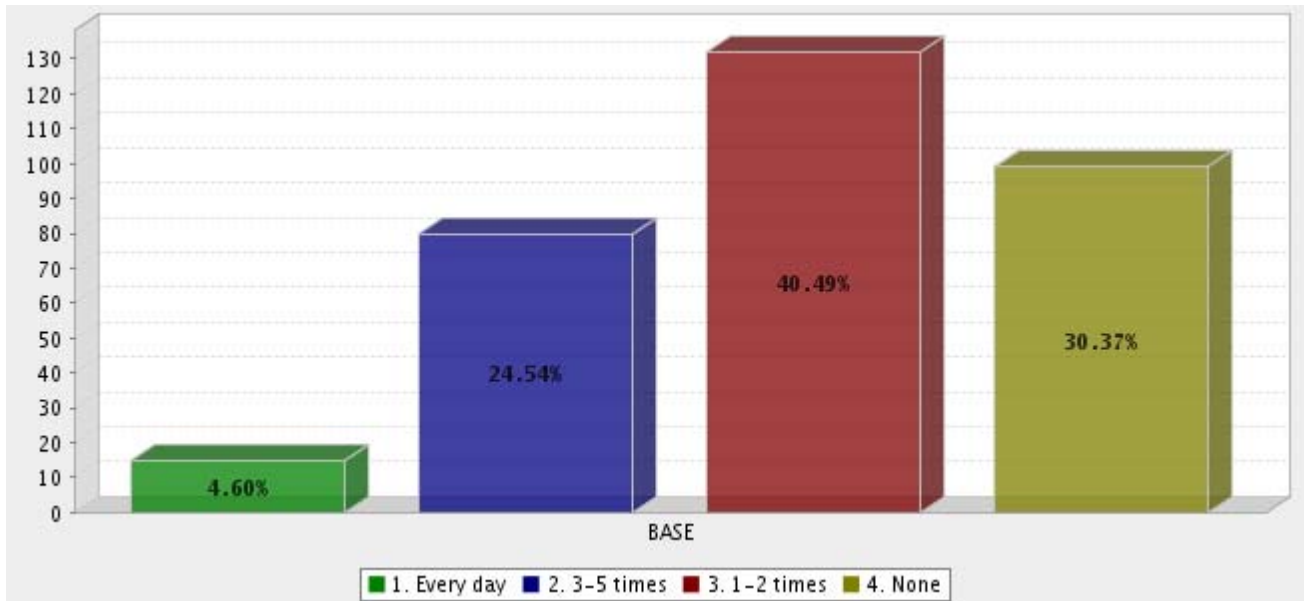




On a typical day, you would rate your level of stress as:

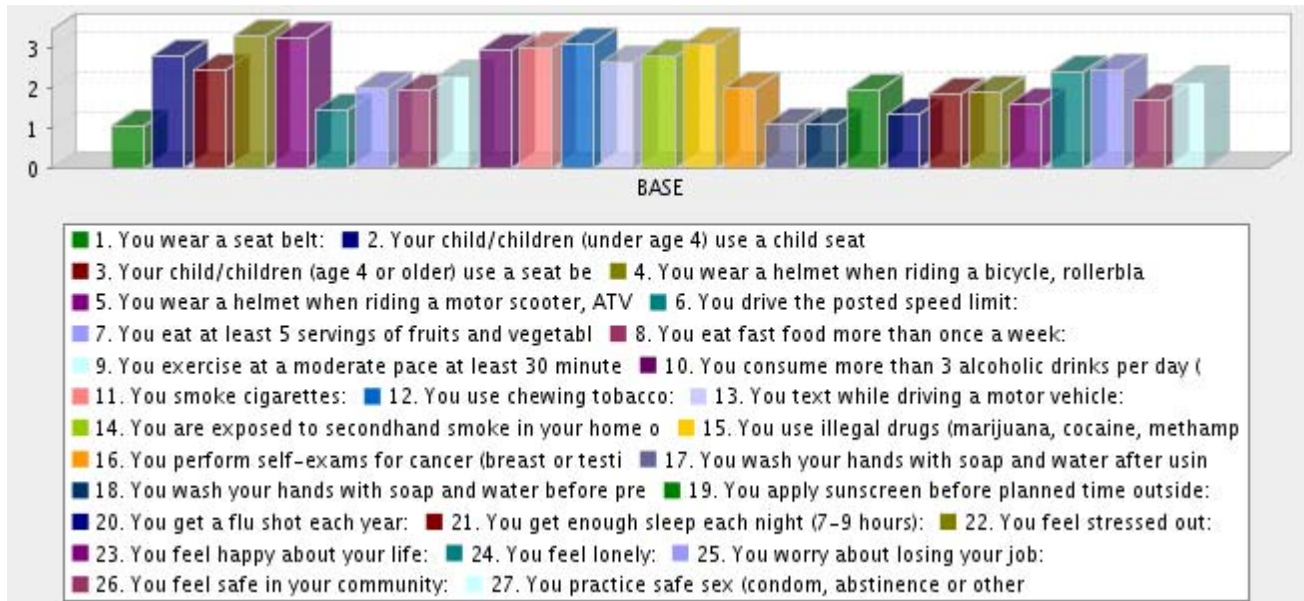


On average, how many times per week do you exercise?

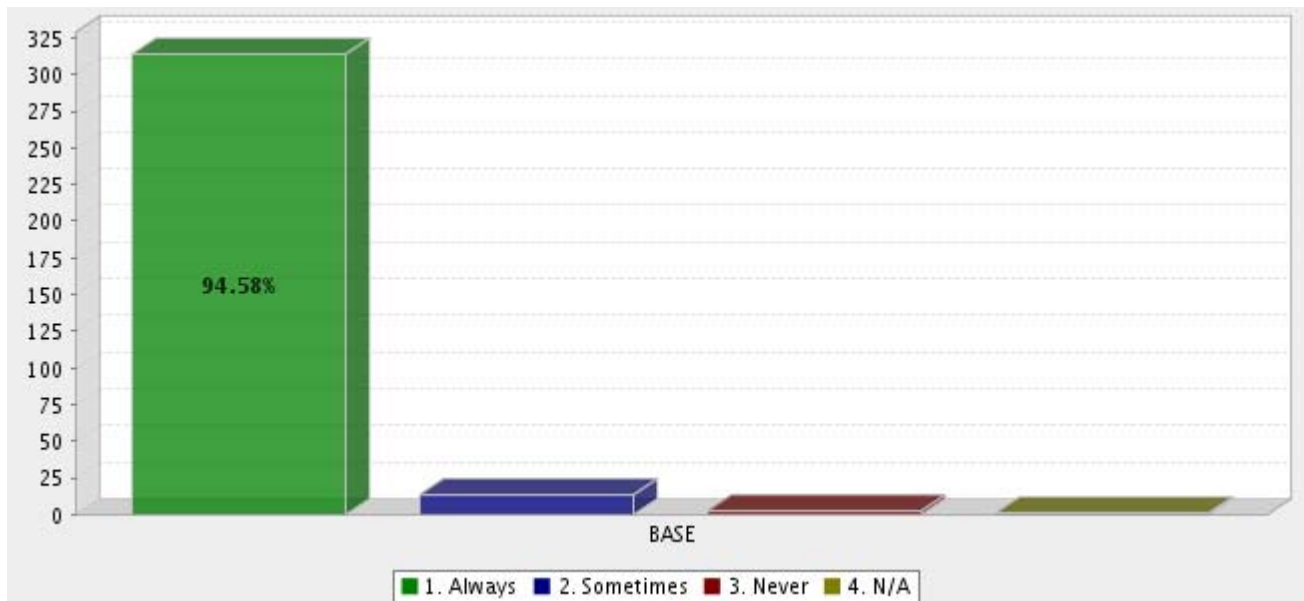




In the following section, select which answer describes you.

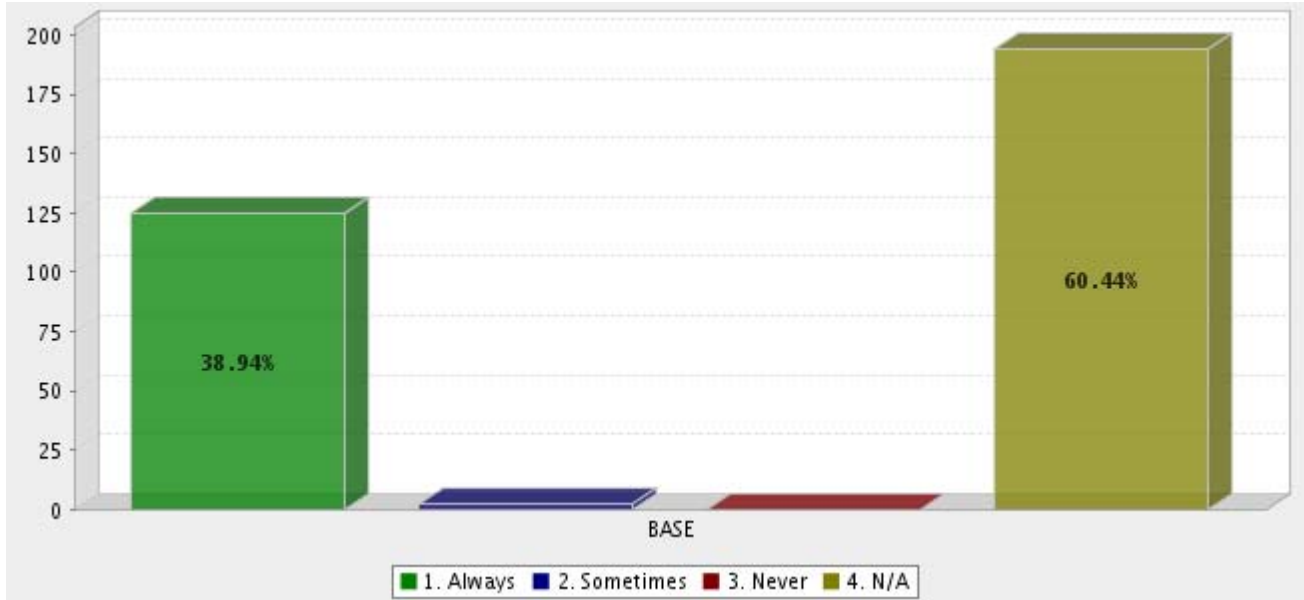


You wear a seat belt:

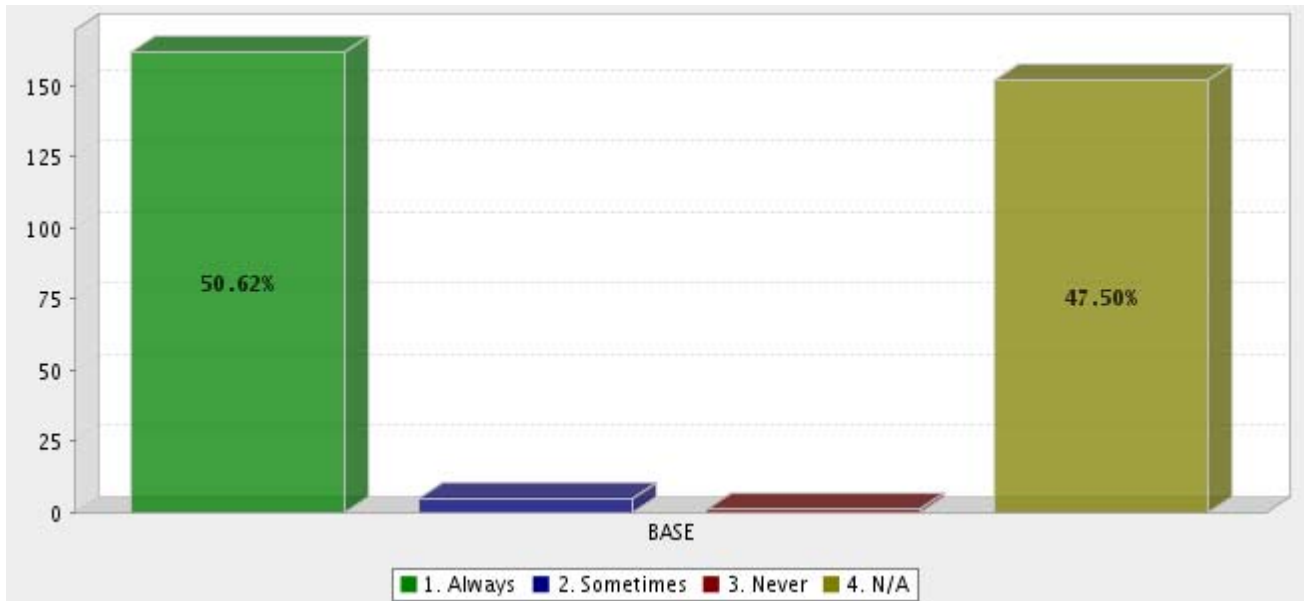




Your child/children (under age 4) use a child seat:

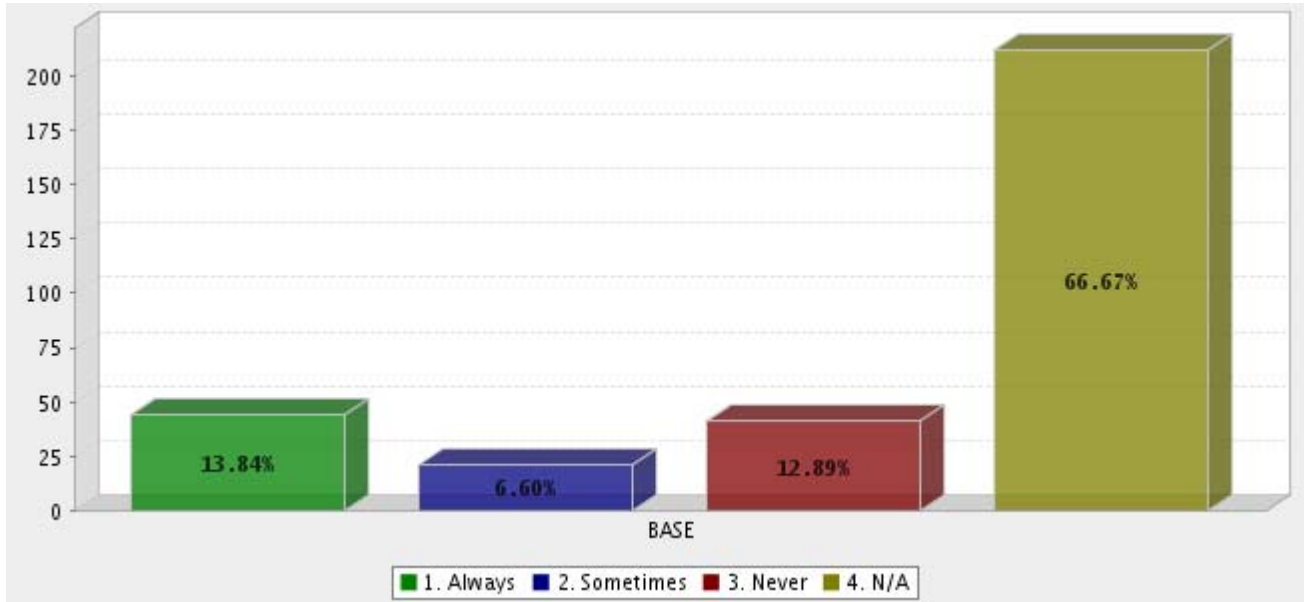


Your child/children (age 4 or older) use a seat belt:

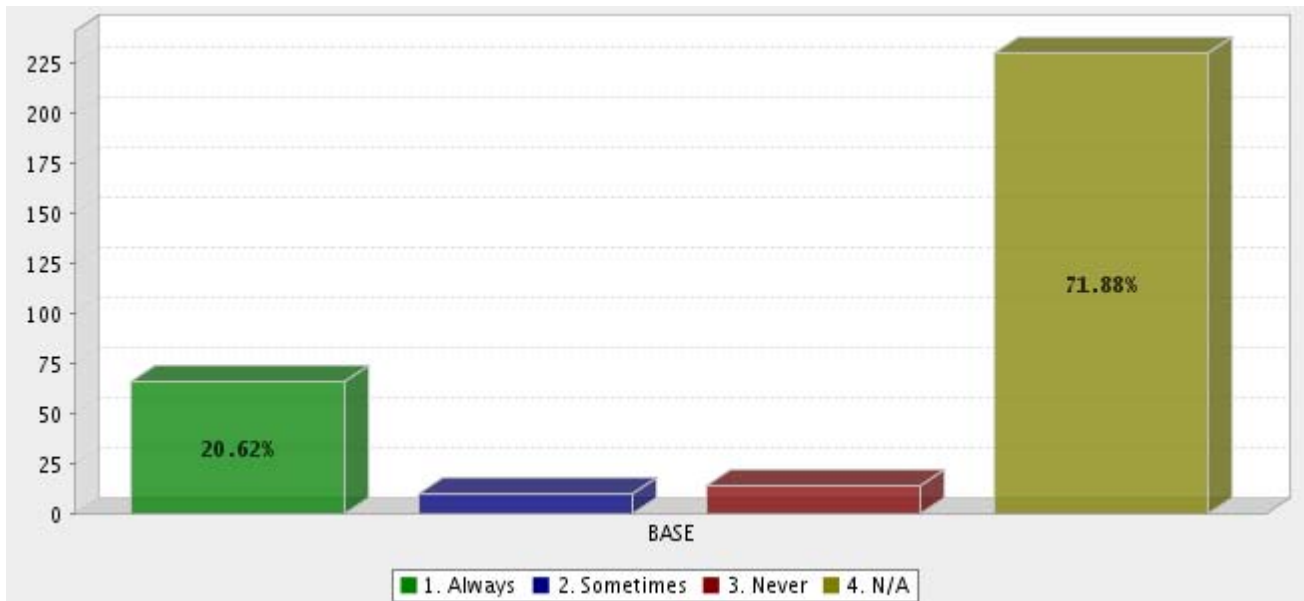




You wear a helmet when riding a bicycle, rollerblading or skateboarding:

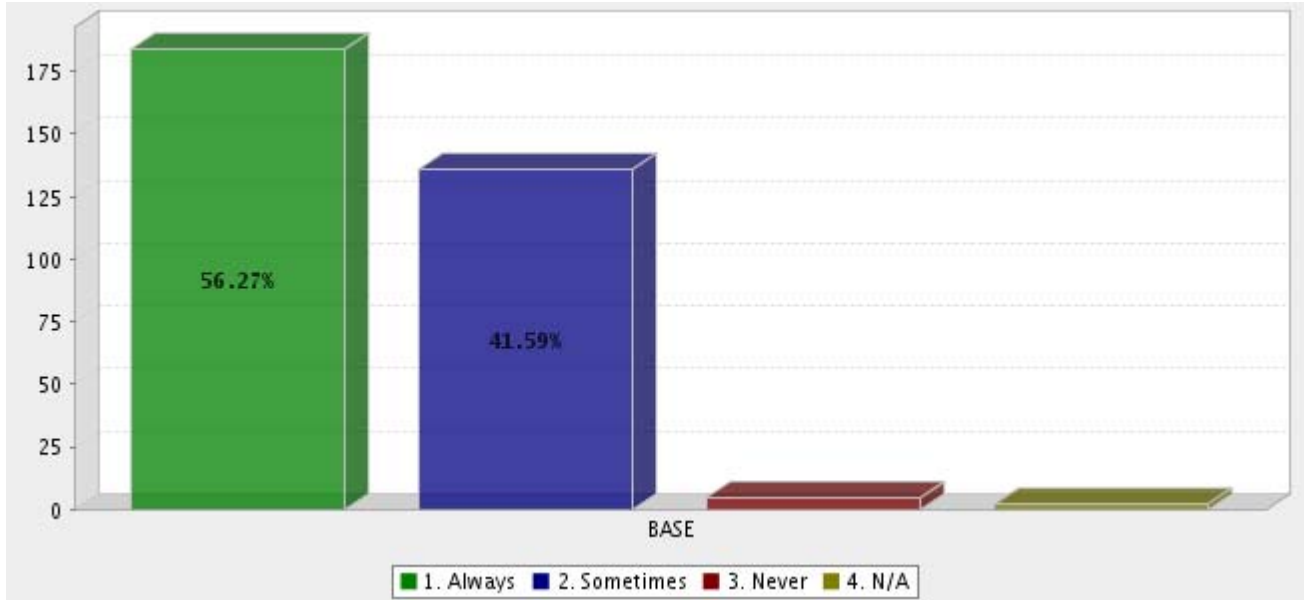


You wear a helmet when riding a motor scooter, ATV or motorcycle:

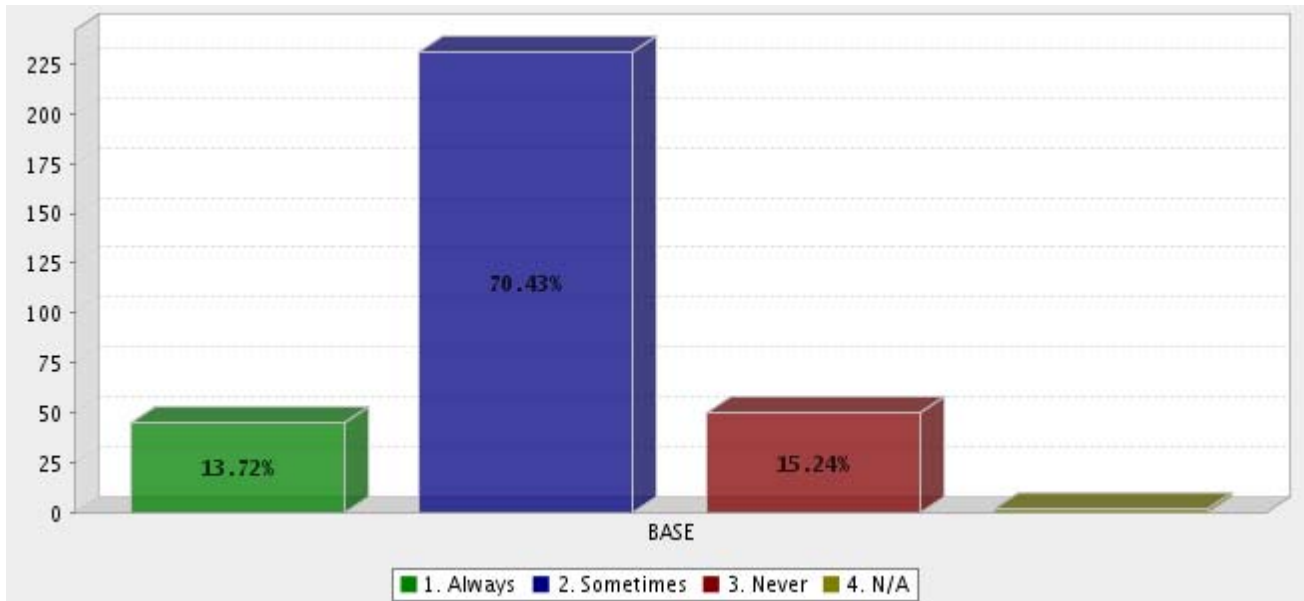




You drive the posted speed limit:

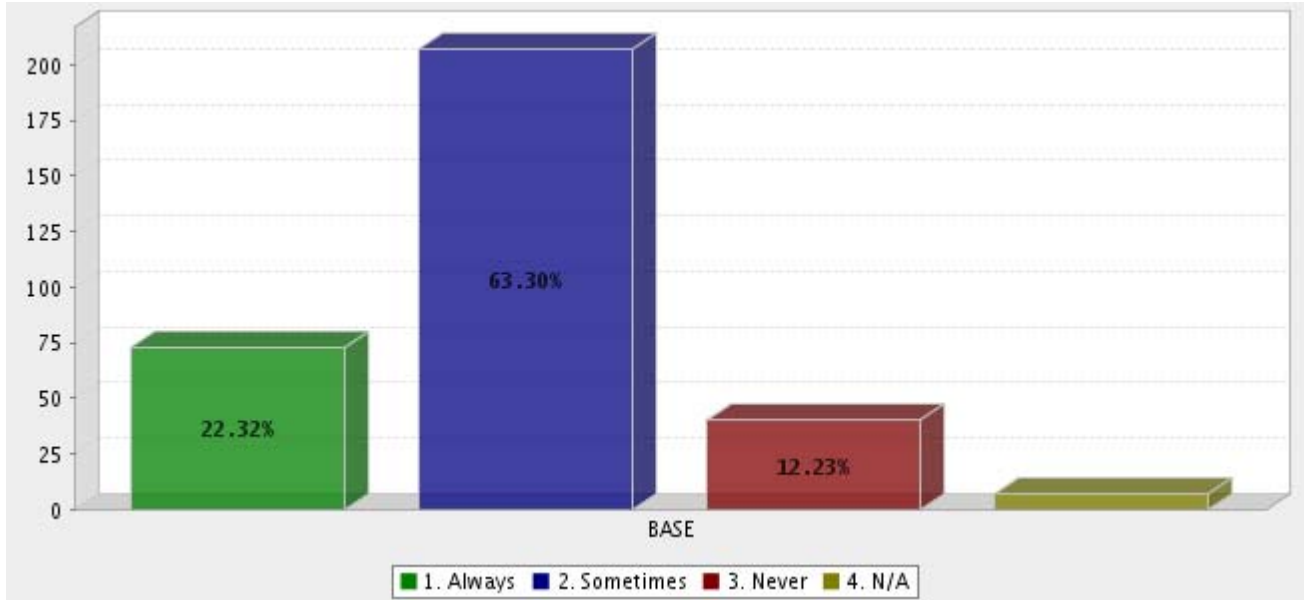


You eat at least 5 servings of fruits and vegetables each day:

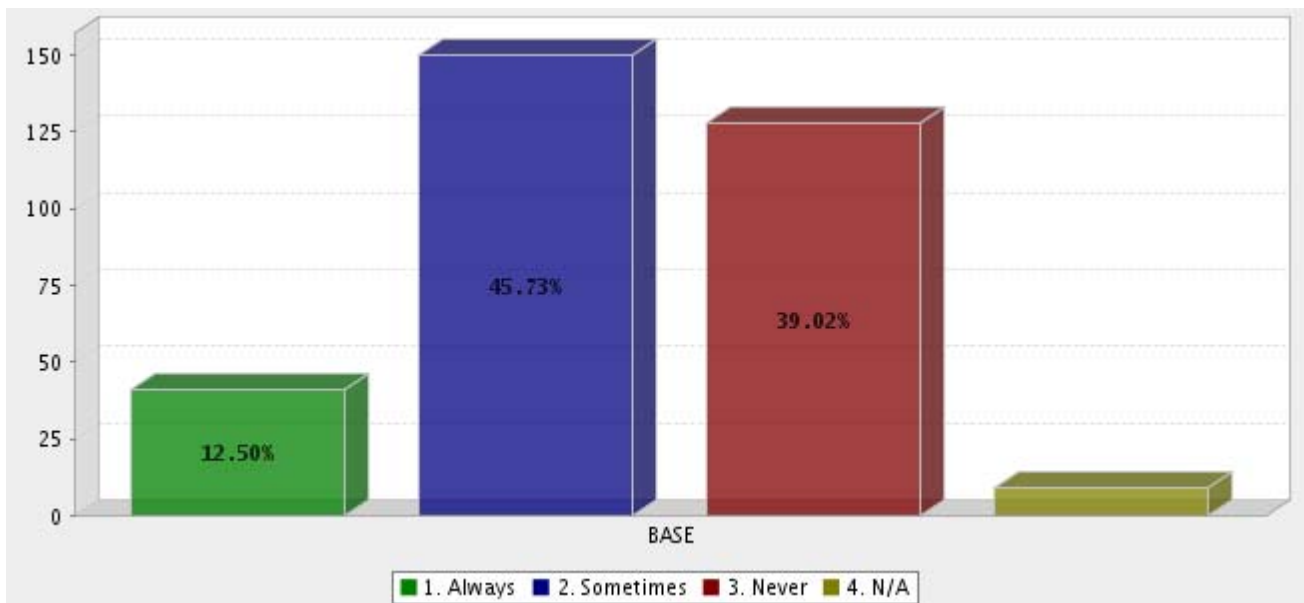




You eat fast food more than once a week:

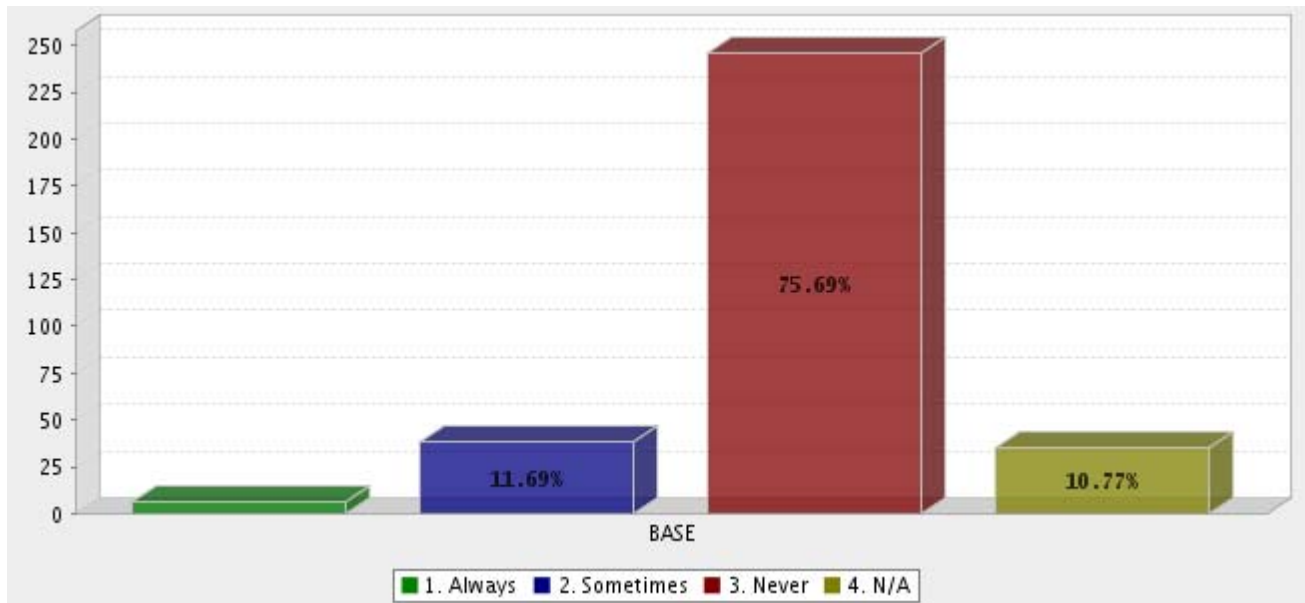


You exercise at a moderate pace at least 30 minutes per day, 5 days per week:

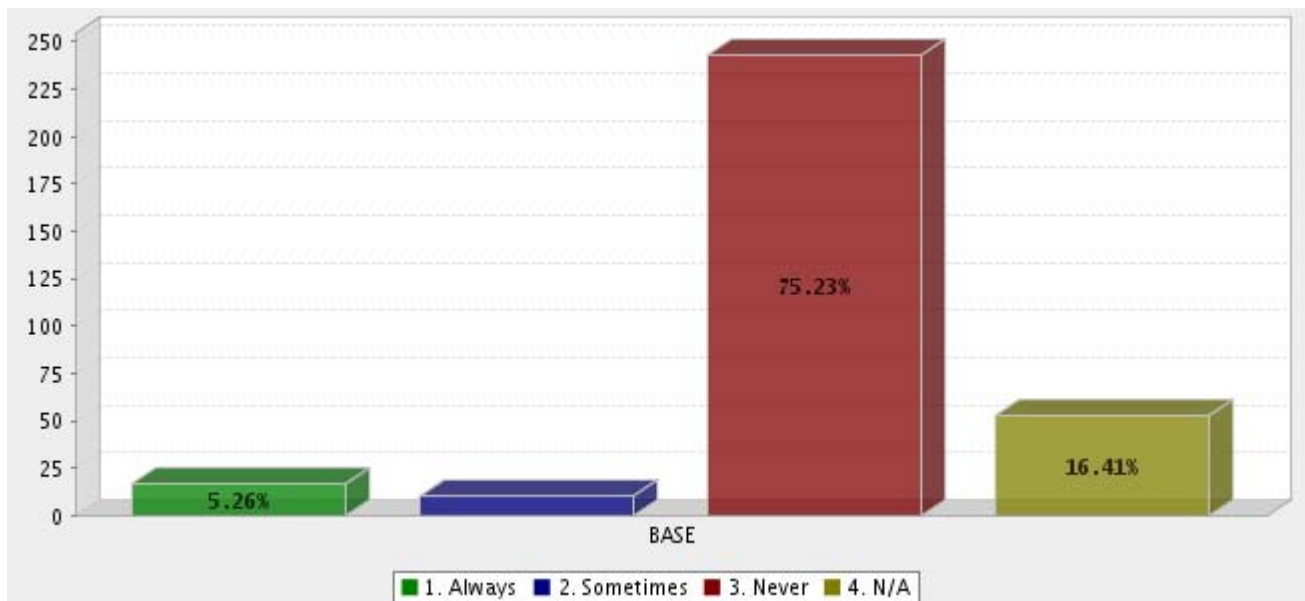




You consume more than 3 alcoholic drinks per day (female) or more than 5 per day (male):

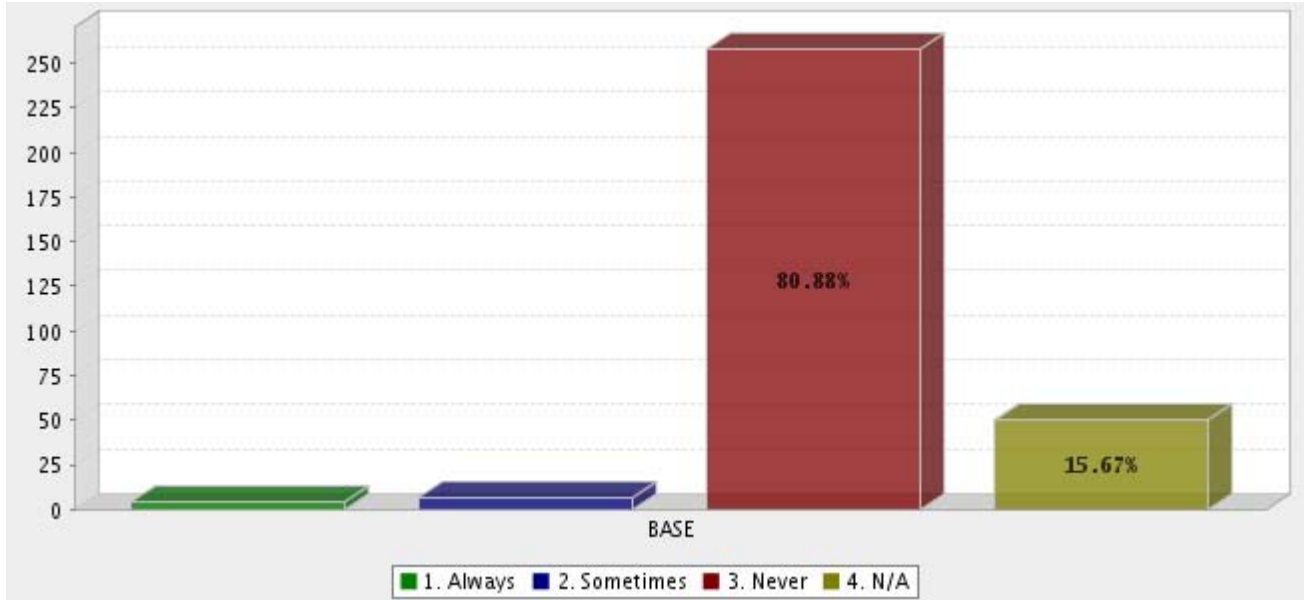


You smoke cigarettes:

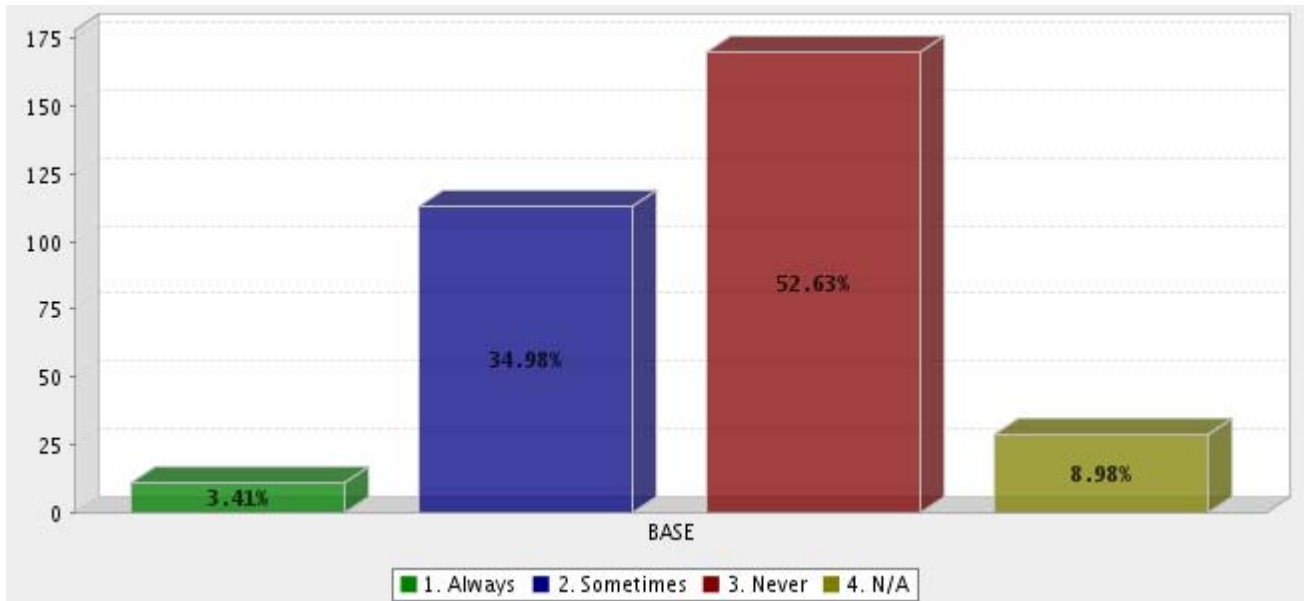




You use chewing tobacco:

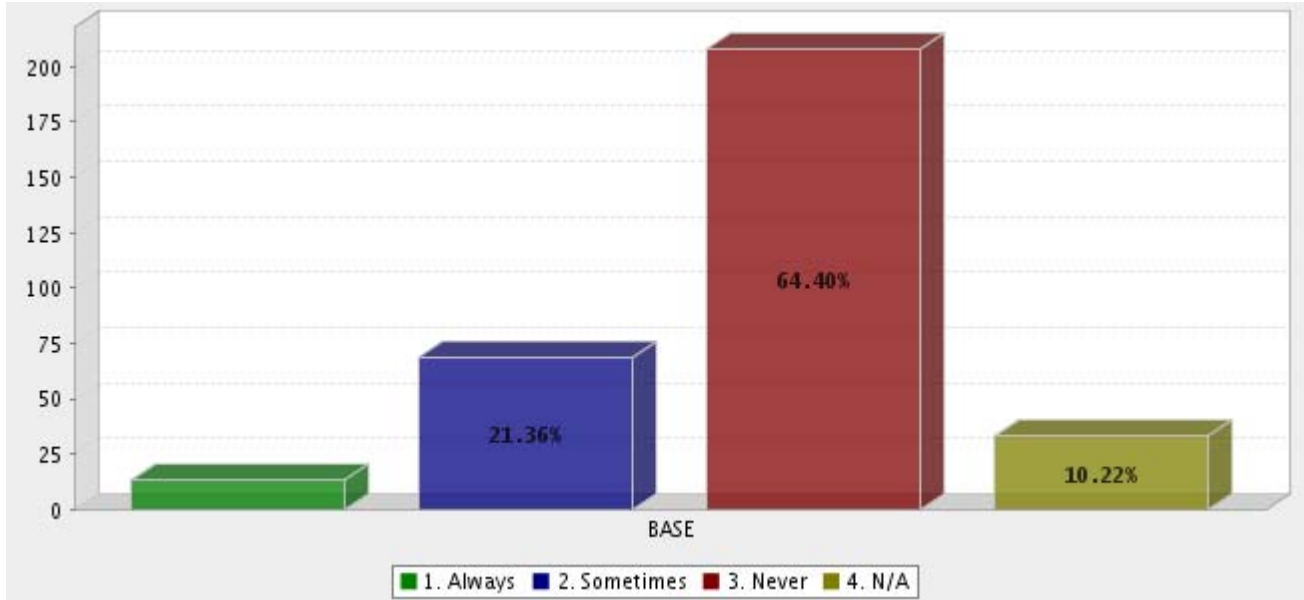


You text while driving a motor vehicle:

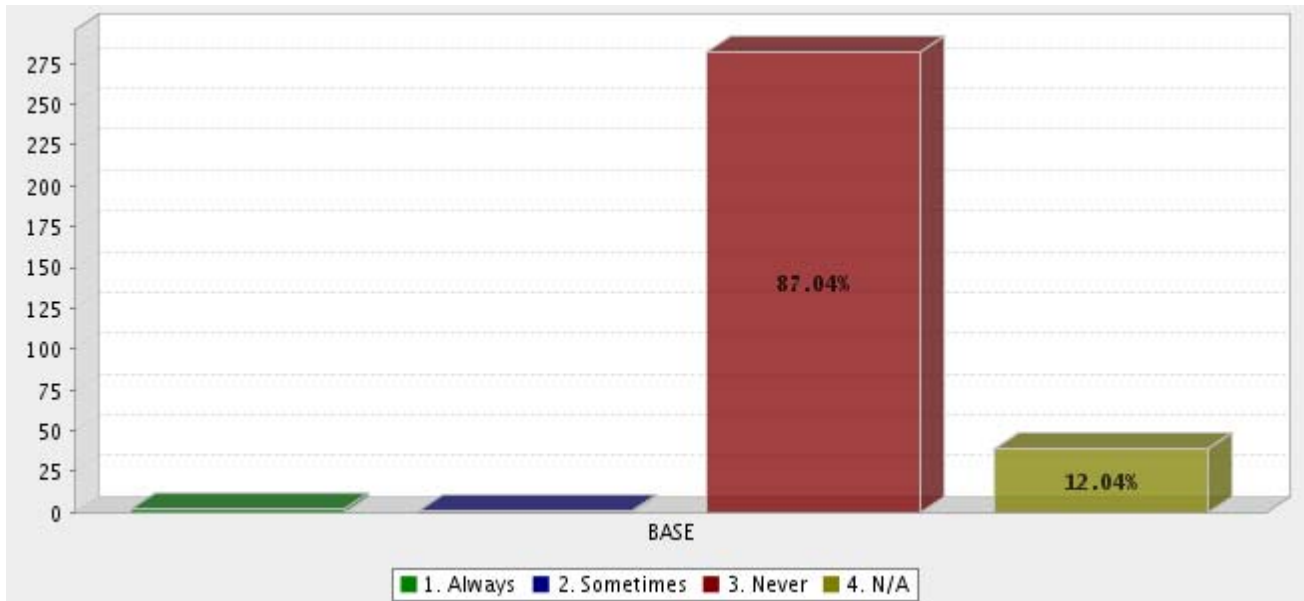




You are exposed to secondhand smoke in your home or at work:

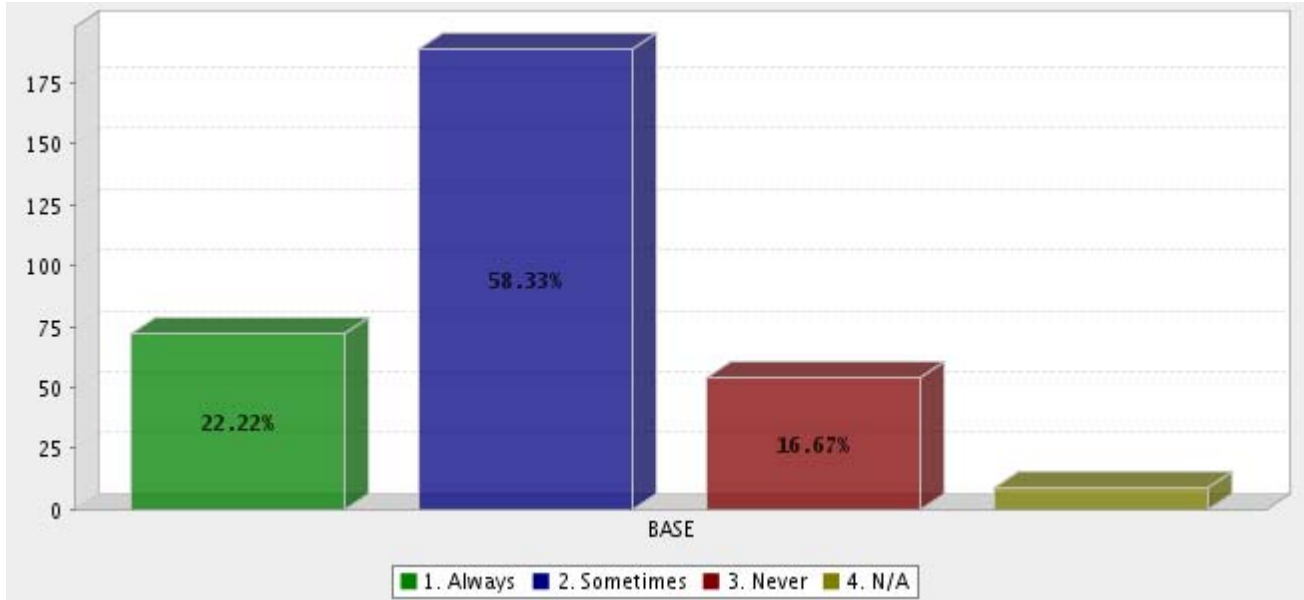


You use illegal drugs (marijuana, cocaine, methamphetamine, etc.):

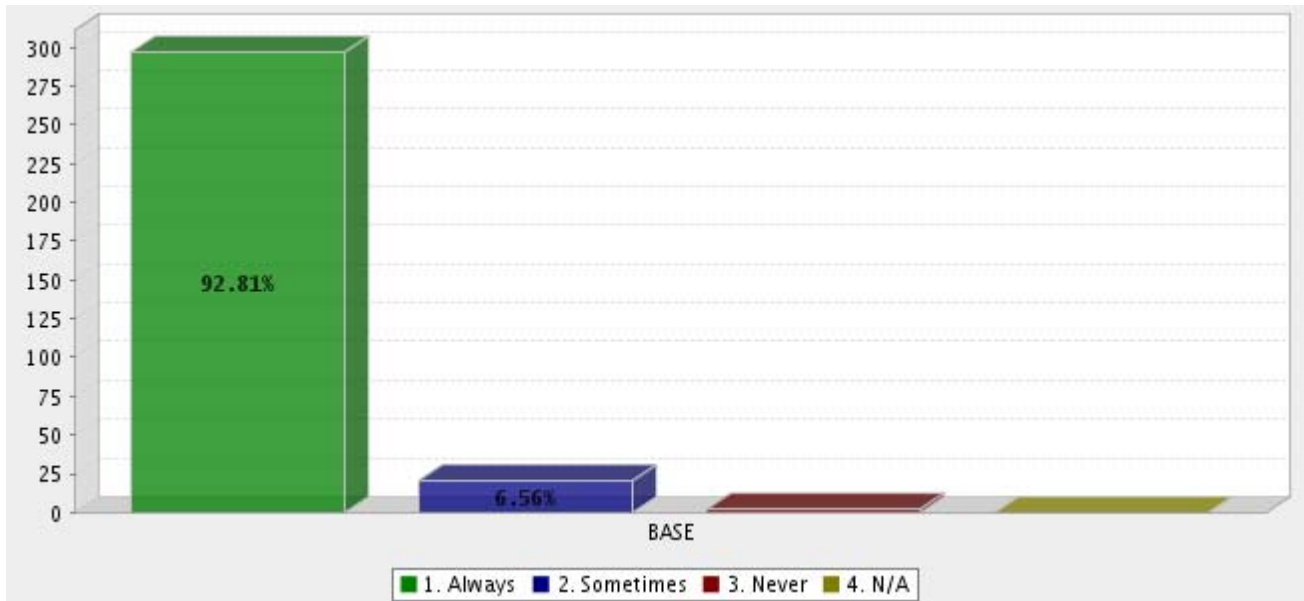




You perform self-exams for cancer (breast or testicular):

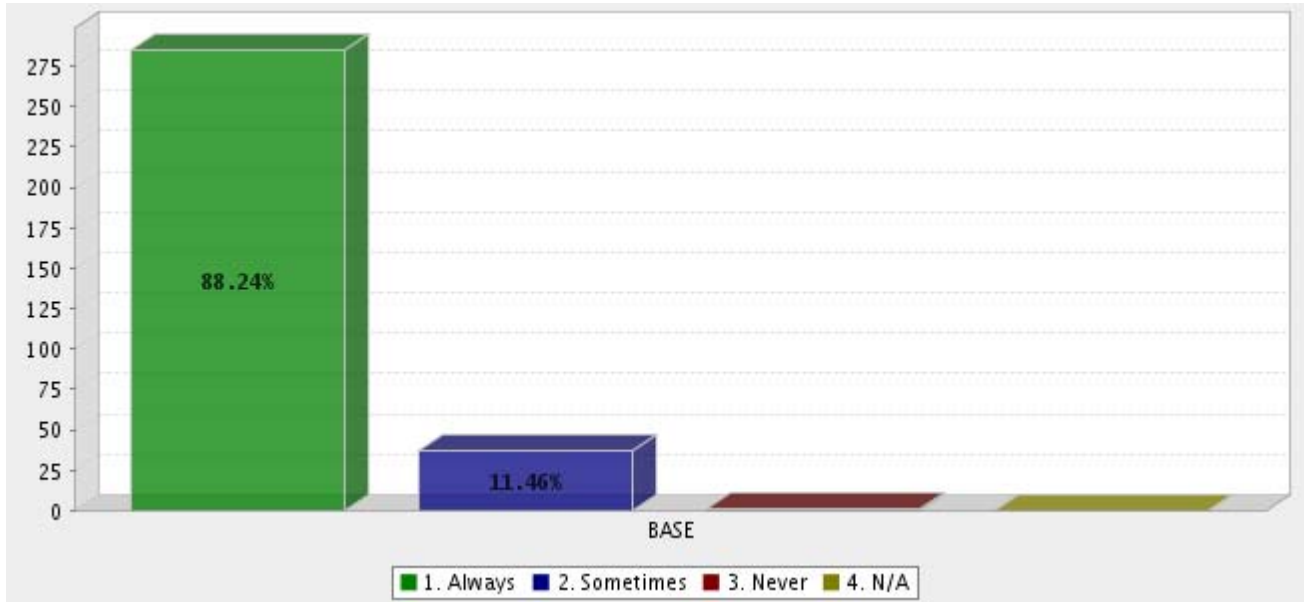


You wash your hands with soap and water after using the restroom:

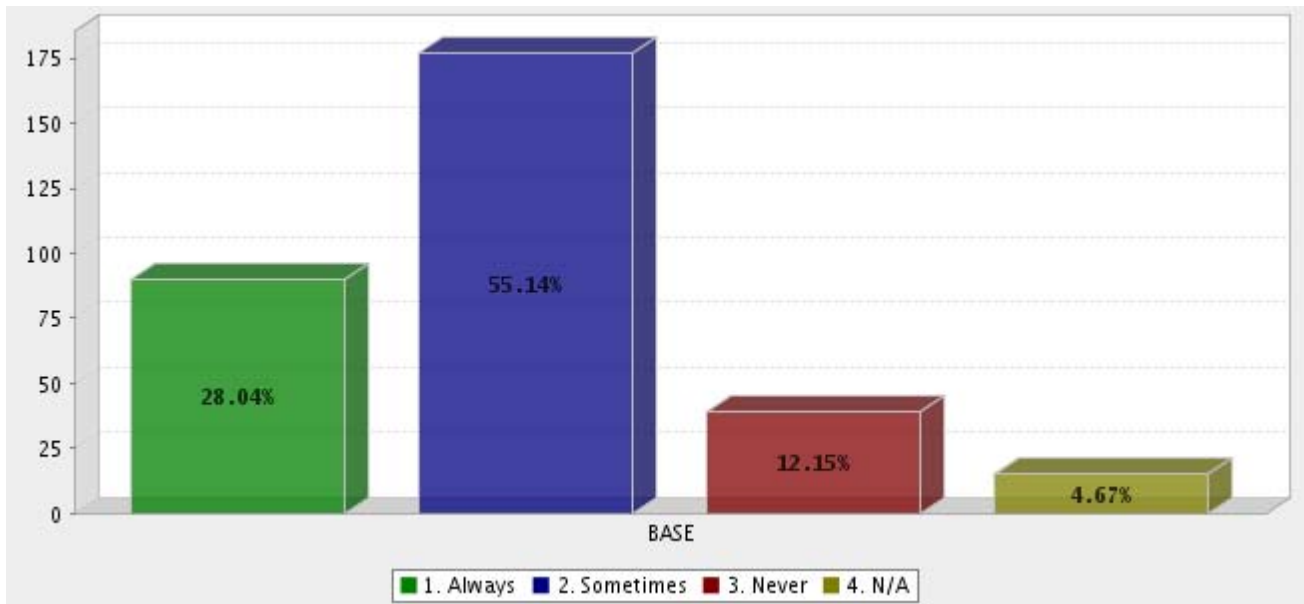




You wash your hands with soap and water before preparing and eating meals:

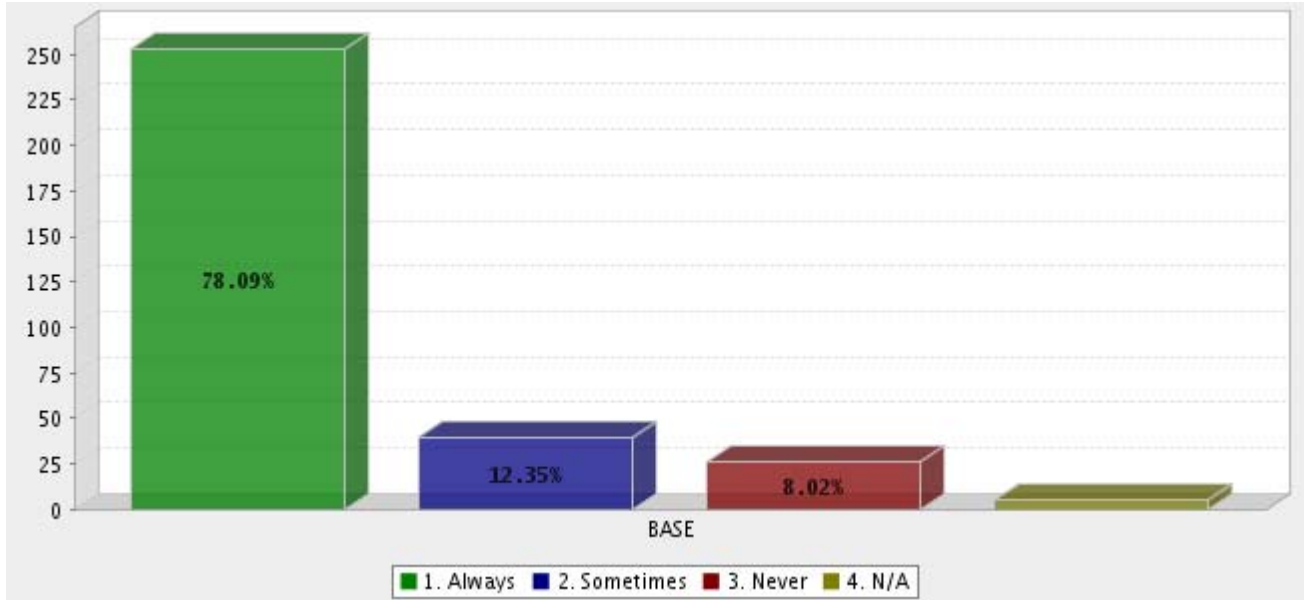


You apply sunscreen before planned time outside:

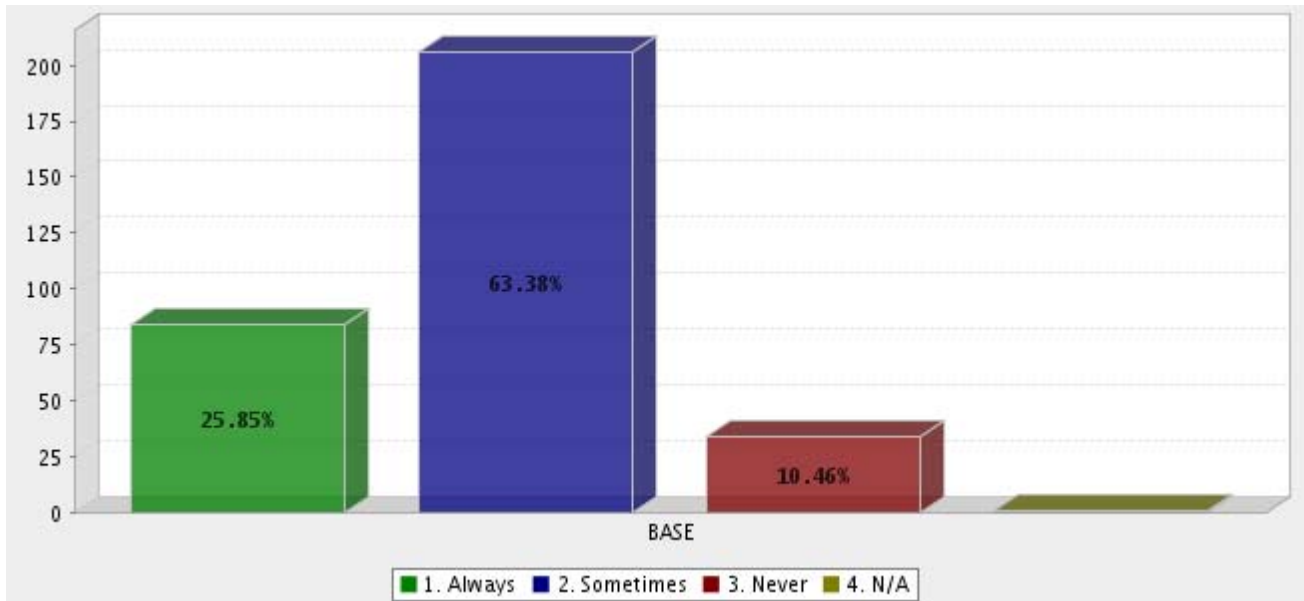




You get a flu shot each year:

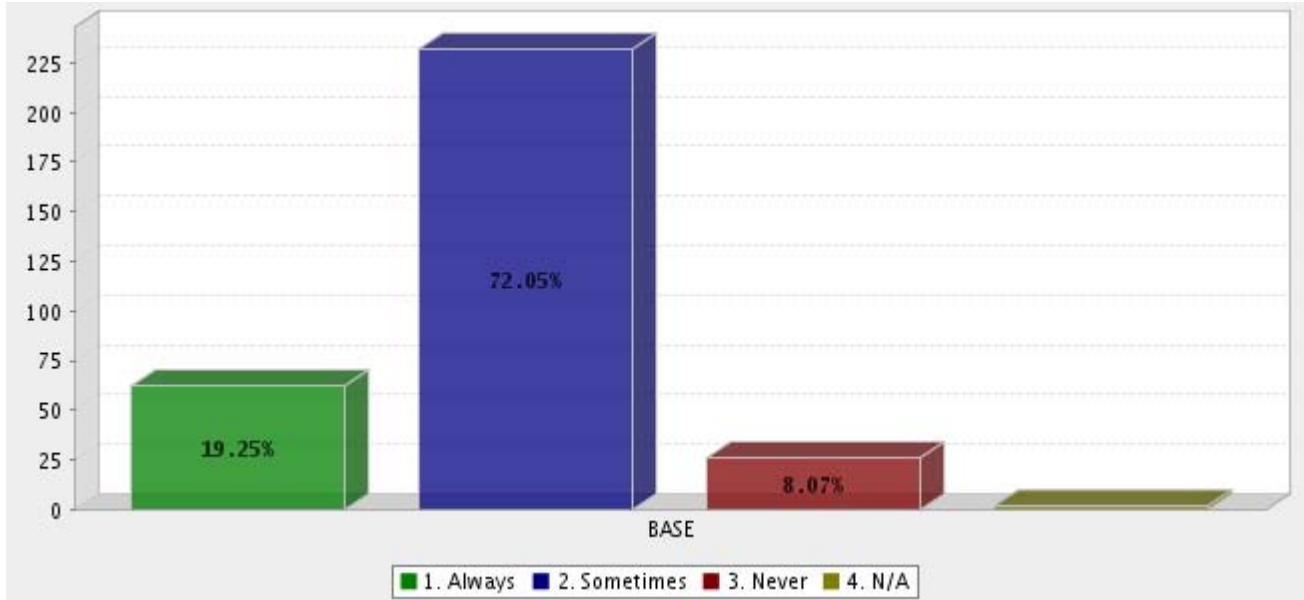


You get enough sleep each night (7-9 hours):

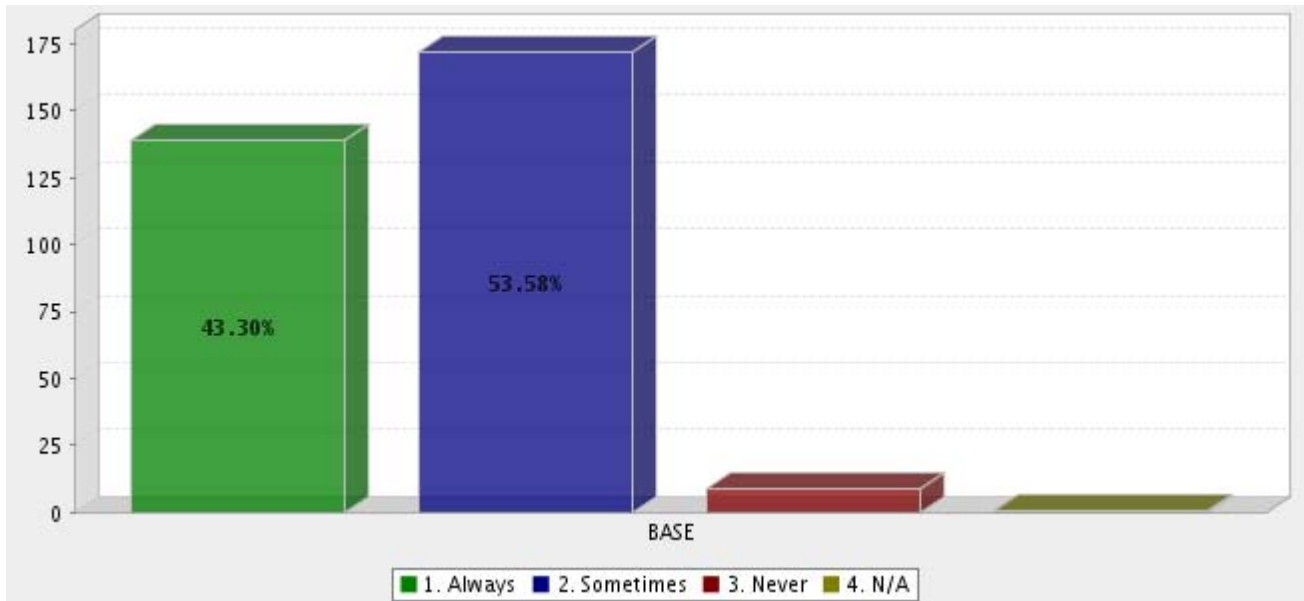




You feel stressed out:

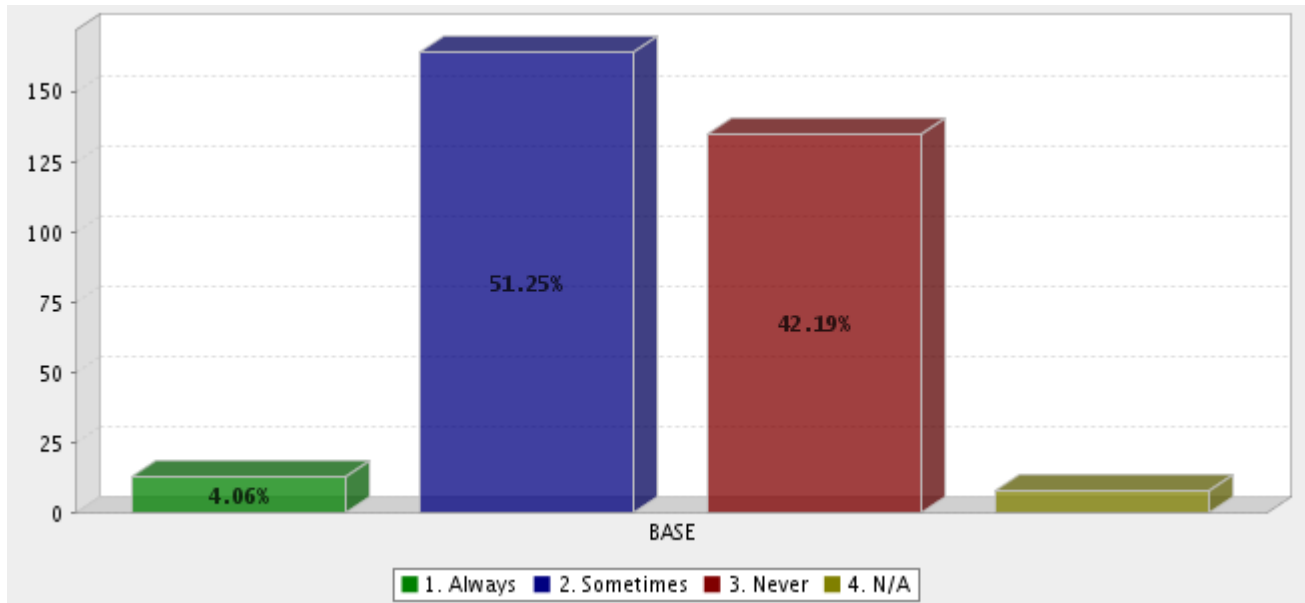


You feel happy about your life:

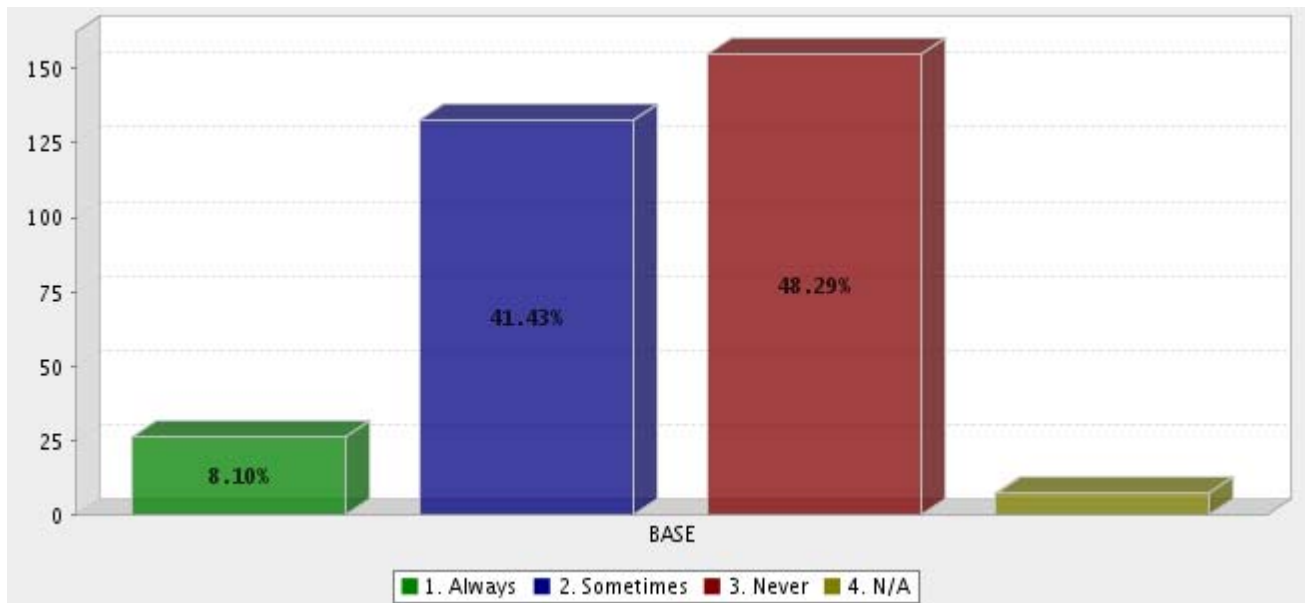




You feel lonely:

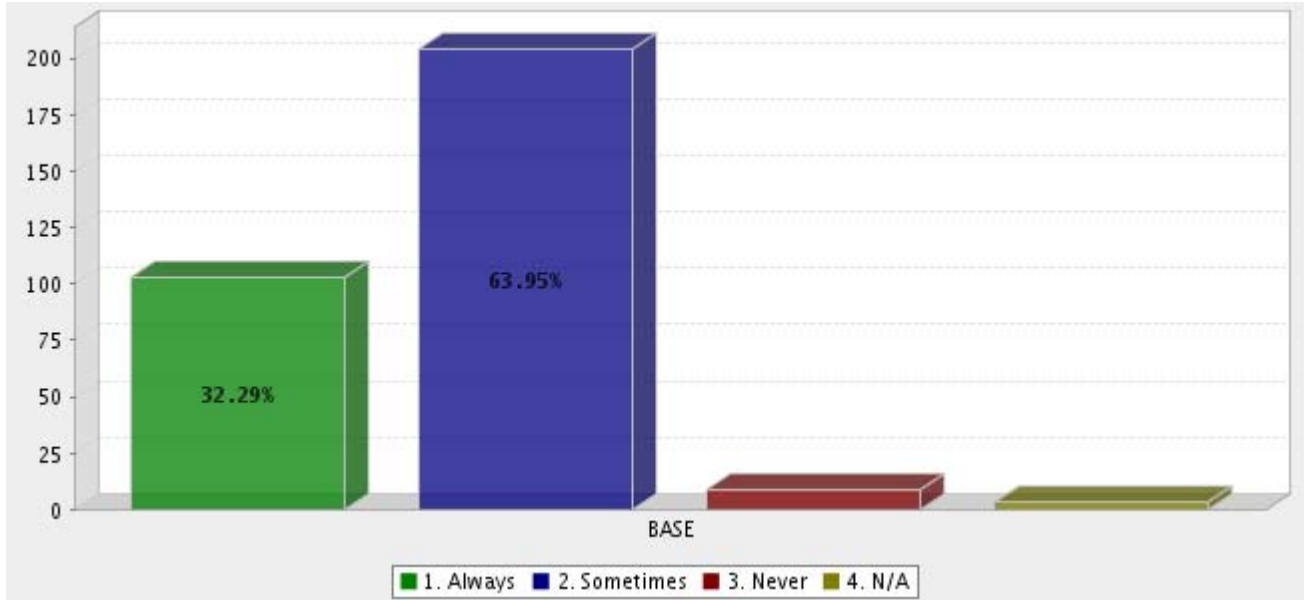


You worry about losing your job:

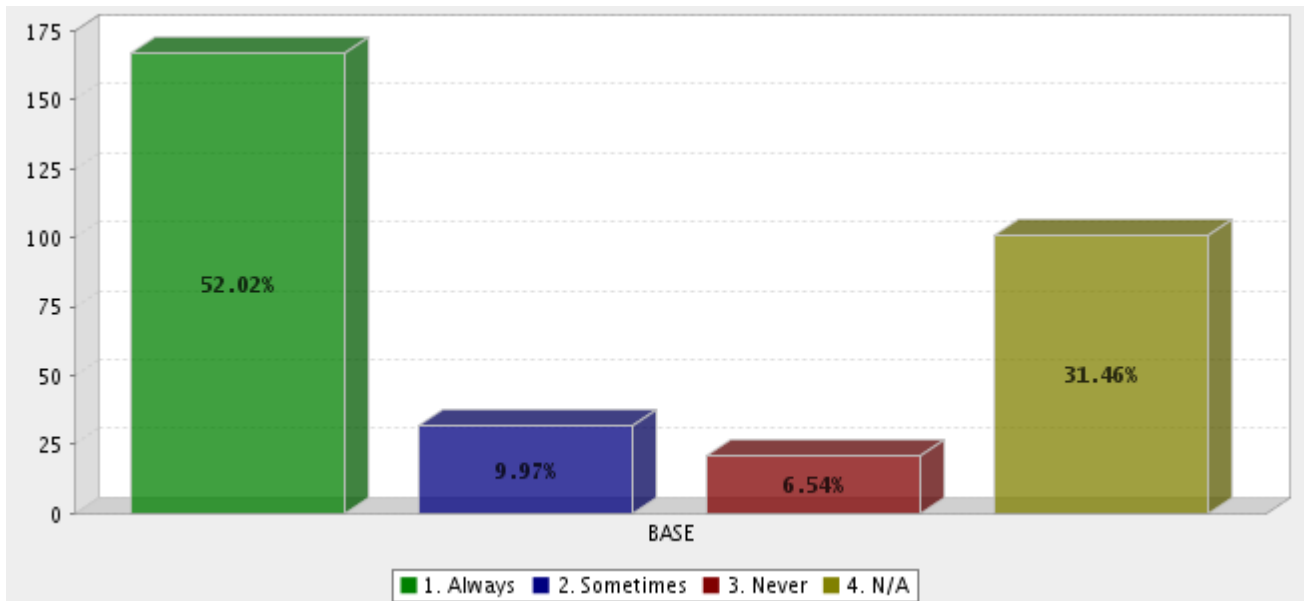




You feel safe in your community:

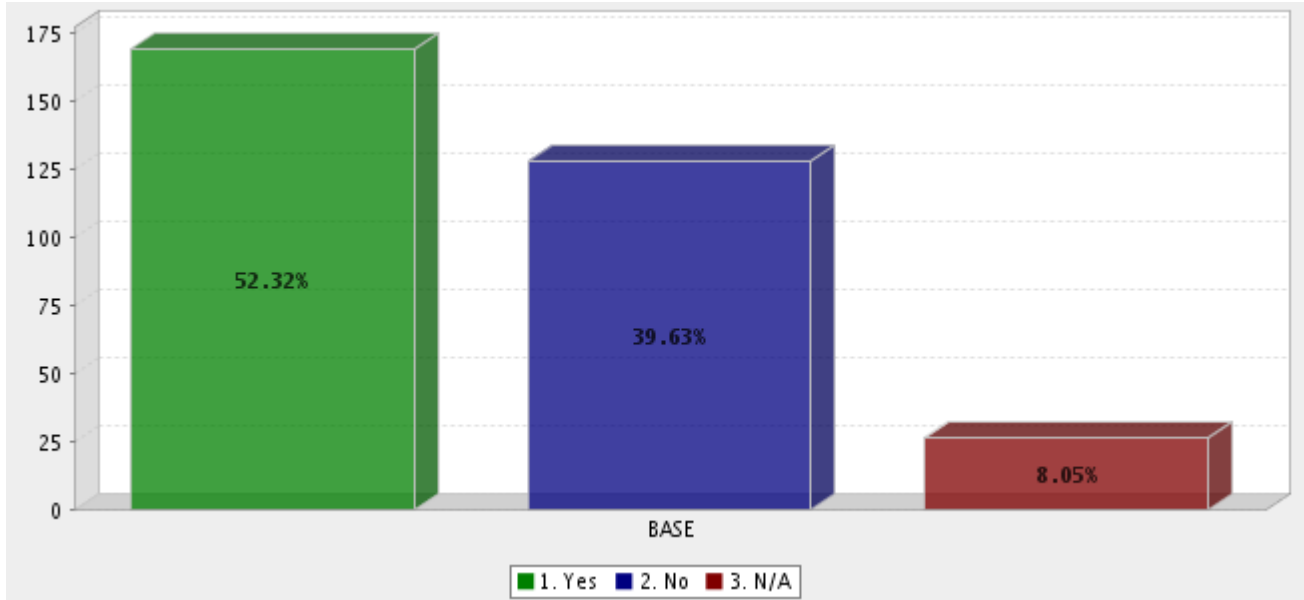


You practice safe sex (condom, abstinence or other barrier method, etc.):

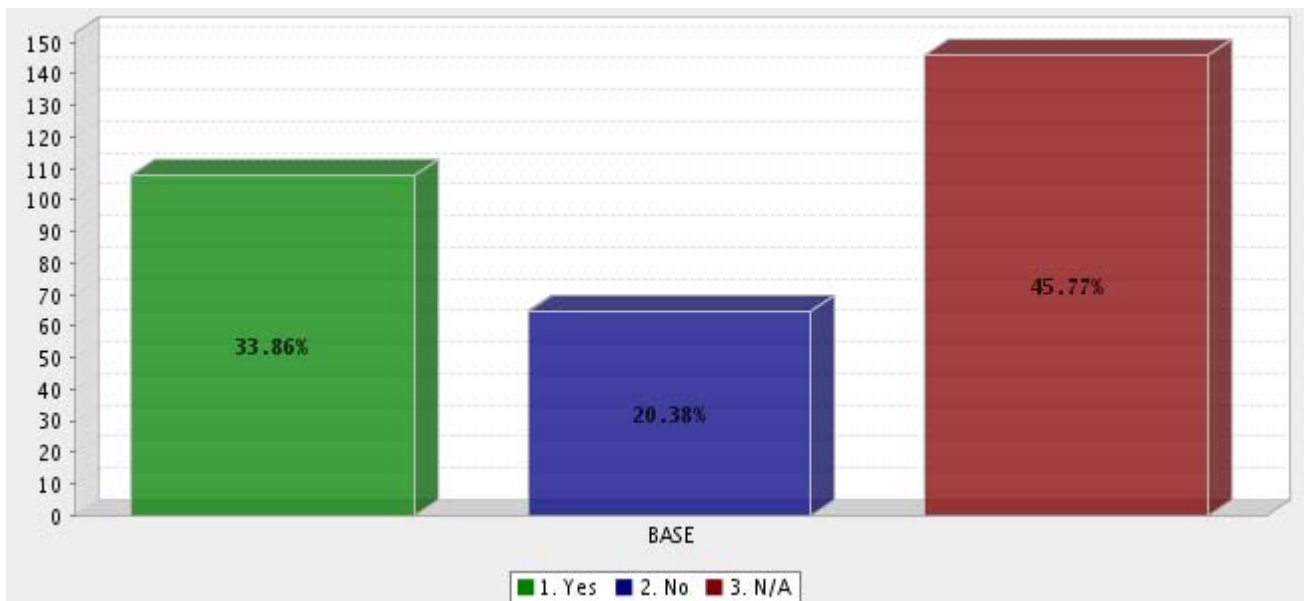




Do you keep firearms in your home?



If firearms are kept in your home, are they stored unloaded and separate from ammunition?

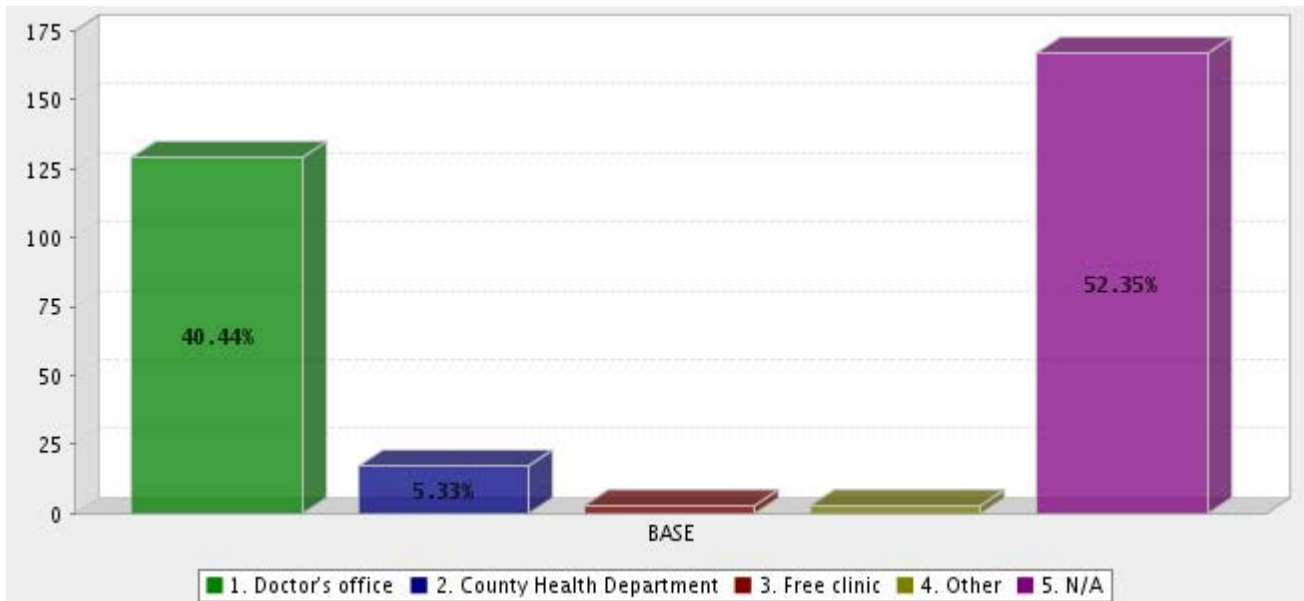




Does domestic violence impact your life?



If you have children, what is your primary resource for obtaining childhood immunizations?





TEXAS REGIONAL HEALTHCARE PARTNERSHIP PLAN

Texas Healthcare Transformation and Quality Improvement Program

REGIONAL HEALTHCARE PARTNERSHIP (RHP) PLAN

1-31-12

RHP 14/Regional Healthcare Partnership Region 14

RHP Lead Contact: *John O'Hearn, MHA*
Director of Regional Development
1115 Waiver Region 14 Anchor Contact
Medical Center Health System
500 W. 4th St. Odessa, TX 79761
johearn@echd.org
Office 432-640-2429
Fax 432-640-1118

Table of Contents

Instructions	1
Section I. RHP Organization.....	3
Section II. Executive Overview of RHP Plan	8
Section III. Community Needs Assessment.....	27
Section IV. Stakeholder Engagement.....	46
A. RHP Participants Engagement.....	46
B. Public Engagement	47
Section V. DSRIP Projects	49
A. RHP Plan Development	49
B. Project Valuation.....	50
C. Category 1: Infrastructure Development.....	52
D. Category 2: Program Innovation and Redesign.....	203
E. Category 3: Quality Improvements	395
F. Category 4: Population-Focused Improvements (Hospitals only)	591
Section VI. RHP Participation Certifications.....	618
Section VII. Addendums	620

Instructions

Supporting Documents: RHPs shall refer to Attachment I (RHP Planning Protocol), Attachment J (RHP Program Funding and Mechanics Protocol), the Anchor Checklist, and the Companion Document as guides to complete the sections that follow. This plan must comport with the two protocols and fulfill the requirements of the checklist.

Timeline:

HHSC Receipt Deadline	What to submit	How to submit
10:00 am Central Time, October 31, 2012	Sections I, II, & III of the RHP Plan & Community Needs Supplemental Information	Submit electronically to HHSC Waiver Mailbox
5:00 pm Central Time, November 16, 2012	Pass 1 DSRIP (including applicable RHP Plan sections, Pass 1 Workbook, & Checklist)	Mail to address below
5:00 pm Central Time, December 31, 2012	Complete RHP Plan (including RHP Plan, Workbooks, & Checklist)	Mail to address below

All submissions will be date and time stamped when received. It is the RHP’s responsibility to appropriately mark and deliver the RHP Plan to HHSC by the specified date and time.

Submission Requirements: All sections are required unless indicated as optional.

The Plan Template, Financial Workbook, and Anchor Checklist must be submitted as electronic Word/Excel files compatible with Microsoft Office 2003. RHP Plan Certifications and Addendums must be submitted as PDF files that allow for OCR text recognition. Please place Addendums in a zipped folder.

You must adhere to the page limits specified in each section using a minimum 12 point font for narrative and a minimum 10 point font for tables, or the RHP Plan will be immediately returned.

Mailed Submissions: RHP Packets should include one CD with all required electronic files and two hardbound copies of the RHP Plan (do not include hardbound copies of the financial workbook).

Please mail RHP Plan packets to:

Laela Estus, MC-H425
Texas Health and Human Services Commission
Healthcare Transformation Waiver Operations
11209 Metric Blvd.
Austin, Texas 78758

Communication: HHSC will contact the RHP Lead Contact listed on the cover page with any questions or concerns. IGT Entities and Performing Providers will also be contacted in reference to their specific Delivery System Reform Incentive Payment (DSRIP) projects.

Section I. RHP Organization

Please list the participants in your RHP by type of participant: Anchor, IGT Entity, Performing Provider, Uncompensated Care (UC)-only hospital, and other stakeholder, including the name of the organization, lead representative, and the contact information for the lead representative (address, email, and phone number). The lead representative is HHSC’s single point of contact regarding the entity’s participation in the plan. Providers that will not be receiving direct DSRIP payments do not need to be listed under “Performing Providers” and may instead be listed under “Other Stakeholders”. Please provide accurate information, particularly TPI, TIN, and ownership type; otherwise there may be delays in your payments. Refer to the Companion Document for definitions of ownership type. Add additional rows as needed.

Note: HHSC does not request a description of the RHP governance structure as part of this section.

RHP Participant Type	Texas Provider Identifier (TPI)	Texas Identification Number (TIN)	Ownership Type (state owned, non-state public, private)	Organization Name	Lead Representative	Lead Representative Contact Information (address, email, phone number)
Anchoring Entity <i>(specify type of Anchor, e.g. public hospital, governmental entity)</i>						
Hospital District	135235306	17523029282501	Non-State Public	Ector County Hospital District dba Medical Center Health System	John O’Hearn, Director of Regional Development	500 W. 4th St. Odessa, TX 79761 johearn@echd.org 432-640-2429
IGT Entities <i>(specify type of government entity, e.g. county, hospital district)</i>						
Hospital District	112684904	17523018012002	Non-State Public	Reeves County Hospital District	Lorenzo Serrano	2323 Texas Street Pecos, TX 79772

RHP Participant Type	Texas Provider Identifier (TPI)	Texas Identification Number (TIN)	Ownership Type (state owned, non-state public, private)	Organization Name	Lead Representative	Lead Representative Contact Information (address, email, phone number)
						lorenzoz@trhta.net 432-447-3551 ext. 6325
Hospital District	127298103	17519978807000	Non-State Public	Andrews County Hospital District dba Permian Regional Medical Center	Sandra Cox, CFO	PO Box 2108 Andrews, TX 79714 scox@permianregional.com 432-464-2107
Hospital District	136143806	17515845596000	Non-State Public	Midland County Hospital District dba Midland Memorial Hospital	Russell Meyer, CEO	400 Rosalind Redfern Grover Parkway Midland TX 79701 Russell.meyers@midland-memorial.com 432-221-1584
Hospital District	136145310	17513001051555	Non-State Public	Martin County Hospital District	Rance Ramsey, CNO	600 Interstate 20 East P.O. Box 640 Stanton, Texas 79782 r Ramsey@martinch.org (432) 607-3207 (ext. 3207)
Hospital District	094172602	17512461660002	Non-State Public	McCamey County Hospital District	Jodie Gulihur, CFO	2500 S Hwy 305 McCamey, TX 79752 jgulihur@mchdtx.net 432-652-8626
Hospital District	176354201	17417363466006	Non-State Public	Culberson County Hospital District	Becky Brewster	PO Box 1145 Van Horn, TX 79855 brewster@valornet.com (432) 207-0346
Hospital District	199602701	13523365016	Non-State Public	Crane County Hospital District	Dianne Yeager	1310 South Alford Street Crane, Texas 79731 dyeager@cranememorial.com 432-558-3555
Physician Practice affiliated	081939301	37397397391019	State Owned	Texas Tech	Kandy Stewart	800 W. 4th Street

RHP Participant Type	Texas Provider Identifier (TPI)	Texas Identification Number (TIN)	Ownership Type (state owned, non-state public, private)	Organization Name	Lead Representative	Lead Representative Contact Information (address, email, phone number)
with an Academic Health Science Center (AHSC)				University Health Science Center-Permian Basin		Odessa TX 79763 kandy.stewart@ttuhsc.edu 432-335-5190
County	094204701	17560012027014	Non-State Public	Winkler County	Jeanna Wilhelm	PO Drawer Y Kermit, TX 79745 Jeanna.willhelm@co.winkler.tx.us (432) 586-6658
CMHC	138364812	17514017767014	Non-State Public	Permian Basin Community Centers	Ramona Thomas, CFO	401 E. Illinois Midland, TX 79701 rthomas@pbmhm.com 432-570-3333
CMHC	130725806	17526061696003	Non-State Public	West Texas Centers	Gail Wells	409 Runnels Big Spring, Texas 79720 Gail.wells@wtcmhm.org 432-466-1504
Performing Providers <i>(specify type of provider, e.g. public or private hospital, children's hospital, CMHC, that will receive DSRIP payments under the RHP plan, some of which may also receive UC)</i>						
Private Hospital	176354201	12013552562005	Private	Culberson Hospital	Jared Chanski, CEO	PO Box 609 Van Horn, TX 79855 jchanski@culbersonhospital.org 432-283-2760

RHP Participant Type	Texas Provider Identifier (TPI)	Texas Identification Number (TIN)	Ownership Type (state owned, non-state public, private)	Organization Name	Lead Representative	Lead Representative Contact Information (address, email, phone number)
Private Hospital	112711003	16217955745001	Private	Odessa Regional Medical Center	Stacey Gerig, CEO	520 East Sixth Street Odessa, Texas 79761 SGerig@iasishealthcare.com 432-582-8703
Private Hospital	094204701	17560012027014	Non-State Public	Winkler County Memorial Hospital	William Ernst, CEO	821 Jeffee Dr Kermit, TX wernst@wcmh.net 432-586-8257
UC-only Hospitals (<i>list hospitals that will only be participating in UC</i>)						
Private Hospital	131043506	17525745810000	Private	Scenic Mountain Medical Center	John Irby, CFO	1601 West Eleventh Place Big Spring, TX 79720 John_irby@chs.net 432-268-4904
Private Hospital	094224503	17527175453005	Private	Big Bend Regional Medical Center	Michael Ellis, CEO	2600 Hwy 118 N Alpine, TX Mike_ellis@chs.net 432-837-0242
Public Hospital (County)	136331910	75 6001193	Non-State Public	Ward Memorial Hospital	Padraic White, CEO	PO Box 40 Monahans, TX 79756 pwhite@wardmemorial.org 432-943-2511 ext. 174
Hospital District	199602701	13523365016	Non-State Public	Crane County Hospital District	Dianne Yeager, CEO	1310 South Alford Street Crane, Texas 79731 dyeager@cranememorial.com 432-558-3555
State Hospital	137918204	13201136432000	State-Owned	Big Spring State Hospital	Olga Rodriguez	1100 West 49 th St. Austin, TX 78756 Olga.rodriguez@dshs.state.tx.us

RHP Participant Type	Texas Provider Identifier (TPI)	Texas Identification Number (TIN)	Ownership Type (state owned, non-state public, private)	Organization Name	Lead Representative	Lead Representative Contact Information (address, email, phone number)
						512-776-7181
Other Stakeholders <i>(specify type)</i>						
County Medical Associations/Societies						
Regional Public Health Directors						
Other significant safety net providers within the region (specify type)						
Others (specify type, e.g. advocacy groups, associations)						

Section II. Executive Overview of RHP Plan

RHP 14's vision since the beginning of this project has been to ensure that all patients in this region have access to high quality medical and behavioral healthcare services regardless of socioeconomic income or location. We understand that this is a community effort and we are working diligently with our different stakeholders to ensure that we can accomplish our goals. We are working to ensure that patients have options outside of the traditional inpatient setting, by revamping outpatient procedures and guidelines.

- **High-level summary of existing RHP healthcare environment, which may include a brief summary of the RHP's patient population and health system**
 - RHP 14 has a very unique healthcare environment. Due to our size, many of our patients are traveling great distances to get specialty services and in some cases even primary care. This leads to very low rates in terms on proper screenings, prenatal care, and health literacy. Another unique factor is that we don't have one large system like you would see in East Texas or more urban areas. We are a collection of independent entities that have operated in silos and therefore care became poorly coordinated. Through the waiver process we were able to identify ways in which we can work together to streamline care and through our projects you will find numerous examples of entities working together. We are also a very rapidly growing segment of Texas. Midland and Odessa are the two fastest growing cities in the US according to multiple reports and that doesn't even take into account the estimated 20,000-30,000 people we have living in hotels waiting for housing to come available. This rapidly changing environment has put a strain on already limited resources and space, which we believe leads to improper utilization of emergency services and resources.
 - Patient Population facts and figures:
 - According to our CNA, twenty-six percent of adults 25 years or older in RHP 14 did not graduate from high school. About 28% have some kind of college degree. Eighteen percent of all people in the RHP fall below the poverty line. The percentage of children living in poverty is 26%.
 - The overall teen pregnancy rate in RHP 14 was higher (29.4/1000) than the Texas rate of 21.4/100.
 - 10 of the 16 counties in RHP 14 are considered Frontier Counties because they have less than seven people per square mile.
 - 40% of people living in RHP 14 have commercial insurance.
 - 29% are uninsured, and the remainder relies on Medicare, Medicaid, or CHIP.
 - 13 out of 16 Counties are designated as Medically Underserved Areas.
 - RHP 14 has higher death rates than Texas for heart disease, chronic lower respiratory disease, accidents, Alzheimer's disease, motor vehicle accidents, influenza/pneumonia, and cancers of colon, rectum, anus, and suicide.
- **Key health challenges facing the RHP**

- *Rapid Population Growth- the Texas State Data Center and Office of the State Demographer estimated the population in 2012 to be 385,144. According to their estimates, the population will increase by 10% from 2012 to 2030, growing from 385,144 to 424,968. People aged 65 and older will account for a larger percentage of the population in 2030.*
- *Limited Available Housing- This is directly related to the population growth. Findings homes for incoming healthcare professionals is very difficult.*
- *Provider shortages- We have an aging physician base in RHP 14 and recruitment of providers is sometimes difficult, especially in the frontier counties.*
- **High level summary of how the 4-year DSRIP projects realize the RHP’s 5-year vision**
 - *Primary Care Expansion- RHP 14 understands that our current primary care infrastructure is insufficient to meet our current needs. Almost every entity in RHP 14 has dedicated a project or segment of a project to meet this need.*
 - *Health Literacy rates in our area are very low, so to impact that you will see numerous education projects, as well as interpretation projects aimed at eliminating that specific barrier to care.*
 - *Community involvement is of paramount importance to our long term success as a region. We have projects that bring together different counties entities to tackle chronic disease. Regional partners include school districts, health departments, community colleges, and medical societies. By working together in a substantive way, we believe that our projects will have an even greater impact.*

Summary of Categories 1-2 Projects

Project Title (include unique RHP project ID number for each project.)	Brief Project Description	Related Category 3 Outcome Measure(s) (include unique Category 3 Improvement Target (IT) Identifier specific to RHP and outcome title)	Estimated Incentive Amount (DSRIP) for DYs 2-5
Category 1: Infrastructure Development			
135235306.1.1- West Odessa Family Health Clinic Medical Center Health System 135235306	Establishing a primary care medical home in the underserved area of West Odessa. Focus would be on pediatrics, family practice, optometry, and OB/GYN.	135235306.3.1- IT 1.10 Diabetes care: HbA1c poor control (>9.0%)	\$8,701,783
135235306.1.2 MCHS Healthy Kids Program Medical Center Health System 135235306	Establishing a pediatric program designed to increasing health literacy and improves access to pediatric services.	135235306.3.2 IT 3.11 Pediatric Asthma 30-Day readmission rate	\$8,658,623

Project Title (include unique RHP project ID number for each project.)	Brief Project Description	Related Category 3 Outcome Measure(s) (include unique Category 3 Improvement Target (IT) Identifier specific to RHP and outcome title)	Estimated Incentive Amount (DSRIP) for DYs 2-5
<p>135235306.1.3 MCHS Women’s Health Initiative Medical Center Health System 135235306</p>	<p>Improving access to all expectant mothers and piloting new care models to deliver care.</p>	<p>135235306.3.3 IT 8.3 Early Elective Delivery</p>	<p>\$8,301,010</p>
<p>135235306.1.4 MCHS Interpretation Expansion Medical Center Health System 135235306</p>	<p>Improving interpretation services through technology and increased training therefore ensuring that all patients are able to understand discharge instructions.</p>	<p>135235306.3.4 IT 6.1 Patient Satisfaction</p>	<p>\$1,813,738</p>
<p>136143806.1.1: - Expanded Primary Care Midland Memorial Hospital 136143806</p>	<p>Our Region has only 61 primary care physicians per 100,000 people, compared to the state-wide rate of 69.5. HHS has designated all the counties in RHP14 as having “whole” or “partial” shortages of primary care physicians. Our recruitment project focuses on family practitioners, pediatricians, and mid-level (APRN and/or PA) primary care providers which will allow Midland residents greater access to basic health care. Our goal is to increase the number of primary care providers in RHP 14 by recruiting at least 2 additional providers per year for the extent of the demonstration project thereby increasing access to basic healthcare and increased treatment of high blood pressure issues that affect 33.5% of the population.</p>	<p>136143806.3.1- IT 1.7- Controlling high blood pressure</p>	<p>\$5,627,235</p>

Project Title (include unique RHP project ID number for each project.)	Brief Project Description	Related Category 3 Outcome Measure(s) (include unique Category 3 Improvement Target (IT) Identifier specific to RHP and outcome title)	Estimated Incentive Amount (DSRIP) for DYs 2-5
<p>136143806.1.2: 68NURSE Expansion Midland Memorial Hospital: 136143806</p>	<p>In an effort to improve appropriate utilization of ED services, the 68NURSE telephone triage program was developed to provide medical advice to community residents. Our goal is the expansion of this program. Included in our expansion plans is developing linkages between the triage service and one or more local primary care providers. By using established protocols, patients are triaged based on their chief complaint and associated signs or symptoms to the most appropriate level of care.</p>	<p>136143806.3.2- IT 9.2- ED appropriate utilization</p>	<p>\$3,094,979</p>
<p>136143806.1.3: Establishment of Women’s Clinic in an Underserved Area Midland Memorial Hospital 136143806</p>	<p>To establish a new clinic solely for women’s health within an existing medical clinic. MCHS’ Coleman Clinic is located in a medically-underserved area of Midland. The target clientele are generally young, low-income and uninsured. For many of the patients, educational, cultural and language barriers may discourage timely access to pregnancy testing and early prenatal care. We want to remove the barriers to obstetrical care for low-income women in this medically-underserved area of Midland and improve access to first</p>	<p>136143806.3.3- IT 8.2- % of Low-Birth Weight Births</p>	<p>\$3,376,341</p>

Project Title (include unique RHP project ID number for each project.)	Brief Project Description	Related Category 3 Outcome Measure(s) (include unique Category 3 Improvement Target (IT) Identifier specific to RHP and outcome title)	Estimated Incentive Amount (DSRIP) for DYs 2-5
	trimester prenatal care.		
<p>136143806.1.4:Enhance Interpretation Services and Culturally Competent Care: Expansion of Remote Video/Voice Interpretation Services Midland Memorial Hospital 136143806</p>	<p>Our goal is to increase the number of qualified medical interpreters and to expand video/voice LAS services with our hospital thereby enhancing effective communication with LEP patients and their families. Effective and expedient communication facilitates mutual understanding of assessment, appropriate diagnosis, agreeable treatment options and acute or chronic illness education transcending to compliance with treatment plans, better patient satisfaction scores and lower readmission rates.</p>	<p>136143806.3.4- IT 3.1- All Cause 30 Day Readmission Rate</p>	<p>\$3,094,979</p>
<p>136143806.1.5: Expand Specialty Care Capacity: Recruiting targeted specialty care providers to RHP14 Midland Memorial Hospital 136143806</p>	<p>Our goal is to increase the number of targeted specialty care providers in Midland by recruiting at least one (1) additional targeted specialist per year for the extent of the demonstration project thereby allowing Midland residents greater access to specialty health care. Our primary challenges include cost involved in recruitment; the competitive nature of recruiting the limited number of available physicians to a remote community; the need of providers to be bilingual</p>	<p>136143806.3.5- IT 11.1- Improvement in Clinical Indicator in identified disparity group</p>	<p>\$3,657,703</p>

Project Title (include unique RHP project ID number for each project.)	Brief Project Description	Related Category 3 Outcome Measure(s) (include unique Category 3 Improvement Target (IT) Identifier specific to RHP and outcome title)	Estimated Incentive Amount (DSRIP) for DYs 2-5
	in Spanish/English; and, with the energy-related economic boom, housing has become very limited.		
081939301.1.1: Expansion of Behavior Health Sciences Texas Tech University Health Science Center-Permian Basin 081939301	Improved access to psychiatric care and services in RHP 14 through the recruitment of new physicians.	081939301.3.1- IT-2.4- Behavior Health/Substance Abuse	\$3,491,398
081939301.1.2: VIP Relationships in the Home Texas Tech University Health Science Center-Permian Basin 081939301	Our residency program will appropriately train physicians for RHP 14 in a Patient Centered Medical Home (PCMH) model stressing relationships, and establishment of a Regional Network Relationship (RNR) of physicians and patients.	081939301.3.2- IT 6.1 Patient Satisfaction	\$3,415,496
081939301.1.3: Family Medicine Rural Track Texas Tech University Health Science Center-Permian Basin 081939301	The Texas Tech Family Medicine Rural Track-Permian Basin (TTFMRT-PB) will be developed by the Texas Tech University Health Sciences Center Family and Community Medicine Department at the Permian Basin and submitted for approval by the ACGME. Rural Clinic assessment, IT support, and the development of Telemedicine between Alpine, Texas and Ft. Stockton, Texas (RHP 13) (Pecos County) and TTUSHC-SOM Permian Basin will also occur	081939301.3.3- IT-9.2- ED Appropriate Utilization	\$4,098,595

Project Title (include unique RHP project ID number for each project.)	Brief Project Description	Related Category 3 Outcome Measure(s) (include unique Category 3 Improvement Target (IT) Identifier specific to RHP and outcome title)	Estimated Incentive Amount (DSRIP) for DYs 2-5
<p>081939301.1.4: Identification and Intervention to address local gaps in women’s healthcare through education Texas Tech University Health Science Center- Permian Basin 081939301</p>	<p>Address regional gaps in women’s access to healthcare through the increase of infrastructure dedicated to provision of healthcare for women in the Permian Basin through increased staffing, geographic expansion of obstetric and gynecologic care within the region and collaboration with community agencies and providers.</p>	<p>081939301.3.4- IT 12.1- Breast Cancer Screenings 081939301.3.5- IT 12.1- Cervical Cancer Screenings 081939301.3.6- IT 12.5- Reductions in second teen pregnancy</p>	<p>\$3,263,696</p>
<p>094204701.1.1: Primary Care Expansion Winkler County Memorial Hospital 094204701</p>	<p>Primary Care Expansion to accommodate growing population</p>	<p>094204701.3.1- IT 9.2- ED Appropriate Utilization</p>	<p>\$356,968</p>
<p>127298103.1.1: Establishment of Prompt Care Center Permian Regional Medical Center 127298103</p>	<p>Primary Care Expansion focused on providing Prompt Care Services for the residents of Andrews County.</p>	<p>127298103.3.1- IT 9.2- ED Appropriate Utilization</p>	<p>\$3,311,023</p>
<p>112711003.1.1: Expansion of Primary Care Access Odessa Regional Medical Center 112711003</p>	<p>ORMC will expand access to primary care through the recruitment and establishment of two additional primary care physicians along with increasing hours of operation at identified locations. ORMC hopes to demonstrate these goals through increased satisfaction scores regarding timeliness of care and appointments.</p>	<p>112711003.3.1- IT 6.1- Percent improvement over baseline of patient satisfaction scores; getting timely care, appointments, and information.</p>	<p>\$5,014,112</p>
<p>112711003.1.2: Implementation of Mobile Clinic</p>	<p>Develop a mobile clinic to increase access to primary care services to populations that</p>	<p>112711003.3.2- IT 12.5 Other USPSTF endorsed screening outcome</p>	<p>\$4,512,700</p>

Project Title (include unique RHP project ID number for each project.)	Brief Project Description	Related Category 3 Outcome Measure(s) (include unique Category 3 Improvement Target (IT) Identifier specific to RHP and outcome title)	Estimated Incentive Amount (DSRIP) for DYs 2-5
Odessa Regional Medical Center 112711003	might otherwise go without. Evidence of this will be demonstrated through the increase in carotid artery Stenosis, peripheral arterial disease, and abdominal aortic aneurysm screenings offered.	measure 112711003.3.3- IT 12.5 Other USPSTF endorsed screening outcome measure 112711003.3.4- IT 12.5 Other USPSTF endorsed screening outcome measure	
112711003.1.3: Development of Telemedicine Program Odessa Regional Medical Center 112711003	Develop a telemedicine program and identify services most needed within the RHP. Currently ORMC is exploring a neuro-telemedicine program due to the importance of timely identification and treatment associated with stroke.	112711003.3.5- IT 3.7- Stroke/CVA 30 Day Readmission Rate	\$2,507,056
112711003.1.4: Gestational Diabetes Management Program Odessa Regional Medical Center 112711003	Increase the ability to identify and treat patients with Gestational Diabetes and continue to manage their diabetes throughout pregnancy.	112711003.3.6- IT 1.10- Diabetes Care: HbA1c poor control (>9.0%)	\$4,011,289
112711003.1.5: ORMC Women's Clinic Odessa Regional Medical Center 112711003	The Woman's Clinic will allow ORMC to tailor services and treatments to a specific population. This will be demonstrated through an increase in USPSTF endorsed screenings, including	112711003.3.7- IT 12.5 Other USPSTF endorsed screening outcome measure 112711003.3.8- IT 12.5 Other USPSTF endorsed screening outcome measure 112711003.3.9- IT 12.5 Other USPSTF endorsed screening outcome measure	\$4,011,289
138364812.1.1: Expand Specialty Care Permian Basin	PBCC intends to increase Behavioral Health Care capacity, primarily psychiatric and	138364812.3.1- IT 6.1 Patient Satisfaction	\$4,012,720

Project Title (include unique RHP project ID number for each project.)	Brief Project Description	Related Category 3 Outcome Measure(s) (include unique Category 3 Improvement Target (IT) Identifier specific to RHP and outcome title)	Estimated Incentive Amount (DSRIP) for DYs 2-5
Community Centers 138364812	counseling services, to patients who do not meet the Department of State Health Services (DSHS) definition of “Target Population”.		
138364812.1.2: Enhance Service Availability to Appropriate Levels of Behavioral Health Care Permian Basin Community Centers 138364812	PBCC intends to increase the capacity of its detox and residential substance abuse facility from 22 to 42 beds. The goal of this project is to enhance access to intensive residential treatment and detoxification services, while reducing the need for local Emergency Departments (ED) in PBCC’s catchment area to purchase expensive mental health and detox beds for crisis like situations that are substance abuse related. PBCC could treat these persons in a less restrictive environment.	138364812.3.2 IT 10.1- Quality of Life	\$4,020,192
130725806.1.1: Behavioral Health Telemedicine Expansion West Texas Centers 130725806	West Texas Centers will expand access to behavioral health care through expansion of our current telemedicine network in Andrews, Howard, Reeves, Upton, Ward and Winkler Counties. All West Texas Center Counties in the RHP are served primarily via a current telemedicine system from the hub site of Big Spring, Texas. Acquisition of additional broadband capacity, hardware, software, office space, support staff and expansion of existing	130725806.3.1- IT 6.2 Other Improvement Target	\$2,282,965

Project Title (include unique RHP project ID number for each project.)	Brief Project Description	Related Category 3 Outcome Measure(s) (include unique Category 3 Improvement Target (IT) Identifier specific to RHP and outcome title)	Estimated Incentive Amount (DSRIP) for DYs 2-5
	professional personnel contracts will provide increased access to care for consumers.		
Category 2: Program Innovation and Redesign			
135235306.2.1: Comprehensive Heart Failure Management Program Medical Center Health System 135235306	Create a new delivery system for outpatient heart failure management through a combination of navigation and innovative treatment methodologies.	135235306.3.5- IT 3.2- Congestive Heart Failure 30 Day Readmission Rate	\$4,019,365
135235306.2.2: MCHS-TTUHSC Care Transitions Medical Center Health System 135235306	Create a Care Transitions program through collaboration with the Texas Tech School of Nursing that will ensure that patients are not only navigated through their admission, but in the outpatient realm as well.	135235306.3.6- IT 3.1- All Cause 30 Day Readmission Rate	\$4,369,264
135235306.2.3: MCHS Severe Sepsis Program Medical Center Health System 135235306	Implementation of a Severe Sepsis program that will place heavy focus on internal and external education through the development of a Clinical Sepsis Coordinator position and Sepsis Surveillance Nurses.	135235306.3.7- IT 4.8- Sepsis Mortality	\$1,766,791
135235306.2.4: MCHS Mobility Teams Medical Center Health System 135235306	Implementation of Mobility Teams throughout the hospital. These teams will be comprised of mainly volunteer nursing students who will help ensure that patients' are turned regularly to help prevent pressure ulcers.	135235306.3.8- IT 4.7- Hospital Acquired Deep Pressure Ulcers	\$3,605,850
135235306.2.5: Diabetes Outreach: Education and Screening Medical Center Health System 135235306	Collaboration between MCHS and the Health Department to more actively screen for diabetes in the general population. Through the	135235306.3.9- IT 2.9- Uncontrolled Diabetes Admissions Rate	\$4,644,543

Project Title (include unique RHP project ID number for each project.)	Brief Project Description	Related Category 3 Outcome Measure(s) (include unique Category 3 Improvement Target (IT) Identifier specific to RHP and outcome title)	Estimated Incentive Amount (DSRIP) for DYs 2-5
	development of 2 Diabetes Outreach Coordinators, we will be able to screen at multiple sites and expand educational opportunities to all types of patients.		
135235306.2.6: MCHS Palliative Care Medical Center Health System 135235306	Development of a palliative care program that will be focused on eliminating the stigmas associated with palliative care. This would include the development of a team that could assist physicians, caregivers, families, and patients through this difficult time.	135235306.3.10- IT 13.4- Proportion admitted to the ICU in the last 30 days of life	\$4,337,454
135235306.2.7: Faith Based Community Care Medical Center Health System 135235306	Development of a Faith Based Community Care program that would create a liaison network that could help navigate patients through the complex health care world. These liaisons would be able to access MCHS's vast array of materials and would go through a rigorous training module.	135235306.3.11- IT 12.1- Breast Cancer Screening 135235306.3.12- IT 12.3- Colorectal Cancer Screening 135235306.3.13- IT 12.4- Pneumonia Vaccination Status for Older Adults	\$3,701,461
136143806.2.1: Establish/Expand a Patient Care Navigation Program: Decreasing Frequent Flyers in ED through EMS Patient Navigation Program Midland Memorial Hospital 136143806	Over a third of Midland's EMS transports are for non-emergent reasons. We believe that by (1) developing and implementing a collaborative agreement between the 68NURSE program and EMS for telephonic triage services for non-emergent patients and by (2) collaborating with the local EMS to integrate an APRN on	136143806.3.6- IT-11.1 Improvement in Clinical Indicator in identified disparity group	\$2,250,894

Project Title (include unique RHP project ID number for each project.)	Brief Project Description	Related Category 3 Outcome Measure(s) (include unique Category 3 Improvement Target (IT) Identifier specific to RHP and outcome title)	Estimated Incentive Amount (DSRIP) for DYs 2-5
	<p>the EMS team, we can lower this rate by providing definitive care on site or by redirecting non-emergent patients to a more appropriate level of care. Non-emergent patients calling EMS for transport will receive services of 68NURSE to reduce non-emergent ED visits and provide onsite resources for appropriate level of care sites. We believe we could achieve as much as a 20% decrease in non-emergent EMS transports to the ED through on site APRN care or screening to a more appropriate level of care.</p>		
<p>136143806.2.2: Expand Chronic Care Management Model – Tackling Community Diabetes Midland Memorial Hospital 136143806</p>	<p>A combined effort of Midland Memorial Hospital, Midland Health Department and Midland Community Health Care Services Diabetes, our project seeks to increase screenings for diagnosis, HbA1c control and foot exams among the undiagnosed or inadequately treated diabetic patients in our region. Extrapolating data based on the CDC diabetes statistics, there are probably over 14,000 people with diabetes in Midland County, approximately 3,900 undiagnosed. The target population is adults with diabetes--either undiagnosed or untreated due to lack of</p>	<p>136143806.3.7- IT 1.10 Diabetes care: HbA1c poor control (>9.0%) 136143806.3.8- IT 1.13- Diabetes Care: Foot Care</p>	<p>\$5,627,235</p>

Project Title (include unique RHP project ID number for each project.)	Brief Project Description	Related Category 3 Outcome Measure(s) (include unique Category 3 Improvement Target (IT) Identifier specific to RHP and outcome title)	Estimated Incentive Amount (DSRIP) for DYs 2-5
	education or cost barriers. By creating alternative venues for screening such as the MHD and neighborhood fairs, our goal is to reduce the number of undiagnosed and/or currently unsupervised cases in Midland County who seek costly, sporadic medical services in the ED or end up hospitalized.		
136143806.2.3: Use of Palliative Care Programs: Integration of a Palliative Care Team into an Acute Care Hospital Midland Memorial Hospital 136143806	The Palliative Care Team consult service will be a center of excellence in the practice of palliative care medicine by improving the quality of life of patients with serious, life-limiting illnesses and by providing ongoing education so providers at MMH can better understand the complex nature of life-limiting illnesses and increase their level of comfort dealing with end-of-life issues.	136143806.3.9- IT 13.1- Pain Assessment 136143806.3.10- IT 13.2- Treatment Preferences 136143806.3.11- IT 13.5- Percentage of patients receiving hospice or palliative care services with documentation in the clinical record of a discussion of spiritual/religions concern or documentation that the patient/caregiver did not want to discuss	\$3,094,979
136143806.2.4: Engage in population-based campaigns or programs to promote healthy lifestyles using evidence-based methodologies including social media and text messaging in an identified population: Implement Evidence-based Health Promotion and Disease Prevention	Increase public education of general health and wellness as well as disease prevention by sponsoring community events based on common health disorders or needs discovered from local ED and community clinic data located in neighborhoods of greatest need as identified by zip code. We will track this population to specific neighborhoods where	136143806.3.12- IT 11.1- Improvement in Clinical Indicator in identified disparity group	\$3,376,341

Project Title (include unique RHP project ID number for each project.)	Brief Project Description	Related Category 3 Outcome Measure(s) (include unique Category 3 Improvement Target (IT) Identifier specific to RHP and outcome title)	Estimated Incentive Amount (DSRIP) for DYs 2-5
Programs Midland Memorial Hospital 136143806	community health events will be hosted to educate as well as offer free basic health screenings such as glucose, blood pressure and lipid profiles.		
081939301.2.1: Diabetes Coordinated Care Center Texas Tech University Health Science Center- Permian Basin 081939301	Our goal is to create a coordinated care center that will implement the core components of the chronic care model. The center will attend patients with diabetes and coordinate their care including all educational aspects of nutrition and self-management. The Diabetes Care Center at TTUHSC, which is accessible to all patients regardless of financial status, will be promoted in the community. Establishment of the DCC Center will enable us to implement a centralized, flexible, integrated, outpatient, coordinated diabetes care for all patients in all TTUHSC Family Medicine (FM) outpatient clinics in the Permian Basin thus reducing ED utilization by patients with the diagnosis of diabetes.	081939301.3.7- IT-1.11 Diabetes Care: BP Control (<140/80mm Hg)	\$2,960,097
081939301.2.2: New Model for Delivery of Diabetes Care in the Outpatient Clinic Texas Tech University Health Science Center-	Our proposal focuses on the implementation of a new and transformed model for structuring the diabetes clinic visit, reaching out to the community with education	081939301.3.8- IT- 1.10 – Diabetes Care – HbA1C poor control	\$2,125,198

Project Title (include unique RHP project ID number for each project.)	Brief Project Description	Related Category 3 Outcome Measure(s) (include unique Category 3 Improvement Target (IT) Identifier specific to RHP and outcome title)	Estimated Incentive Amount (DSRIP) for DYs 2-5
Permian Basin 081939301	initiatives on prevention or delay of diabetes, and on delivering comprehensive longitudinal care in a time-efficient, cost-contained format. The intent is to “raise the floor” on treating diabetic patients.		
081939301.2.3: TTUHSC Continuity of Care Texas Tech University Health Science Center-Permian Basin 081939301	This project will focus on strategies and logistics for capturing patients discharged from the hospital with the goal of providing referral and follow-up care resources to prevent readmissions. This proposal is based on the new US Government Commission statement of July, 2012 calling for public-private mechanisms to slow, prevent and delay the burgeoning epidemic of diabetes.	081939301.3.9- IT-3.3- Diabetes 30 day readmission rate	\$1,442,099
081939301.2.4: Identification and Intervention to address local gaps in Women’s healthcare through education Texas Tech University Health Science Center-Permian Basin 081939301	The project will address the challenges by producing a women’s health education program, offering individual education with outpatient visits to increase compliance, patient ability to participate in care and improve patient community programs such as the ongoing collaborative effort between TTUHSC-PB Department of Obstetrics and Gynecology and the Ector County Independent School District. Case coordination will also be a part of the patient experience,	081939301.3.10- IT 12.1- Breast cancer screenings 081939301.3.11- IT 12.2- Cervical Cancer Screenings 081939301.3.12- IT 12.5- reduction in re reported STD’s	\$1,214,398

Project Title (include unique RHP project ID number for each project.)	Brief Project Description	Related Category 3 Outcome Measure(s) (include unique Category 3 Improvement Target (IT) Identifier specific to RHP and outcome title)	Estimated Incentive Amount (DSRIP) for DYs 2-5
	providing assistance with referrals for insurance coverage, referral to specialty care and provision of social assistance.		
176354201.2.1: Establishment of a Primary Care Medical Home Culberson Hospital 176354201	Development of a NCQA Medical Home to better meet the needs of Culberson County.	176354201.3.1- IT 9.2 ED Appropriate Utilization	\$498,478
112711003.2.1: ORMC Sepsis Program Odessa Regional Medical Center 112711003	Implement both the resuscitation and management bundles through process improvement techniques in order to decrease the sepsis mortality rate.	112711003.3.10- IT 4.8 Sepsis Mortality	\$4,011,289
112711003.2.2: Congestive Heart Failure Clinic Odessa Regional Medical Center 112711003	ORMC will develop a Congestive Heart Failure clinic to offer treatment and follow up services for patients presenting with this condition. The clinic will look at reducing readmissions for patients with this condition.	112711003.3.11- IT 3.2- Congestive Heart Failure 30 Day Readmission Rate	\$3,259,172
112711003.2.3: ORMC Chronic Care Management of Diabetes Odessa Regional Medical Center 112711003	Develop and implement a diabetes program that consists of both an outpatient and inpatient program to support the regions diabetic population.	112711003.3.12- IT 1.10- Diabetes Care: HbA1c poor control (>9.0%)	\$3,509,878
112711003.2.4: ED Patient Care Navigation Odessa Regional Medical Center 112711003	The patient navigator program will look at identifying and assisting a specific population to be identified within DY 2. The navigator program will help guide patients through various	112711003.3.13- IT 9.2- ED appropriate utilization	\$3,509,878

Project Title (include unique RHP project ID number for each project.)	Brief Project Description	Related Category 3 Outcome Measure(s) (include unique Category 3 Improvement Target (IT) Identifier specific to RHP and outcome title)	Estimated Incentive Amount (DSRIP) for DYs 2-5
	healthcare options relating to their condition.		
136145310.2.1: Expand Chronic Care Management: Diabetes Martin County Hospital District 136145310	The goal of this project is to provide diabetic patients with, chronic conditions, proactive ongoing care that keeps the patient healthy and empowers them to self-manage their condition in order to avoid worsening health issues and the need for ER and/or inpatient care.	136145310.3.1- IT 2.9- Uncontrolled Diabetes Admission Rates	\$1,416,595
09417602.2.1: Diabetes Transition of Care McCamey County Hospital District 09417602	Implement a pilot intervention for diabetic patients to improve HbA1C for those with uncontrolled diabetes, or newly diagnosed patients.	094172602.3.1- IT-1.10 Diabetes care: HbA1c poor control (>9.0%)	\$48,000
138364812.2.1: Integration of Behavioral and Primary Care Permian Basin Community Centers 138364812	Permian Basin Community Centers (PBCC) intends to integrate primary care into the center's two largest behavioral health care clinics. These 2 clinics currently serve approximately 600 S individuals with SPMI. The goal is to have primary care physicians, case management, and support staff imbedded in PBCC's public mental health care clinics in order to provide a more cohesive continuum of care between behavioral health and primary care.	138364812.3.3- IT 10.1- Quality of Life	\$8,723,286
112684904.2.1: Implementation of a Certified Diabetes Education Program	Implement a Certified Diabetes Education Program. The ultimate goal of the program is to develop and implement	112684904.3.1- IT 1.12- Diabetes Care Retinal Eye Exam 112684904.3.2- IT 1.13-	\$969,833

Project Title (include unique RHP project ID number for each project.)	Brief Project Description	Related Category 3 Outcome Measure(s) (include unique Category 3 Improvement Target (IT) Identifier specific to RHP and outcome title)	Estimated Incentive Amount (DSRIP) for DYs 2-5
Reeves County Hospital District 112684904	chronic disease management interventions that are geared towards improving effective management of chronic conditions. This will have the ultimate effect of increasing the percentage of adult diabetes patients who have optimally managed modifiable risk factors with the intent of preventing or reducing future complications associated with poorly managed diabetes.	Diabetes Care Foot Exam 112684904.3.3- IT 1.14- Diabetes Care Microalbumin/Nephropathy	
112684904.2.2: Mammography Program Reeves County Hospital District 112684904	As a major part of the Reeves County Hospital District Cancer Prevention Program, the Hospital District will commence in a project to implement a mammography program in order to increase mammography screenings in the Hospital's geographic service area.	112684904.3.4- IT 12.1- Breast Cancer Screening 112684904.3.5- IT 12.2- Cervical Cancer Screening 112684904.3.6- IT 12.3- Colorectal Cancer Screening	\$1,538,355
112684904.2.3: Patient Experience Survey Reeves County Hospital District 112684904	Reeves County Hospital District will commence in a project to improve the patient experience for all patients served by the Pecos Valley Rural Health Clinic through customer satisfaction surveys with the ultimate goal of increasing overall patient satisfaction.	112684904.3.7- IT 6.1- Patient Satisfaction	\$836,063
130725806.2.1: Behavioral Health and Primary Care Integration West Texas Centers 130725806	West Texas Centers will develop a behavioral health and primary care integrated project in Howard County, Big Spring, Texas. Co-location will occur	130725806.3.2- IT 6.2 Other Outcome Improvement	\$3,234,991

Project Title (include unique RHP project ID number for each project.)	Brief Project Description	Related Category 3 Outcome Measure(s) (include unique Category 3 Improvement Target (IT) Identifier specific to RHP and outcome title)	Estimated Incentive Amount (DSRIP) for DYs 2-5
	through a lease arrangement with Scenic Mountain Medical Center (SMMC).		

Section III. Community Needs Assessment

TABLE OF CONTENTS

<i>DATA SUPPORTING INFRASTRUCTURE AND ACCESS DEVELOPMENT</i>	<i>1</i>
<i>Primary Service Area and Potential Patients</i>	<i>1</i>
<i>Population and Counties (Table A in Appendix supplements information)</i>	<i>1</i>
<i>Population Projections</i>	<i>2</i>
<i>Socioeconomic Profile of Residents (Tables B-D)</i>	<i>4</i>
<i>Health Professional Shortage Areas</i>	<i>4</i>
<i>Medically Underserved Areas</i>	<i>6</i>
<i>Supply of Physicians and Specialists (Tables H-M)</i>	<i>6</i>
<i>Healthcare Coverage (Tables N-P)</i>	<i>7</i>
<i>Disparities in Accessing Healthcare (Tables Q-S)</i>	<i>8</i>
<i>DATA SUPPORTING FOCUS ON HIGH BURDEN CONDITIONS: HEALTH FACTORS AND BEHAVIORS</i>	<i>9</i>
<i>Mental Health and Substance Abuse</i>	<i>9</i>
<i>Mortality (Table T)</i>	<i>10</i>
<i>Fertility and Natality (Table U)</i>	<i>10</i>
<i>Communicable Diseases (Table V)</i>	<i>12</i>
<i>Health Rankings</i>	<i>12</i>
<i>Health Factors (Table W)</i>	<i>12</i>
<i>Health Outcomes (Table X)</i>	<i>13</i>
<i>Counties in RHP 14 Ranked</i>	<i>14</i>
<i>Preventable Hospitalizations (Table Y)</i>	<i>14</i>
<i>SUMMARY: DEMAND AND NEED FOR SERVICES</i>	<i>16</i>
<i>DATA SOURCES</i>	<i>17</i>

LIST OF FIGURES AND TABLES*

<i>Figure 1. Population Projections</i>	<i>3</i>
<i>Figure 2. Percentage of RHP 14 Rankings for Health Factors</i>	<i>15</i>
<i>Figure 3. Percentage of RHP 14 Rankings by Quartile</i>	<i>15</i>
<i>Table 1. Population Projections</i>	<i>2</i>
<i>Table 2. HPSAs and MUAs</i>	<i>6</i>
<i>Table 3. Pregnancy Rates, Ages 13 – 17</i>	<i>11</i>
<i>Table 4. Births to Mothers Less than 18 Years of Age</i>	<i>12</i>

** further supporting data can be found in supporting data appendix*

Summary of Community Needs

Identification Number	Brief Description of Community Needs Addressed through RHP Plan	Data Source for Identified Need
CN.1	<i>High rates of chronic disease, including cancer, diabetes, heart disease, cardiovascular disease, respiratory diseases, Alzheimer's, and obesity.</i>	<i>County Health Rankings, University of Wisconsin and Robert Wood Johnson Foundation Texas Department of Health and Human Services</i>
CN.2	<i>High costs associated with preventable hospitalization admissions and readmissions.</i>	<i>Texas Department of State Health Services, Center for Health Statistics</i>
CN.3	<i>Shortages of health care professionals, including primary care physicians and mental health care providers.</i>	<ul style="list-style-type: none"> •Texas Center for Public Policy Priorities •Texas Department of State Health Services, Center for Health Statistics •Texas Medical Board •US Department of Health and Human Services, Health Resources and Services Administration
CN.4	<i>Lack of primary care physicians specializing in gynecology or geriatrics.</i>	<i>Texas Medical Board</i>
CN.5	<i>Low utilization of preventative care services and screenings, especially by those with lower incomes.</i>	<i>Texas Behavioral Risk Factors Surveillance System</i>
CN.6	<i>Need to overcome patient access to care barriers. E.g., language, previous experiences, distant travel required for many residents to access cardiac, neonatal, and pediatric intensive care, screening sites, physical rehabilitation, and long-term care hospital services.</i>	<ul style="list-style-type: none"> •Texas Behavioral Risk Factors Surveillance System •US Census Bureau
CN.7	<i>Need for improvement in prenatal and perinatal care.</i>	<ul style="list-style-type: none"> •County Health Rankings, University of Wisconsin and Robert Wood Johnson Foundation •Texas Department of Health and Human Services
CN.8	<i>Shortages in dental care.</i>	<i>US Department of Health and Human Services, Health Resources and Services</i>

		<i>Administration</i>
CN.9	<i>Need for improvement in adolescent health, with focus on teen pregnancy, suicide, and obesity.</i>	<i>Texas Office of Adolescent Health</i>
CN.10	<i>Increase palliative care services.</i>	<i>Center to Advance Palliative Care and the National Palliative Care Research Center</i>
CN.11	<i>High rate of teen pregnancy.</i>	<i>Texas Department of State Health Services, Center for Health Statistics</i>

INTRODUCTION

A community needs assessment often focuses on barriers to accessing care. It can also describe the primary service area of a hospital, a hospital’s patients and its services, other healthcare providers in the area, and demand for services. Assessments also aid in planning and improving access to and quality of care. This assessment concerns Regional Healthcare Partnership (RHP) 14 in Texas, which includes 16 counties: Andrews, Brewster, Crane, Culberson, Ector, Glasscock, Howard, Jeff Davis, Loving, Martin, Midland, Presidio, Reeves, Upton, Ward, and Winkler. The assessment’s purpose is to assist RHP 14 as it plans its proposal for the HHSC 1115 Waiver. The Delivery System Reform Incentive Pool (DSRIP) section of the waiver includes four categories:

- Category 1: Infrastructure Development
- Category 2: Program Innovation and Redesign
- Category 3: Quality Improvements
- Category 4: Population-focused Improvements

This assessment contributes supporting data for Categories 1 and 2. Providers in the respective region should contribute specific data to support the need for additional infrastructure, including clinic, emergency department, and inpatient hospital volume and cost data by payer and by condition. If infrastructure is determined to be required for particular disease areas, e.g., diabetes clinics, then provider-specific volume data should be provided as well. Categories 3 and 4 require data supporting high burden areas in particular, some of which are provided in this document, but again, should be strengthened with data from the region’s providers. This assessment includes several supporting data tables and figures, most of which can be found in the Supporting Data appendix. Within the CNA, tables are numbered, while Appendix tables are ordered by letter and are noted in parentheses beside section subtitles.

DATA SUPPORTING INFRASTRUCTURE AND ACCESS DEVELOPMENT

A. Primary Service Area and Potential Patients

Population growth, age distribution, and race/ethnicity have a significant impact on community need for healthcare services. Overall population growth and growth by age cohort impact the total demand for healthcare services and demand for specific services,

while certain racial/ethnic backgrounds increase the likelihood of some diseases and disorders.

Population and Counties (Table A in Appendix supplements information)

Total population for RHP 14 grew by over 13% from 2000 to 2011. (See Table 1) All but two counties (Ector, Midland) in RHP 14 are considered rural by the 2010 U.S. Census. Population density per square mile for the region is 13.7. Ten counties (Brewster, Crane, Culberson, Glasscock, Jeff Davis, Loving, Martin, Presidio, Reeves, and Upton) in RHP 14 are considered Frontier Counties because they have less than seven people per square mile.

Almost 91% of RHP 14 residents identify as white, while 48% of all people, regardless of race, identify as Hispanic. Sixty-three percent speak English only. The region’s percentage of the population 65 and older (11%) is about the same as Texas’ percentage (10%).

Population Projections

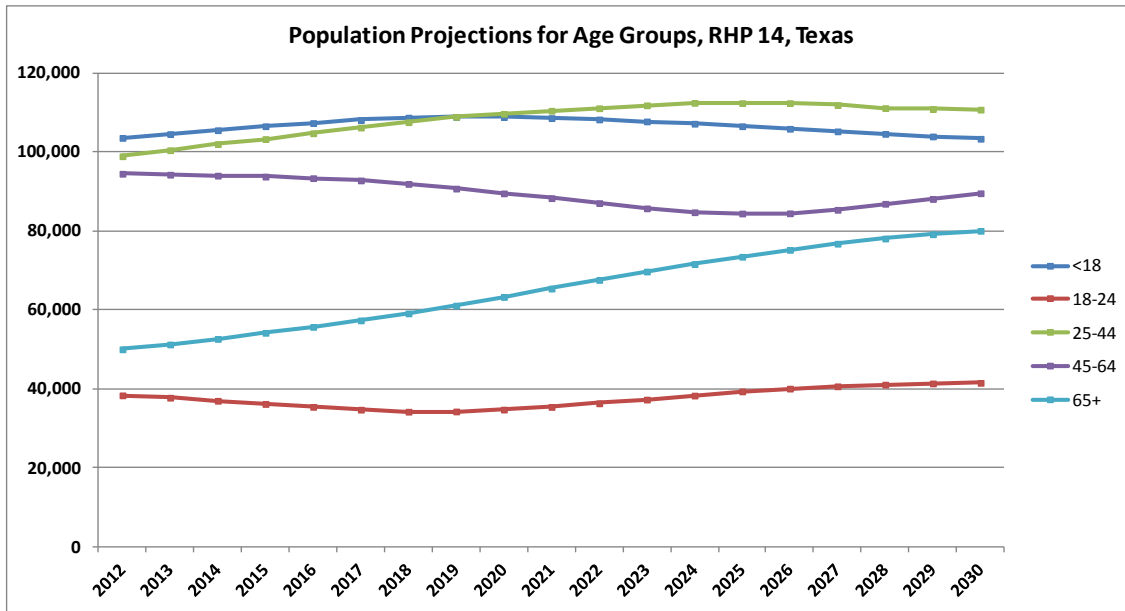
The Texas State Data Center and Office of the State Demographer estimated the population in 2012 to be 385,144. According to their estimates, the population will increase by 10% from 2012 to 2030, growing from 385,144 to 424,968. People aged 65 and older will account for a larger percentage of the population in 2030. (See Figure 1 below.)

Table 1. Population Projections

Population and Size, RHP 14, Texas	
Population	
2000	349,953
2010	390,978
2011	398,463
Population of RHP's counties (2011)	
Midland	140,308
Ector	140,111
Howard	35,122
Andrews	15,445
Reeves	13,757
Ward	10,716
Brewster	9,386
Presidio	7,761
Winkler	7,178
Martin	4,934
Crane	4,383
Upton	3,346
Culberson	2,383
Jeff Davis	2,288
Glasscock	1,251
Loving	94
Size in square miles	
Land area	29,138
Water area	37
Total area	29,175
Population density per square mile (2011)	13.7

Source: Census Bureau and Environmental Protection Agency

Figure 1. Population Projections



These population projections of growth are conservative as thousands are moving to this area given its recent oil boom.¹ Areas of RHP 14, e.g., Midland (Midland County), Odessa (Ector County), are currently some of the fastest growing cities in the nation.² The local economy is projected to expand by nearly 10% this year,³ and Midland (4.1%) and Odessa (4.9%) report the lowest unemployment rates in Texas.⁴ Businesses in these areas still desperately seek workers. Populations of some of RHP 14’s small towns are also rapidly

¹ We used “One-Half 1990-2000 Migration (0.5) Scenario” from Office of the State Demographer. It assumes rates of net migration one-half of those of the 1990s. The reason for including this scenario is that many counties in the State are unlikely to continue to experience the overall levels of relative extensive growth of the 1990s. A scenario which projects rates of population growth that are approximately an average of the zero and the 1990 2000 scenarios is one that suggests slower than 1990-2000 but steady growth. However, the recent oil boom and population boom in this area suggest that the .5 population growth scenario is a conservative estimate.

² “100 leading locations for 2012,” Area Development, 2012:55-73. Available: <http://www.areadevelopment-digital.com/areadevelopment/201206#pg1>. August 2012.

³ Warbelow K. “Texas oil boom fueling trucker bonuses propels Odessa,” Bloomberg. Available: <http://www.bloomberg.com/news/2012-08-06/texas-oil-boom-fueling-trucker-bonuses-propels-odessa.html>. August 2012.

⁴ McEwen M. “Midland, Odessa report state’s lowest unemployment,” MyWestTexas.com. Available: http://www.mywesttexas.com/local_newsroom/article_18d407c9-e8aa-55a9-9a58-915843249afd.html. March 2012.

growing. Forbes named Pecos (Reeves County) and Andrews (Andrews County) as the second and ninth fastest growing small towns in America between 2007 and 2010.⁵

Socioeconomic Profile of Residents (Tables B-D)

Twenty-six percent of adults 25 years or older in RHP 14 did not graduate from high school. About 28% have some kind of college degree. Eighteen percent of all people in the RHP fall below the poverty line. The percentage of children living in poverty is 26%. The percentages of high school dropouts and poor people are expected to increase in Texas. According to demographer Dr. Steve Murdock, "The state's public schools have more and more low-income kids and persistently high dropout rates, and unless that changes, the future of Texas will contain more long-term unemployment and poverty, and more folks depending on food stamps, Medicaid and CHIP."⁶ Median household income is lower than the median in Texas and the U.S. Per capita income in the RHP is similar to per capita income in Texas and the U.S. The average wage per job has increased since 2006. However, the unemployment rate has also increased over the last five years. (Table D in the appendix displays the major employers in RHP 14.)

Access to Healthcare (Tables E-G)

Rural Healthy People 2010, a companion document to *Healthy People 2010*, examined top rural health priorities and presented promising models to address *Healthy People 2010* objectives. Both public and private health organizations identified access to quality health services (primary care, emergency medical services, insurance, and long-term care) as the leading focus area. RHP 14 had nine hospitals in the Metropolitan Statistical Areas (MSAs) of Midland and Odessa and twelve hospitals outside the MSA as of 2011. Eleven of the hospitals are public, and ten are for-profit. There are 1,485 acute beds and 264 psychiatric beds among all of the region's hospitals.

As of 2009, none of the hospitals in RHP 14 had Teaching Facilities, Burn Care, Other Intensive Care, Alcoholism-Drug Abuse or Dependency Care, Skilled Nursing Care, Intermediate Nursing Care, Other Long Term Care, Other Care, Hospice Program, or Extracorporeal Shock Wave Lithotripter. Big Bend Regional Medical Center, Culberson Hospital, McCamey County Hospital District, Permian Regional Medical Center, Reeves County Hospital District, Scenic Mountain Medical Center, and Ward Memorial Hospital have Medicare Defined Swing Bed Units.

Health Professional Shortage Areas

Texas ranks 42nd in the nation for the ratio of physicians to population, and 47th for the ratio of nurses to population. There is a shortage of every kind of health professional in Texas except Licensed Vocational Nurses. Physicians, registered nurses, physical therapists,

⁵ Greenfield. "America's fastest-growing small towns," Forbes. Available: <http://www.forbes.com/sites/bethgreenfield/2012/01/23/fastest-growing-small-towns/>. January 2012.

⁶ Scharrer, Gary. "Poverty, dropout rates threaten Texas' future," Austin Bureau. Available: <http://www.chron.com/news/houston-texas/article/Report-Poverty-dropout-rates-threaten-Texas-1698327.php>. June 2012.

clinical laboratory scientists, occupational therapists, pharmacists, dentists, audiologists, and other health care professionals all number less (per 100,000 population) than the national averages.⁷

The 2012-2013 Texas legislative budget allows for some growth in support for health-related institutions of higher education, but many programs sustained significant cuts. State support for Graduate Medical Education has been reduced by almost a third, from \$79 million to \$54 million. Funds for the Professional Nursing Shortage Reduction Program have been cut by 40%, and about three-fourths of funding for both the Family Practice Residency Program and the Physician Education Loan Repayment Program has been eliminated. Other primary care training programs have also been completely eliminated, including the Children's Medicaid Loan Repayment Program.

It is important for Texas to build its healthcare workforce in order to (1) reduce the current shortages and (2) prepare for large increases in demand when more Texans become insured in 2014 through the Affordable Care Act. Over \$250 million in new federal medical education training funds have been allocated since the Affordable Care Act passed in 2010. The Texas legislature did not build on this investment in 2011, but instead made cuts to key health care professional training.⁸

Health Professional Shortage Areas (HPSAs) are designated by the U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA) as having shortages of primary medical care, dental, or mental health providers and may be geographic (a county or service area), demographic (low-income population) or institutional (comprehensive health center, federally qualified health center or other public facility). As of 2011, every county but three (Andrews, Loving, Upton) in RHP 14 is considered a Mental Health Professional Shortage Area. Ten counties are considered Primary Care Health Professional Shortage Areas. (See Table 2 below.) Five counties in the region have special populations with unmet needs. Special populations include: Medicaid eligibles, low-income populations, migrant and seasonal farm workers, homeless, American Indians, Alaska Natives, and other populations isolated by linguistic or cultural barriers. Six counties are designated as shortage areas for dental health professionals; four counties have facilities that treat special populations with limited access to dental care.

⁷ Dunkelberg, Anne. 2011. *Texas Health Care 2011: What Has Happened and the Work that Remains*, Center for Public Policy Priorities. 2011. Available: http://www.cppp.org/files/2011_11_TexasHealthCare.pdf. June 2012.

⁸ Ibid.

Table 2. HPSAs and MUAs

X" Denotes "Entire County" as Health Professional Shortage Area or Medically Underserved Area, RHP 14, Texas, September 2011

	Primary Care	Mental	Dental	Medically Underserved Area
Andrews	Low-income	X		
Brewster	Low-income	X		X
Crane	X	X		X
Culberson	X	X	X	X
Ector	Facility	Facility	Facility	Partial
Glasscock	X	X	X	X
Howard	Low-income, facility	X	Facility	X
Jeff Davis	X	X	X	X
Loving	X	X	X	
Martin		X		Partial
Midland	Service area, facility	Low-income, facility	Facility	Partial
Presidio	X	X	Facility	X
Reeves	X	X	X	X
Upton	X	X		
Ward	X	X	X	X
Winkler	X	X		X

Sources: U.S. DHHS, Health Resources and Services Administration, Professional Shortage Areas, Designated on September 1, 2011. Texas DSHS. MUA and MUP Designations, Medically Underserved Area, 2010.

Medically Underserved Areas

Medically Underserved Areas designated by HRSA are those with too few primary care providers, high infant mortality, high poverty, or high elderly population. All but three counties (Andrews, Loving, and Upton) are designated as full or partial Medically Underserved Areas.

Supply of Physicians and Specialists (Tables H-M)

Medicaid funding has a large impact on the supply of physicians. For health professionals, Texas Medicaid fees fall well below commercial insurance or Medicare, and sometimes do not even cover the costs of services. The failure of Texas Medicaid rates to keep up with inflation—even before the recent rate cuts made by the legislature—discourages providers from agreeing to take Medicaid patients. For example, the Texas Medical Association’s biennial poll of doctors shows the percentage of doctors taking on new Medicaid patients

has dropped steeply over the last decade.⁹ The Hogg Foundation for Mental Health reports that less than one-third of Texas physicians accept Medicaid patients.¹⁰

Rate cuts during the 82nd Legislature were the largest healthcare budget cuts the Texas Legislature made since 2003—even larger than the CHIP cuts. Before the last rate increase in 2007, accumulated Texas Medicaid rate cutbacks had reduced physicians' fees to 1993 levels for most services. Due to these cuts, we expect the supply of physicians in the region to decrease relative to the population in the next five years.

"Direct Patient Care" (DPC) physicians are those who work directly with patients and do not include researchers, administrators, or teachers. For the region as a whole, the rate of DPCs per 100,000 population ranged from 129.3 in 2008 to 137.3 in 2011. Rates of DPCs in the state of Texas are higher than those of RHP 14. Midland County has the highest rate of Direct Patient Care physicians, while Winkler County has the lowest. "Primary Care" (PC) physicians are those who indicate that they have a primary specialty of General Practice, Family Practice/Medicine, Internal Medicine, Pediatrics, Obstetrics and/or Gynecology, or Geriatrics, and are a sub-set of DPC physicians. For the region as a whole, the rate of PC physicians per 100,000 people varied from 54.1 to 61.0 from 2008 to 2011. Rates of PC physicians in the state of Texas are slightly higher than those in RHP 14. Reeves County has the highest rate of PC physicians per 100,000 people, while Winkler County has the lowest.

Over the last five years, family medicine doctors have accounted for over one third of all primary care specialists. Percentages of each specialization have remained stable since 2008. According to the Texas Medical Board (2011), there are no primary care physicians in the region specializing in gynecology or geriatrics. The combined percentage of family medicine and family practice physicians in RHP 14 (41%) is higher compared to the state's combined percentage (35%).

Healthcare Coverage (Tables N-P)

About 40% of people living in RHP 14 have commercial insurance. Twenty-nine percent are uninsured, and the remainder relies on Medicare, Medicaid, or CHIP. People without healthcare coverage are less likely to have a usual source of care, to use preventive or specialty services, to obtain needed prescription medications, or to receive high-quality services. As a result, they are at increased risk of poor health outcomes and death. The latest data from the U.S. Census Bureau show that in 2010, Texas remained the state with the highest uninsured rate in the nation at 24.6%. The total number of uninsured Texans is 6.2 million—roughly 250,000 fewer than in 2009. Working-age adults saw a small increase in coverage through job-based insurance, which was a slight reverse in the long-term trend in loss of job-based coverage, made even worse by the recession. Despite the modest up-tick,

⁹ Ibid.

¹⁰ Martinez ON. Behavioral Health Panel: Addressing the Needs of Texas through Best Practices and Innovative Delivery Models. Presentation, Hogg Foundation for Mental Health. Available: <http://www.hhsc.state.tx.us/1115-docs/August-7-8-Summit/7.1-Behavioral-Health-Panel-Martinez.pdf>. August 2012.

Texas' working-age adults are still nearly twice as likely as children to be uninsured. Compared to Texas as a whole, RHP 14 has similar percentages of people who lack healthcare coverage. Compared to the U.S., the region and Texas have higher percentages of uninsured adults.

Medicaid is the foundation of Texas' health care safety net, providing health care benefits for over 3.3 million low-income Texans in September 2011. Children make up the greatest number of enrollees, but adults with disabilities, low-income seniors, pregnant women, and a small number of parents in poverty also rely on the program for critical medical care and community services and supports. About seven in 10 Texas nursing home residents rely on Medicaid for their care. Approximately 15% of RHP 14 residents are enrolled in Medicaid.

Disparities in Accessing Healthcare (Tables Q-S)

In recent decades, the U.S. has made much progress in improving health among its residents and in reducing health disparities, yet health disparities by race/ethnicity, income and education, geographic location, and other characteristics still exist. Public Health Administrative Region 9/10, which includes RHP 14 and the state of Texas have similar percentages of adults who could not access healthcare due to cost. RHP 14 and Texas have higher percentages than the U.S. In the region, the following groups were more likely than their counterparts to report that they could not access healthcare due to cost in the past 12 months: women, blacks and Hispanics, people younger than 65, those with no high school diploma, and people with low incomes. According to the Texas Behavioral Risk Factor Surveillance System (BRFSS), these groups were more likely than their counterparts to report that they were uninsured: Hispanics, younger adults, and those with no high school diploma, and those with income levels less than \$25,000.

RHP 14 has a small population for its size and many people have to drive long distances for primary and specialty care (refer to Table 1). As previously stated, 10 of the 16 counties in RHP 14 are considered Frontier Counties because they have less than seven people per square mile. Nine of the region's twenty-one hospitals are located in the metropolitan areas of Midland and Odessa. Seventy percent of people in the region must travel to Midland and Odessa to access cardiac, neonatal, and pediatric intensive care, other special needs, physical rehabilitation, and acute long-term care in a hospital.

Screenings and the utilization of other preventative services are other access to care measures. RHP 19 has higher percentages of adults who did not access most of these specific aspects of preventative care than Texas and the U.S. The percentage of people 50 years and older who had a blood stool test was similar for the RHP, Texas, and the U.S. In the region, women aged 50 and older are less likely than their male counterparts to have had a blood stool test. Hispanic women are just as likely as white women to have had a mammogram or a pap smear. Those with lower levels of education and income are less likely than adults with higher education and income levels to receive most of these preventative services.

DATA SUPPORTING FOCUS ON HIGH BURDEN CONDITIONS: HEALTH FACTORS AND BEHAVIORS

Mental Health and Substance Abuse

In Texas, between 2001 and 2010, the number of psychiatric hospitals in Texas increased by 5% and the number of beds increased by 8%. Admissions for mental conditions increased by 22% across the State, indicating that the growth in services may not meet the growth in need.¹¹ Nearly 500,000 Texas adults have serious and persistent mental illness, with one in three receiving services from the community mental health system.¹² Less than half patients receiving referrals for specialty mental health services seek treatment from the referred specialists. As of 2009, Texas had less than seven psychiatrists and less than 70 social workers per 100,000 residents (ratios have fallen since 2000).¹³

In addition, of the almost 155,000 children diagnosed with severe emotional disturbances, only one-fourth are treated in the community mental health system. Suicide is the second leading cause of death in Texans 15 to 19 years of age.¹⁴ The numbers of youth admitted to substance abuse treatment programs and have interacted with the criminal justice system increased in Texas from 4,305 in 2008 to 4,803 in 2011.¹⁵

Texas ranks 50th in per capita funding for mental health services.¹⁶ Funding for community mental health services in the Texas Department of State Health Services budget escaped deep cuts in 2010-2011. However, no funding was provided to allow for inflation or population growth, so service levels per person will likely be reduced in some programs. For example,

- The number of children receiving community mental health services in 2012-2013 is projected to be the same as in 2011, though lower than in 2010. The 2012-2013 number represents a 6% gain over children served in 2003, though not enough to keep up with population growth.
- The number of adults receiving community mental health services has been flat since 2009 and remains at essentially the same number served in 2003. However, the population in Texas has grown by 3.3 million (15%), and the number of uninsured Texans has grown by nearly 1 million.

¹¹ Texas Hospitals: Utilization and Financial Trends. 2001-2010. Available: <http://www.dshs.state.tx.us/chs/hosp/hosp5>. July 2012.

¹² Martinez ON. Behavioral Health Panel: Addressing the Needs of Texas through Best Practices and Innovative Delivery Models. Presentation, Hogg Foundation for Mental Health. Available: <http://www.hhsc.state.tx.us/1115-docs/August-7-8-Summit/7.1-Behavioral-Health-Panel-Martinez.pdf>. August 2012.

¹³ Ibid.

¹⁴ Ibid.

¹⁵ DSHS, Behavioral Health Data Book, FY 2012 Qtr 1, Jan 9, 2012. BHIPS and CMBHS.

¹⁶ Martinez ON. Behavioral Health Panel: Addressing the Needs of Texas Through Best Practices and Innovative Delivery Models. Presentation, Hogg Foundation for Mental Health. Available: <http://www.hhsc.state.tx.us/1115-docs/August-7-8-Summit/7.1-Behavioral-Health-Panel-Martinez.pdf>. August 2012.

- The Legislature expressed intent to maintain state and community mental health hospital bed capacity, contingent on DSHS implementing \$15 million in cost-containment policy changes in the state facilities.
- The number of adults and youth receiving substance abuse treatment is held at the 2010 level.¹⁷

Mortality (Table T)

RHP 14 has higher death rates than Texas for heart disease, chronic lower respiratory disease, accidents, Alzheimer’s disease, motor vehicle accidents, influenza/pneumonia, cancers of colon, rectum, anus, and suicide.

Fertility and Natality (Table U)

Like every state, Texas funds family planning through both federal block grants and Medicaid coverage. These programs provide not only birth control, but also preventive care and basic check-ups to low-income and largely uninsured women (one-third of Texas’ working age adults are uninsured). The 82nd Texas Legislature passed deep cuts in block-grant-funded family planning care that will reduce the total number of Texas women served with birth control by at least 70% in 2012-2013. The appropriations act for 2012-13 says that the Department of State Health Services (DSHS) Family Planning programs will serve 61,135 Texas women in each year of the budget; this is down from the actual 211,980 served in 2010—a 71% reduction (150,845 less) in clients served by DSHS programs. The Texas Legislative Budget Board estimated the 2010-2011 DSHS Family Planning spending at over \$111 million, compared to appropriations for 2012-2013 of \$37.9 million for the biennium. This results in a 66% reduction (\$73.2 million) from 2010-2011—a two-thirds cut.¹⁸

Access is critical to reducing several Texas challenges: high and growing rates of pre-term births, births too close together causing medical risks for the newborn, and births to unmarried teen mothers. More than half of all Texas births are reported unplanned, and maintaining access to family planning services is essential to reducing unplanned pregnancies. Most of the fertility and natality-related rates are similar between the region and Texas.

Teen Pregnancy and Births

The Texas pregnancy rate per 1000 female teenagers between 13 and 17 years was 21.4 in 2010.¹⁹ The overall rate in RHP 14 was higher (29.4/1000) than the Texas rate. Table 3 below displays the pregnancy rate among this population by county. Twelve of the 16 counties in RHP 14 have higher pregnancy rates among 13 to 17 year olds than Texas’ overall rate. Reeves County had the highest rate at 50.7 per 1000, while Glasscock and Loving Counties had no reported pregnancies in this age group in 2010.

¹⁷ DSHS, Behavioral Health Data Book, FY 2012 Qtr 1, Jan 9, 2012. BHIPS and CMBHS.

¹⁸ Ibid.

¹⁹ <http://www.dshs.state.tx.us/chs/vstat/vs10/t14b.shtm>

In 2010, 4.3% of births in Texas were to mothers less than 18 years of age.²⁰ The rate in RHP 14 (6.2%) was higher than in Texas. Table 4 below shows the percent of births to these young mothers by county. Ten of the 16 counties in RHP 14 have higher birth rates to young mothers than Texas' overall rate. Reeves County has the highest rate, while Glasscock and Loving Counties reported no births among this age group in 2010.

The birth rate to white, black, and Hispanic teen mothers in Texas was 1.8%, 5.0%, and 6.2%, respectively, in 2010.²¹ Half of counties in RHP 14 showed higher rates in Hispanic mothers less than 18 years of age than overall Texas rates.

Table 3. Pregnancy Rates, Ages 13 – 17

Reported Pregnancy Rate Per 1000 Women Age 13-17 by County, RHP 14, 2010	
	Rate per 1000
Andrews	23.9
Brewster	23.3
Crane	14.7
Culberson	31.6
Ector	34.9
Glasscock	0.0
Howard	33.1
Jeff Davis	33.7
Loving	0.0
Martin	14.6
Midland	24.6
Presidio	35.5
Reeves	50.7
Upton	24.2
Ward	21.7
Winkler	17.0

²⁰ <http://www.dshs.state.tx.us/chs/vstat/vs10/t11.shtm>

²¹ Ibid.

Table 4. Births to Mothers Less than 18 Years of Age

Births to Mothers \leq 17 Years by County and Ethnicity, RHP 14, 2010				
	Total %	White %	Black %	Hispanic %
Andrews	5.2%	5.0%	0.0%	5.3%
Brewster	4.7%	3.4%	0.0%	5.9%
Crane	3.2%	0.0%	0.0%	4.7%
Culberson	10.7%	0.0%	0.0%	13.0%
Ector	6.8%	4.2%	4.1%	8.3%
Glasscock	0.0%	0.0%	0.0%	0.0%
Howard	7.0%	4.9%	n/a	9.3%
Jeff Davis	n/a	0.0%	0.0%	n/a
Loving	0.0%	0.0%	0.0%	0.0%
Martin	3.6%	0.0%	0.0%	6.8%
Midland	4.9%	2.4%	7.9%	6.9%
Presidio	8.9%	0.0%	0.0%	10.3%
Reeves	13.3%	0.0%	0.0%	15.4%
Upton	7.9%	4.8%	0.0%	n/a
Ward	6.6%	3.3%	n/a	9.5%
Winkler	3.9%	2.7%	0.0%	4.6%

Communicable Diseases (Table V)

The Varicella rate is much higher in RHP 14 than in Texas; the rate for AIDS is somewhat higher in the region.

Health Rankings

Health Factors (Table W)

There are many different variables that measure health behaviors and other factors related to health. We have chosen obesity, excessive drinking, motor vehicle crash death rate, Chlamydia rate, and teen birth rate for illustrative comparison. Obesity is a risk factor for adult-onset diabetes, coronary heart disease, and several other serious medical conditions that can lead to poor health and premature death. Chlamydia is the most common bacterial sexually transmitted infection (STI) in North America and is one of the major causes of tubal infertility, ectopic pregnancy, pelvic inflammatory disease, and chronic pelvic pain. STIs in general are associated with a significantly increased risk of morbidity and mortality, including increased risk of cervical cancer, involuntary infertility, and premature death. RHP 14 has a lower excessive drinking rate than Texas and a higher teen birth rate than Texas.

Health Outcomes (Table X)

Among the many health outcomes, we include mother/baby issues of low birth weight and birth defects, and the chronic disease diabetes. In 2006, the leading causes of death in Texas

were 1) cardiac conditions, 2) cancer, 3) cerebrovascular diseases, 4) accidents, 5) chronic respiratory disease, and 6) diabetes. These rankings vary by race and ethnicity. However, as care for cardiac, cerebrovascular, and chronic respiratory conditions is largely covered by Medicare, we focus here on diabetes as a leading driver of costs in the Medicaid population. Other health conditions are worth exploring in future drill-down analyses with provider-specific data recommended at the Introduction of this assessment.

Low birth weight represents two factors: maternal exposure to health risks and an infant's current and future morbidity and premature mortality risk. Diabetes is one of the major causes of premature death in the U.S. and disproportionately affects some racial and ethnic populations. Among the Type I diabetic population in Texas, almost 19% of primary payment for hospitalizations in 2006 was provided by Medicaid, compared to 15% by Medicare. Among Type II diabetics, Medicaid was the primary payment source for 10% of discharges in 2008, compared to 43% by Medicare. The percentages of low birth weight babies and diabetes among adults are similar for the region and Texas. The region has a higher rate of premature death than Texas.

RHP 14 has identified a number of areas for improvement, including cardiovascular disease, diabetes, palliative care, prenatal and perinatal care, and adolescent health. As previously mentioned, **cardiovascular disease** is the number one cause of death in Texas. Nearly one-third of all deaths in 2005 were related to heart disease and stroke.²² The state has identified two priorities regarding the improvement of cardiovascular care: (1) reduce the incidence of stroke in Texas and (2) prevent, treat, and control heart disease and heart attacks. RHP 14 has a higher rate of heart disease-related death than the state overall. Nearly 10% of Texas adults (1.8 million) in 2010 had been diagnosed with **diabetes**.²³ A total of 16.5% of African Americans in Texas, 11.0% of Hispanics, and 8.2% of whites have the disease, and prevalence has an inverse relationship with education level (14.4% in those with less than a high school education vs. 7.1% with a college education). Overall, Texas has improved in access to **palliative care** over the last few years with 42% of hospitals having palliative care programs in 2011 (up from 33% in 2008).²⁴ However, 43 states perform better on this measure. Proper **prenatal and perinatal care** is associated with successful fetal outcomes (e.g., live births, lower rates of preterm births and low birth weights). In RHP 14, 40% of pregnant women do not receive prenatal care in the first trimester of pregnancy and 9% of babies are born with low birth weights. The state of **adolescent health** in Texas is problematic. In 2008, Texas had the third highest teen birth rate (ages 15-19) in the nation,

²² Texas Department of State Health Services. Texas Plan to Reduce Cardiovascular Disease and Stroke, 2008. Available: <http://www.dshs.state.tx.us/Layouts/ContentPage.aspx?PageID=34551&id=34608&terms=heart+disease>. August 2012.

²³ Texas Department of State Health Services. Texas Diabetes Prevention and Control Program: Diabetes Status in Texas, 2012. Available: <http://www.dshs.state.tx.us/diabetes/tdcdata.shtm>. August 2012.

²⁴ Morrison RS, Meier DE. America's Care of Serious Illness: A State-by-State Report Card on Access to Palliative Care in Our Nation's Hospitals. Center to Advance Palliative Care and the National Palliative Care Research Center. Available: <http://reportcard-live.capc.stackop.com/pdf/state-by-state-report-card.pdf>. August 2011.

and ranked fourth for teen pregnancy rate.²⁵ High school students report that in the past 12 months, 14% have seriously considered suicide and 7% have attempted it one or more times. Texas obesity rates among adolescents are slightly higher than national averages (14% vs. 12%).

Counties in RHP 14 Ranked

The Population Health Institute at the University of Wisconsin produces *County Health Rankings* for almost all counties in the U.S. The *Rankings* are based on a model of population health that emphasizes the many factors that, if improved, can help make communities healthier places to live, learn, work and play. The Population Health Institute examined data for 223 Texas counties. Each received a rank from 1 to 223. Our Community Needs Assessment examined data for the counties in RHP 14. Using the percentile rank for each county, we determined the quartile in which the counties fell. Comparing the counties in RHP 14 to 223 Texas counties, the lower quartile (up to 24%) represents the *highest, or relatively better*, scores for health factors and outcomes. The upper quartile (75% to 100%) represents the *lowest, or relatively worse*, scores for factors and outcomes. Looking at the rankings for health factors, 53% of RHP 14 counties ranked relatively well in health behaviors; 47% ranked relatively poorly (Figures 2 and 3). Sixty-one percent scored relatively well for social and economic factors. There is great opportunity for improvement in clinical care, where about 69% of the counties were relatively worse off than other Texas counties. Thirty-one percent of RHP 14's counties ranked relatively well in mortality; 46% ranked relatively well in morbidity.

Preventable Hospitalizations (Table Y)

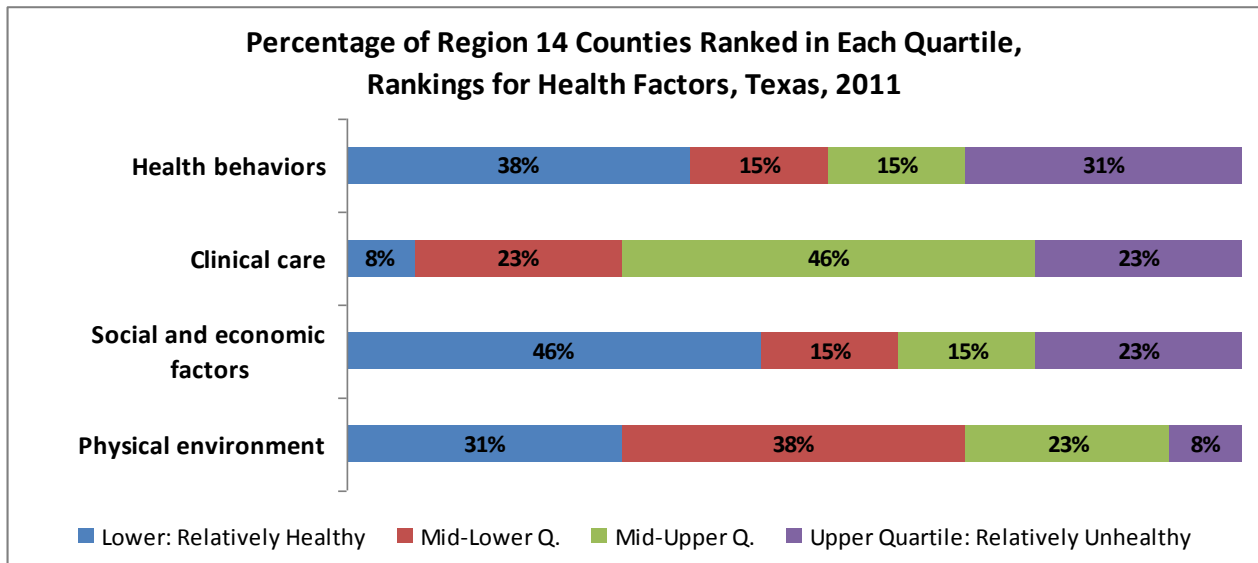
Hospital admissions increased across Texas by 8% between 2001 and 2010, and inpatient days increased by 7%. Also across Texas, emergency room visits increased by 29%, and inpatient surgical operations increased by 11%. Public Health Region 9, which covers 12 of RHP 14's 16 counties, has a similar hospital utilization rate (548 inpatient days per 1,000) than the state average of 546 inpatient days per 1,000 population.

In Public Health Region 9, bad debt charges totaled \$16.1 million and charity charges totaled \$3.1 million, for total uncompensated care charges of \$34.6 million. As a percent of gross patient revenue, uncompensated care was 14.4% in PHR 9 in 2010, similar to the state's average of 14%.²⁶

²⁵ Office of Adolescent Health. Facts About Adolescent Health in Texas. Available: <http://www.hhs.gov/ash/oah/adolescent-health-topics/pdfs/tx.pdf>. September 2012.

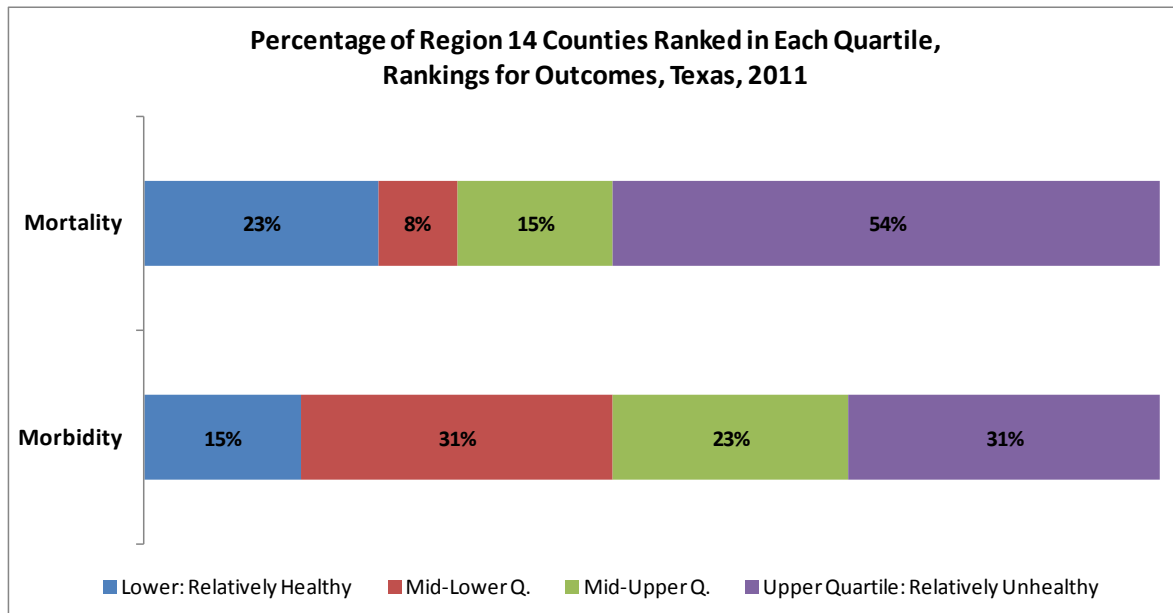
²⁶ Texas Hospitals: Utilization and Financial Trends. 2001-2010. Available: <http://www.dshs.state.tx.us/chs/hosp/hosp5>. July 2012.

Figure 2. Percentage of RHP 14 Rankings for Health Factors



Source: County Health Rankings, University of Wisconsin, Robert Wood Johnson Foundation

Figure 3. Percentage of RHP 14 Rankings by Quartile



Source: County Health Rankings, University of Wisconsin, Robert Wood Johnson Foundation

According to a recent analysis of THIC data, RHP 14 received \$461,193,683 between 2005 and 2010 for hospitalizations that may have been preventable. The two most costly hospitalizations per county resident were congestive heart failure (\$115,444,073 per adult resident) and pneumonia (\$99,814,350 per adult resident). These conditions in particular may be focus areas for quality improvement. Provider-specific data regarding volume and

other burden to the current healthcare infrastructure may be supplemented here to drive initiatives in these two high-burden conditions.

SUMMARY: DEMAND AND NEED FOR SERVICES

Regional Healthcare Partnership 14, compared to Texas as a whole, has similar percentages of White and Hispanics and people 65 years or older. RHP 14's percentage of older adults is expected to grow in the next 20 years, meaning that the expansion of services for chronic conditions related to coronary and cerebrovascular disease may be as cost-beneficial as those related to pre-natal and infant care, diabetes, and acute illnesses. Conditions of focus to reduce potentially avoidable hospitalizations, with both inpatient and outpatient efforts, may be congestive heart failure and bacterial pneumonia. These two conditions have the highest rate of reimbursement per county resident from 2005 to 2010.

The median household income of RHP 14 residents is lower than that of Texas and the U.S. Thirty-two percent of the RHP's adults are uninsured, and 19% of its children are uninsured. An analysis of ED overutilization may reveal an opportunity to shift ED visits among the poor to community based care. Additionally, with market reforms underway and expanded coverage in 2014 under the Affordable Care Act, the percentage of uninsured is expected to decrease.

The population of much of the region is inadequate to support full-time specialty physicians, so the community must rely on satellite clinics, telemedicine, and travel to secure specialty care. As of 2011, all but two counties in the region are considered full or partial Medically Underserved Areas. Medically Underserved Areas are areas designated by HRSA as having too few primary care providers, high infant mortality, high poverty, or high elderly population. All but two of the counties in RHP 14 are designated as "whole county" Mental Health Professional Shortage Areas. The two have special populations designated as Mental Health Professional Shortage Areas. All of the counties are designated as "whole" or "partial" shortage areas for primary care health professionals. All but two are designated as "whole" or "partial" Dental Health Professional Shortage Areas. These shortages are expected to worsen in the short-term future.

Texas' health challenges have also been made more severe by a deep revenue shortfall from the global recession and the 82nd Texas Legislature's Budget for 2012-2013, which made deep cuts in health care investment. Cost-effective healthcare is a priority for RHP 14.

Prepared by Terri Conner, Ph.D.
Independent Healthcare Consultant

DATA SOURCES

This report presents the current data available from national, state, public, and private databases. Data are based on estimates, projections or self-reported information from different time periods. Data such as population and socioeconomic characteristics are not comparable among different sources. Please refer to the specific data source for complete description of methodologies:

- American Hospital Association Annual Survey of Hospitals 2009
- American Association of Medical Colleges
- Behavioral Risk Factor Surveillance System
- Bureau of Economic Analysis, U.S. Department of Commerce
- Center for Health Statistics, Texas Department of State Health Services
- County Health Rankings, University of Wisconsin and Robert Wood Johnson Foundation
- County Information Project, Texas Association of Counties
- eHealthScores.com
- Environmental Protection Agency
- Hogg Foundation for Mental Health
- Kids Count Data Center, Annie E. Casey Foundation
- National Center for Health Statistics
- Rural Policy Research Institute
- Texas Department of Health and Human Services
- Texas Department of State Health Services, Center for Health Statistics, Health Professions Resource Center
- Texas Department of State Health Services, Texas Health Care Information Collection, Center for Health Statistics
- Texas Department of State Health Services, Texas Hospital List
- Texas Health and Human Services Commission
- Texas Medical Board
- Texas Population Estimates Program and Texas Population Projections Program, Texas State Data Center and Office of the State Demographer
- Texas Workforce Commission
- U.S. Census Bureau 2005-2009, 2009, 2010, 2011
- U.S. Department of Commerce, Bureau of Economic Analysis
- U.S. Department of Health and Human Services, Health Resources and Services Administration

Section IV. Stakeholder Engagement

A. RHP Participants Engagement

The engagement process started in some ways back in January of 2012. A few initial meetings were held with various stakeholders around the region to see what their initial thoughts were on the waiver and its implications. Formal letters were sent out to participants in May following the final map being decided upon. RHP 14 met frequently through a mix of WebEx and In-person meetings to allow for ample opportunities to ask questions and build plans. Over the course of the design phase, all communications from HHSC to the anchor were promptly forwarded to all participants and all participants were informed of any changes via e-mail on almost a daily basis. RHP 14 held meeting bi-monthly via WebEx or in person on the following dates:

<i>RHP 14 Planning Meetings</i>	<i>Executive Committee Meeting</i>	<i>RHP 14 Plan Presentation/Public Meetings</i>	<i>Planning Sessions with Consultant (Kevin Nolting)</i>
<i>January 27th</i>	<i>August 10th</i>	<i>May 22nd - Region 14 Public Meeting</i>	<i>July 16th-17th</i>
<i>March 23rd</i>	<i>September 7th</i>	<i>October 16th - PBCC Board Meeting</i>	<i>October 11th-12th</i>
<i>May 18th</i>	<i>September 21st</i>	<i>October 18th-Regional WebEx</i>	
<i>June 15th</i>	<i>October 5th</i>	<i>October 31st - Midland Memorial Public Board Meeting</i>	
<i>June 29th</i>	<i>October 24th -Plan Review</i>	<i>November 4th - Medical Center Public Board Meeting</i>	
<i>July 13th</i>			
<i>August 7th-8th - Summit (10 Attendees)</i>			
<i>August 10th</i>			
<i>August 24th</i>			
<i>September 7th</i>			
<i>September 21st</i>			
<i>October 5th</i>			
<i>November 16th</i>			
<i>January 18th, 2013</i>			

In July, RHP 14 decided to put together an Executive Committee to assist the anchor through the review process and to help facilitate the passes. Regional consensus dictated that the committee reflects all interested parties, so the following structure was decided upon:

EXECUTIVE COMMITTEE Structure	Type of Organization
Bill Webster, CEO- Medical Center Health System	8 Hospital Representatives- Mix Large Urban, Private, Rural

John O’Hearn- Anchor Contact- MCHS Russell Tippin, CEO- Permian Regional Medical Center Mike Metts, CFO-Odessa Regional Medical Center Russell Meyers, CEO- Midland Memorial Hospital John Irby, CFO- Scenic Mountain Medical Center Mike Ellis, CEO- Big Bend Regional Medical Center Lorenzo Serrano, Reeves County Hospital District	
Larry Carroll, CEO- Permian Basin Community Centers Keith Morehouse, CEO- BCA Odessa Shelley Smith, CEO- West Texas Centers	3 Behavioral Health Representatives
Gino Solla, Director- Ector County Health Department	1 Public Health Official
Kandy Stewart, Controller Texas Tech Health Sciences Center	1 Academic Medical Center Representative

RHP 14 was also an active participant on all HHSC webinars and presentations. John O’Hearn (Anchor contact) was present on all Anchor Calls.

RHP 14 will continue to meet quarterly starting in December 2012. We will also have Learning Collaboratives that will take place twice a year. Plans for the learning collaboratives will be put in place starting in December. RHP 14 will also be looking for additional funds at the beginning of DY3. Many providers already have plans in place that could be approved and executed in an expedited manner. MCHS as the anchor will collect plans over the course of DY2 in anticipation of funds becoming available.

B. Public Engagement

Public Meetings/Public Comment:

RHP 14’s individual entities all worked diligently to let their communities know about the waiver and its implications. Public meetings were held throughout the region at different times and casual conversations regarding plans were very common during this entire process. RHP 14 held two public meetings over the course of the year to inform our local constituents about our work:

- May 22- A meeting was held in Odessa at Medical Center Health System to answer questions surrounding the program and what it meant to the region. A copy of that presentation is in the addendum.

- October 18th: A presentation was given by John O’Hearn via WebEx to the entire region. This presentation covered our process for selecting projects and gave a description of the final plan. Many of our performing providers held meetings to listen in and ask general questions.
- Our plan was posted online from November 21-28th for public comment on www.texasrhp14.com. Media and stakeholders were informed of the posting.

Individual performing providers also held public meetings to inform their boards and stakeholders of their plans and to elicit feedback on said plans. All public entities in RHP 14 presented their plans to their boards on a regular basis and used that feedback to edit their plans. Medical Center and Midland Memorial both invited members of the local press to their board meetings and articles were written (copies provided in the addendum).

Other Interested Stakeholders:

Numerous different public agencies and providers have been involved with RHP 14 during this process and will be involved moving forward. RHP 14 plans to publish all mid-year and end of year reports on our website to make sure that the public is aware of our progress in meeting the goals of the waiver projects. A few of those entities are:

- Ector County Independent School District
- BCA- Odessa
- Midland County Medical Society
- Texas Tech School of Nursing
- Ector County Medical Society
- StarCare Home Health

Section V. DSRIP Projects

A. RHP Plan Development

- RHP Tier level: Tier 4
- Minimum number of projects: 4 Total- 2 Category Projects
- Number of projects identified in Pass 1:
 - Category 1: 23
 - Category 2: 27
 - Describe the process used to implement Pass 1: For Region 14 the process was simple; projects were submitted to the executive committee and reviewed using the anchor checklist. Projects that required revisions were sent back to the provider to allow them to continue their work. This region includes numerous IGT entities, so their ability to participate and what they chose to do was really up to them. Our largest private hospital, ORMC, is being funded through Midland Memorial and therefore projects were vetted through the IGT provider.
- RHP 14 used an outside contractor to assemble the Community Needs Assessment, but the needs of the individual communities were communicated through the Anchor. These needs were identified at a local level by a group which included: Medical Staffs, Boards, and Community Focus Groups. After a few meetings and consultations with local stakeholders our Region's 2 primary needs became very apparent to all involved parties:
 1. **Expansion of Primary Care Services (*Physical and Behavioral*)** - Many of our counties are designated as Medically Underserved Areas (MUA) and therefore it became apparent that every performing provider would in some way focus on this issue. Projects include physician recruitment, clinic expansion, service line expansion, and increases in screening services. You will see a commitment to all types of primary care, including Pediatrics, Family Practice, Internal Medicine, and Obstetrics/Gynecology.
 2. **High Rates of Chronic Disease**- The rates of Congestive Heart Failure, Diabetes, and Asthma are alarmingly high in RHP 14 and it is essential that projects in this region work to find ways to curb that trend. Projects in the region range from the implementation of a Diabetes Education program to numerous projects focused on Congestive Heart Failure.
- Project selection in this region was very simplistic for the most part. The main reason for that is the makeup of our region. Almost every performing provider is their own OGT provider, therefore they have the ability to craft a plan that meets their community's needs as they see fit. Projects were vetted through individual boards and by the RHP 14 Executive Committee on October 24th. The majority of the projects met the needs as they were identified in the CNA. Moving forward, plans that are submitted over the course of DY2 for possible funding in DY3 will again be vetted by local stakeholders and

then by the executive committee. Projects that were not selected are listed in Addendum 10.

- Exempt from Category 4 reporting according to the criteria in paragraph 11.e. in the Program Funding and Mechanics Protocol:

Texas Tech University Health Science Center-Permian Basin	081939301
McCamey Hospital	094172602
Big Bend Regional Medical Center	094224503
Reeves County Hospital	112684904
Permian Regional Medical Center	127298103
West Texas Centers	130725806
Scenic Mountain Medical Center	131043506
Martin County Hospital District	136145310
Ward Memorial Hospital	136331910
Permian Basin Community Centers	138364812

B. Project Valuation

*Many of the providers in are located in Frontier Counties as identified by DSHS and other entities, therefore funds were limited and doing more than one project would have been very difficult. This made their valuation relatively simple, but their projects were put through the same tests as larger entities with numerous projects.

Medical Providers in RHP 14 Methodology

The Medical providers in RHP 14 took a very simple 4 step approach to project valuation.

1. We decided as a region early on that we were going to build our plan around the IHI Triple Aim (Improving the patient experience of care (including quality and satisfaction); Improving the health of populations; and Reducing the per capita cost of health care) and that any project that didn't meet some aspect of that was not going to be considered.
2. Once a project passed the IHI test, establishing a value was created by asking 4 simple questions:
 - a. Does the project meet the waiver goals?
 - i. This was crucial in our opinion to make sure that every project was created with the intention of meeting goals and metrics of the waiver. We wanted to avoid gray areas and make sure that HHSC and CMS's guidance was followed.
 - b. Does the project address a pressing community need?
 - i. Plans were put up against the community needs assessment to ensure that the project was actually meeting an unmet need in the community. We wanted to avoid simple service line expansion and vanity projects.
 - c. Which population is being served?

- i. The population in RHP 14 is very diverse and therefore our programs must be able to adapt to their changing needs. RHP 14 has a very high uninsured rate and a very large Medicaid population. Projects that were approved needed to show that these types of patients were being served.
 - d. What is the project investment (Resources needed)?
 - i. Given that many of our needs are unable to be addressed without a massive infrastructure upgrade, RHP 14 wanted to include this as a question in the process. Projects costs were taken into account as a final measuring stick, but it was definitely last on the list.
- 3. Once the questions were answered, providers ranked their projects in order of importance and then assigned the proper dollar amount.
- 4. All project valuations were discussed by the Executive Committee on October 24th and the same set of IHI and valuation questions were explored. All projects were deemed to be reasonable and have met the goals

Behavioral Health Providers Valuation Methodology:

There are 2 CMHCs in RHP 14 and they followed a methodology that was used across the state for valuing projects. The following valuation is based on work prepared by H. Shelton Brown, Ph.D., A. Hasanat Alamgir, Ph.D., UT Houston School of Public Health and Thomas Bohman, Ph.D., UT Austin Center for Social Work Research.

It uses the method of cost-utility analysis (a type of cost-effectiveness research), as well as additional information on potential future costs saved. See Attachment 4 in Addendum – Rationale for Economic Valuation.

Valuations should be based on economic evaluation principles that identify, measure, and value the relevant costs and consequences of two or more alternatives. Typically, one alternative is a new program while the second is treatment as usual. Cost-utility analysis (CUA) measures the cost of the program in dollars and the health consequences in utility-weighted units. This valuation uses quality-adjusted life-years (QALYs) analysis that combines health quality (utility) with length of time in a particular health state.

Cost-utility analysis is a useful tool for assessing the value of new health service interventions due to the fact that it provides a standard way of valuing multiple types of interventions and programs. The valuation also incorporates costs averted when known (e.g., emergency room visits that are avoided). In order to make the valuations fair across potentially different types of interventions, the common health goal, or outcome, is the number of life-years added.

The benefits of the proposed program are valued based on assigning a monetary value of \$50,000 per life-year gained due to the intervention. This threshold has been a standard way of valuing life-years in terms of whether the cost of the intervention exceeds this standard. The number of life-years added is based on a review of the scientific literature. Since integrated healthcare is synonymous with collaborative healthcare, the term “collaborative healthcare” will be used in this valuation to be consistent with the literature referenced.

C. Category 1: Infrastructure Development

Identifying Project and Provider Information:

Project Title: Eliminate Disparities in Health Care Access for the uninsured and underserved population of West Odessa (West Odessa Family Health Clinic)

Unique Category 1 Identifier: 135235306.1.1

Performing Provider: Medical Center Health System TPI 135235306

DSRIP Category: Category 1.1.1 Expand Primary Care Access

Project Description:

- **Provider:** Medical Center Health System is a multi-site health system anchored by Medical Center Hospital a 402-bed hospital in Odessa, TX. MCHS has a service area of 38,000 square miles, which covers 17 counties and almost 390,000 lives.
- **Intervention(s):** This project will create a new primary care medical home for a vastly underserved population in West Odessa. The West Odessa Family Health Clinic will house Primary Care physicians specializing in Pediatrics, Family Practice, Internal Medicine, OB/GYN, and Optometry.
- **Need for the project:** We currently only have one clinic that serves as a FQHC Look-a-like. West Odessa does not have a primary care site and it is estimated that almost 30% of our population lives in that area.
- **Target population:** The target population is all Medicaid or uninsured patients living in the West Odessa area. Given the broad spectrum of coverage, almost all ages and acuities would fall under this clinic's structure.
- **Category 1 or 2 expected patient benefits:** The project seeks to provide primary care accessibility to thousands of underserved residents in Ector County. Many of these patients currently don't have a primary care medical home, so benefits will range from disease management to disease prevention. MCHS expects to conduct 3,700 Visits in DY 3, 8,000 visits in DY4, and 11,000 in DY5.
- **Category 3 outcomes:** IT-1.10 our goal is to reduce the % of patients presenting with a high HbA1c by 10% by the end of DY5.

Community health centers represent one of the nation's most prominent and enduring investments in the effort to build and sustain access to comprehensive primary health care for medically underserved communities and populations. Health centers play a particularly important role in the Medicaid program. Medicaid beneficiaries make up 39 percent of all health center patients and, nationwide, an estimated 14 percent of all Medicaid beneficiaries, or about one in every seven, receive care at health centers. Nearly a fifth (18 percent) of the primary care physicians who have a high share of Medicaid patients (defined as physicians who derive more than 25 percent of their practice revenues from Medicaid) work in health center settings. In many communities, health centers dominate the networks of Medicaid managed care plans; in 2010, 29 percent of health centers reported participating in capitated Medicaid

managed care arrangements, and 58 percent reported participating in some type of Medicaid managed care arrangement. Health centers make a major difference in access for the uninsured. Uninsured health center patients are more likely than similar patients nationally to report a generalist physician visit in the past year (82 percent versus 68 percent) and to have a regular source of care (96 percent versus 60 percent). Rural counties with a health center site have been shown to have a third fewer uninsured emergency department visits per 10,000 uninsured residents than rural counties without a health center site, as well as fewer emergency department visits that could have been avoided with timely primary care. The uninsured served in health centers experience better rates of recommended preventive care. Compared to uninsured women treated in other primary care settings, uninsured women served in health centers are 22 percent more likely to receive a Pap smear, 17 percent more likely to receive a breast exam, and 16 percent more likely to receive a mammogram. Controlling for age and race, gender, poverty level, and health related limitations, uninsured health center patients are 8 percent more likely to get cholesterol screening and 8 percent more likely to be screened for high blood pressure than uninsured patients in other primary care settings. The same pattern emerges from data on patients covered by Medicaid. America's health centers offer a proven solution to these complex problems. Health centers remove multiple barriers to primary care access and improve health outcomes, all in a cost-effective and locally-directed manner. Health centers are required to be open to all residents regardless of ability to pay or insurance status, target medically underserved areas, offer comprehensive primary care services, and be directed by a local patient-majority governing board. Countless studies document that health centers reduce or eliminate barriers to care, improve health, and lower health system costs. As barriers to primary care continue to threaten the health and productivity of our nation, health centers stand ready and willing to expand and break down these barriers. The dedicated stream of mandatory funding for health centers enacted under the Affordable Care Act is a promising starting point for continued expansion. Building the nation's primary care system on a strong foundation of health centers is only attainable, however, with sufficient investment to support expansion efforts and to maintain existing operations.

The goals of the proposed project are: (1) Provide a facility that can accommodate and support growth in primary medical and specialty care along with enhanced community and patient health education and counseling; (2) Support community efforts to redevelop and revitalize the area of West Odessa. The proposed facility will allow MCH to expand and improve services to the service area's population in four critical ways: First, the new facility will provide 20 additional exam rooms to accommodate the addition of one family physician, one OB/GYN, one FTE APN, one Endocrinologist and one Ophthalmologist. This increased staff is expected to enable the clinic to serve 2500 new patients and provide an additional 8000 encounters annually. Second, the additional space is essential if MCH is to fully utilize the capacity of its electronic health record and clinic management software system. The full utilization of the electronic systems will reduce staff recordkeeping time and operating costs while simultaneously improving patient monitoring and care. Third, improved linkage and access to secondary and tertiary care providers at Texas Tech. Fourth, the expanded space will allow MCH to expand its provision of community and patient health promotion, education and counseling services. These services, such as self-management classes for patients with diabetes,

smoking cessation, and nutrition counseling for the overweight are vital tools in addressing the long-term health needs of our residents.

Relationship to Regional Goals:

- RHP 14 has been focused on expanding care through the development of primary care access points in underserved areas. This project will place a clinic in an underserved area of Odessa, thereby providing access to insured and uninsured alike.

5 Year Goals:

- Build West Odessa Family Health Clinic
- Establish clinic as West Odessa’s Medical Home for Pediatric, Family Practice, Obstetrics, and Optometry.
- Work in conjunction with Healthy Kids Program, Faith Based Community Care, Diabetes Center and Outreach Program, and the Care Transitions program.
- Reduce Poor HbA1C control by 10% at the end of DY5

Challenges/Issues

- Barriers to Care—such as affordability, availability, and accessibility;
- Poor Health Outcomes—often due to a lack of preventive screenings; and
- Economic Consequences—due to using the Emergency Department and hospital rather than primary care

Starting Point/Baseline Data (if applicable)

In our first year of operations (DY3), we expect to around 3700 visits given the mid-year opening. Based on that data, we project an increase to 8000 visits in DY4 and an increase to 11000 patient visits in DY5.

Rationale:

- **This project meets CN1, CN3, and CN 5 that were identified in the Community Needs Assessment.**

In Ector County, 29% of the population is uninsured. There are over 19,000 Medicaid enrollees in Ector County alone. According to recent studies, 30% of elementary age students live west of Loop 338, which means this clinic will be perfectly positioned to meet the needs of the community. There is a huge need to meet the demands of this growing population. Our struggles remain in recruiting physicians to provide primary care to all of these patients. Many physician offices are not seeing the Medicaid and Uninsured patient population, but being a Federal Qualified Health Center Look Alike, we are required to see these patients. Because we are a Look Alike designation, we do not receive federal funding for treating this population, but are required to serve them regardless of their ability to pay. Because of MCH’s commitment to the mission of Family Health Clinic and the FQHC LAL status, these patients are being served according to these regulations.

Continuous access to primary care is critical to rein in health care costs and prevent the health care system from becoming overloaded and misused. Numerous studies have documented the savings that result from using primary care as opposed to tertiary levels of care. In addition to providing comprehensive services in West Odessa, the health center also will provide supportive services, such as transportation, interpreters, case management, and health education that increase access in the West Odessa area. To cater to their large elderly population, the health center also assists to provide nursing home placement and home visiting services. These health center services hope to have:

- 25% fewer uninsured Emergency Department visits for ambulatory care sensitive conditions compared to rural counties without a health center,
- \$5 billion annually returned to rural communities through employment and supplier purchases
- Increased rates of pap smears among rural health center female patients compared to rural women nationally
- Lower rates of low birth weight among rural health center patients than among patients of other providers.

Related Category 3 Outcome Measure(s):

IT-1.10 Diabetes care: *HbA1c poor control (>9.0%)*²⁷ - NQF 0059 (Standalone measure)

Key Factor Description:

The West Clinic will work with the Diabetes Center for diabetic education, including nutrition, exercise, medication management and blood glucose testing. Also having an Endocrinologist work out of the clinic two days a week will allow access for focus treatment on diabetes.

Major Planned Action Description:

Increase number of referrals to Diabetes Center and work with Diabetes Center in offering satellite classes at clinic on site. Have focused classes with the endocrinologist by offering group class sessions.

Relationship to other Projects

The health center will work closely with the Care Transition Program to assist with creating open access slots so those patients can be seen by a physician. The Case managers and community navigators will assist to direct patients to the clinic to help prevent avoidable Emergency Department visits. The clinic will allow more of collaboration for chronic disease patients to assist in better health outcomes for the community.

Relationship to Other Performing Providers' Projects in the RHP:

No direct correlation outside of Ector County

27

http://www.htsrec.com/janda/pdf/2012EP_MeasureSpecifications/NQF%200059/NQF_HQMF_HumanReadable_0059.pdf

Plan for Learning Collaborative:

RHP 14 plans to meet quarterly to discuss waiver operations and timelines during each year of the waiver. Leadership within the region has also discussed the possibility of having a yearly summit at varying locations to discuss regional issues and opportunities. These learning collaboratives would focus on 4 to 5 regional needs and would allow for substantial interaction. Plans will be crafted during DY2.

Project Valuation

- Readmission data suggest that \$216 million in charges could have been avoided with proper outpatient management 10,669 Hospitalizations
- Diabetes alone accounted for 1356 avoidable hospitalizations and over \$30 million dollars in charges

MCHS used a basic valuation tool to measure the effect of each project. The tool was centered on 4 main questions:

1. Does the project meet the waiver goals?
2. Does the project address a pressing community need?
3. Which population is being served?
4. What is the project investment (Resources needed)?

After consulting with local stakeholders, this project was deemed to be our most pressing project and therefore was given the highest allocation.