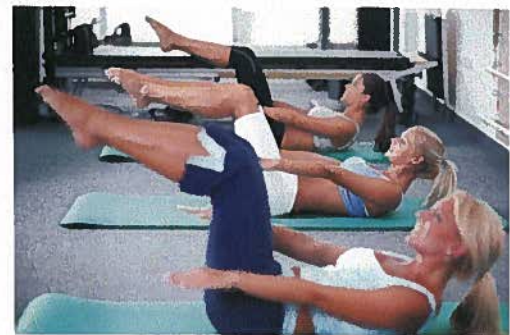
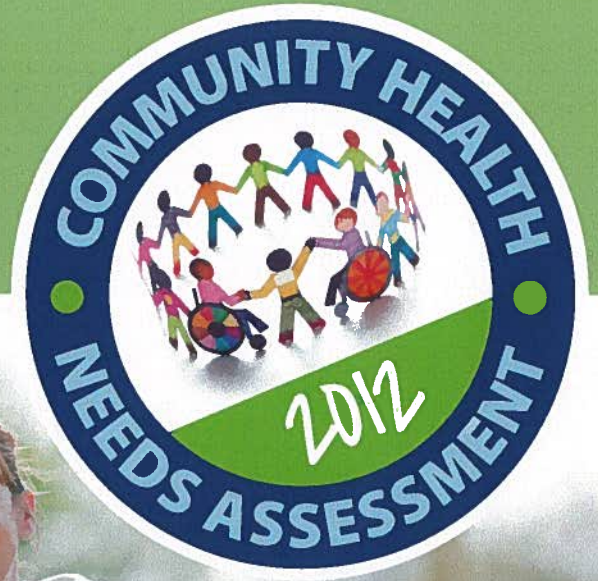


Trover Health System Regional Medical Center



TROVER
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Regional Medical Center
Community Health Needs Assessment
January 2012

Contents

Introduction	1
Summary of Community Health Needs Assessment	1
General Description of Hospital	2
Community Served by the Hospital	3
Defined Community	3
Community Details.....	5
Identification and Description of Geographical Community.....	5
Community Population and Demographics.....	6
Socioeconomic Characteristics of the Community	12
Income and Employment.....	12
Poverty.....	14
Uninsured	15
Education	16
Health Status of the Community	17
Leading Causes of Death	18
Health Outcomes and Factors.....	21
Hopkins County	22
Webster County	24
Muhlenberg County.....	26
Health Care Resources.....	29
Hospitals and Health Centers.....	29
Hospital Market Share	30
Other Health Care Facilities and Providers	31
Estimated Demand for Physician Office Visits and Hospital Services.....	33
Estimated Demand for Physician Services	37

**Regional Medical Center
Community Health Needs Assessment
January 2012**

Key Informant Interviews.....	39
Methodology.....	39
Key Informant Profiles	40
Key Informant Interview Results.....	40
Key Findings.....	44
Community Health Survey.....	45
Methodology.....	45
Survey Instrument.....	46
Community Health Survey Results	46
Prioritization of Identified Health Needs.....	49
Considerations for Meeting Identified Health Needs.....	52
Access to Care	52
Obesity.....	53
Substance Abuse.....	54
Clinical Preventative Services (Diseases of the Heart and Cancer)	55
Mental and Emotional Well Being	56
Health Issues of Uninsured Persons, Low-Income Persons and Minority Groups	57
 Appendices	
A – Acknowledgements.....	58
B – Key Informant Interview Protocol	60
C – Community Health Survey Detail Results	64
D – Sources.....	88

Introduction

IRC Section 501(r) requires health care organizations to assess the health needs of their communities and adopt implementation strategies to address identified needs. Per IRC Section 501(r), a byproduct of the *Affordable Care Act*, to comply with federal tax-exemption requirements, a tax-exempt hospital facility must:

- 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 of 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, which describes both a process and a document, is intended to document Regional Medical Center's compliance with IRC Section 501(r). Health needs of the community have been identified and prioritized so that Regional Medical Center (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.
- Conducting a health survey which gathered a wide range of information which 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

This community health needs assessment was partially funded by a grant provided to Regional Medical Center. The purpose of the community health needs assessment is to document compliance with new federal laws outlined above.

Regional Medical Center 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 2,000 partners and employees in 30 offices. BKD serves more than 900 hospitals and health care systems across the county. The community health needs assessment was conducted from August 2011 through December 2011.

Based on current literature and other guidance from the treasury and the IRS, the following steps were conducted as part of Regional Medical Center's community health needs assessment:

- The "community" served by Regional Medical Center was defined by utilizing inpatient and outpatient data regarding patient origin. This process is further described in Community Served by the Hospital.
- Population demographics and socioeconomic characteristics of the community were gathered and reported utilizing various third parties (see references in *Appendix D*). 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 the estimated demand for physician and hospital services was evaluated.
- Community input was provided through key informant interviews of 25 stakeholders and a community health survey was widely distributed. The Community Health Survey was completed by 364 individuals. Results and findings are described in the Key Informant Interviews and Community Health Survey sections of this report.
- Information gathered in the steps above 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 weighs 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 Regional Medical Center has to impact the need as well as the health needs impact on overall health. Information gaps were identified during the prioritization process and they have been reported.

- Recommendations based on this assessment have been communicated to Regional Medical Center.

General Description of Hospital

Regional Medical Center is a Kentucky, nonprofit organization, located in Madisonville, Kentucky. A board of directors governs the Hospital and ensures that medical services are available to the residents of Madisonville and surrounding areas.

The parent corporation of Regional Medical Center, Trover Health System (Trover), is an integrated health care provider serving western Kentucky residents for more than 55 years. Trover proudly offers 55 services and specialties to meet the needs of Kentuckians close to home. With more than 146 primary care, mid-level and specialist physicians, 460 registered nurses and more than 1,000 licensed health care professionals, Trover is made up of an experienced team of dedicated staff. Trover provides health care solutions with compassion and respect for the uniqueness of every individual. Guided by a values-based culture to consistently deliver clinical and service excellence to our patients, Trover strives for excellent care, every time. Regional Medical Center is governed by 16 board members.

Community Served by the Hospital

Regional Medical Center is located in the city of Madisonville, Kentucky, in the County of Hopkins. Madisonville is approximately one hour south of Evansville, Indiana. Madisonville and the surrounding geographic area are not close to any metropolitan area. Madisonville is mainly accessible by interstate and other secondary roads and does have an airport.

Defined Community

A community is defined as the geographic area from which a significant number of the patients utilizing hospital services reside. While the community health needs assessment considers other types of health care providers, Regional Medical Center is the single largest provider of acute care services. For this reason, the utilization of Regional Medical Center 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 Regional Medical Center's total discharges and outpatient visits.
- Regional Medical Center'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 Regional Medical Center.

Based on the patient origin of acute care discharges from January 1, 2010, through June 30, 2011, management has identified the community to include the zip codes listed in *Exhibit 1*. *Exhibit 1* presents Regional Medical Center's patient origin and charges for each of the top 23 zip code areas in its community. Pages 5 and 6 present detailed maps of Regional Medical Center's geographical location and the footprint of the community identified in *Exhibit 1*. The first map displays Regional Medical Center's geographic relationship to surrounding counties, as well as significant roads and highways. The second map displays Regional Medical Center's defined community and identifies the 23 zip code areas that comprise Regional Medical Center's community. These zip codes are listed with corresponding demographic information in *Exhibits 2* through 5.

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 for the community covers all of Hopkins County and most of Muhlenberg and Webster Counties. The community health needs assessment will utilize the three counties when that corresponding information is more readily available.

Exhibit 1
Regional Medical Center
Summary of Inpatient Discharges by Zip Code (Descending Order)
1/1/10 - 6/30/11

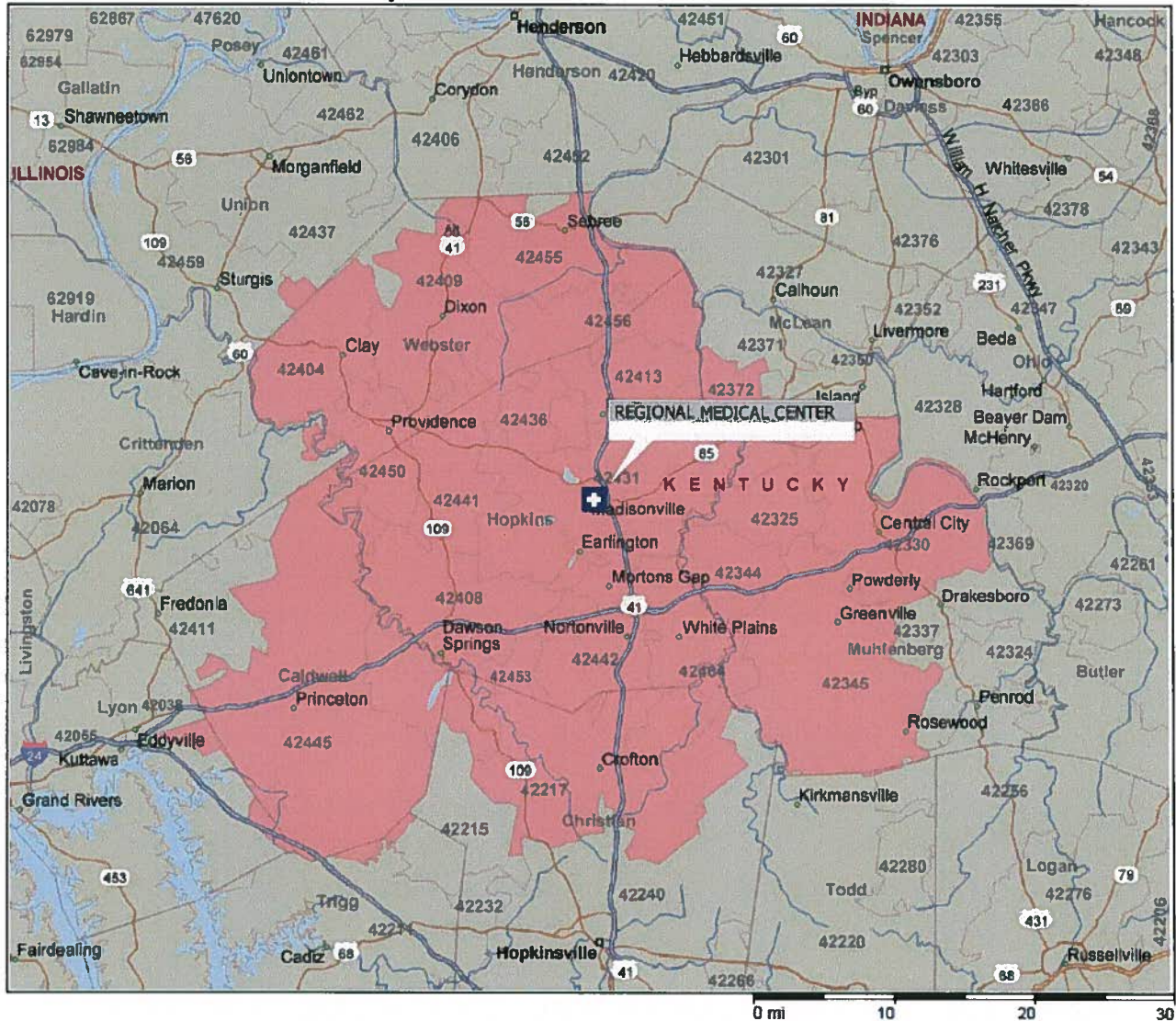
Zip Code	City	Discharges	Charges	Percent of Total Discharges	Cumulative Percent
42431	Madisonville	3,089	\$ 62,547,425	34.1%	34.1%
42408	Dawson Springs	751	\$ 17,016,661	8.3%	42.4%
42450	Providence	447	\$ 9,086,139	4.9%	47.4%
42442	Nortonville	380	\$ 8,483,703	4.2%	51.6%
42345	Greenville	305	\$ 8,093,511	3.4%	55.0%
42330	Central City	278	\$ 5,937,525	3.1%	58.0%
42445	Princeton	251	\$ 4,490,569	2.8%	60.8%
42413	Hanson	247	\$ 5,278,554	2.7%	63.5%
42410	Earlington	234	\$ 4,614,522	2.6%	66.1%
42217	Crofton	170	\$ 3,676,986	1.9%	68.0%
42404	Clay	169	\$ 3,852,737	1.9%	69.9%
42464	White Plains	161	\$ 3,485,553	1.8%	71.6%
42372	Sacramento	144	\$ 3,117,652	1.6%	73.2%
42441	Nebo	142	\$ 2,623,349	1.6%	74.8%
42440	Mortons Gap *	136	\$ 2,797,631	1.5%	76.3%
42325	Bremen	128	\$ 2,909,012	1.4%	77.7%
42409	Dixon	115	\$ 2,401,780	1.3%	79.0%
42456	Slaughters	110	\$ 2,894,122	1.2%	80.2%
42436	Manitou	107	\$ 2,102,535	1.2%	81.4%
42455	Sebree	86	\$ 1,768,206	1.0%	82.3%
42453	Saint Charles	73	\$ 1,370,313	0.8%	83.2%
42344	Graham	65	\$ 1,338,591	0.7%	83.9%
42367	Powderly	54	\$ 1,003,278	0.6%	84.5%
	All Other	1,405	\$ 33,017,097	15.5%	100.0%
	Total	9,047	\$ 193,907,452	100.0%	

Source: Trover Health System

* This zip code is a PO Box and will not be used in the service area summaries.

Community Population and Demographics

The following map geographically illustrates Regional Medical Center’s location and community by showing the community zip codes shaded. The bulk of the community’s population is concentrated in and around the city of Madisonville, with portions of the nearby counties of Webster and Muhlenberg also having significant discharge numbers.



The U.S. Bureau of Census has compiled population and demographic data based on the 2010 census. The Nielson Company, a firm specializing in the analysis of demographic data, has extrapolated this data by zip code to estimate population trends from 2011 through 2016. Population estimates by age and zip code for Regional Medical Center’s community are presented after the map in *Exhibit 2*.

Exhibit 2 illustrates that the overall population is projected to decrease slightly over the five-year period from 103,185 to 102,311. However, the age category that utilizes health care services the most, 65 years and over, is projected to increase from 17,010 to 18,820. The projected changes to the composition of the total community, between male and female, is projected to remain approximately the same over the five-year period.

**Exhibit 2
Regional Medical Center Community Zip Codes
Estimated 2011 Population and Projected 2016 Population**

Zip Code	City	Under 15 years	15-44 years	45-64 years	65 years and over	Total	Male	Female
Estimated 2011 Population								
42431	Madisonville	5,209	9,871	7,526	4,558	27,164	12,916	14,248
42408	Dawson Springs	1,315	2,493	1,922	1,246	6,976	3,386	3,590
42450	Providence	891	1,589	1,163	722	4,365	2,085	2,280
42442	Nortonville	683	1,242	878	445	3,248	1,604	1,644
42345	Greenville	1,879	3,908	3,154	2,101	11,042	5,340	5,702
42330	Central City	1,536	3,977	2,578	1,522	9,613	5,107	4,506
42445	Princeton	1,951	3,879	3,274	2,026	11,130	5,354	5,776
42413	Hanson	466	925	815	335	2,541	1,258	1,283
42410	Earlington	351	599	446	268	1,664	780	884
42217	Crofton	935	1,574	1,207	637	4,353	2,082	2,271
42404	Clay	464	968	736	409	2,577	1,306	1,271
42464	White Plains	348	728	532	260	1,868	918	950
42372	Sacramento	390	724	531	324	1,969	987	982
42441	Nebo	274	547	482	196	1,499	763	736
42325	Bremen	370	819	605	322	2,116	1,050	1,066
42409	Dixon	390	959	718	323	2,390	1,208	1,182
42456	Slaughters	348	636	499	253	1,736	854	882
42436	Manitou	240	480	426	162	1,308	655	653
42455	Sebree	696	1,210	805	525	3,236	1,590	1,646
42453	St. Charles	101	176	141	79	497	244	253
42344	Graham	211	344	247	151	953	458	495
42367	Powderly	181	355	258	146	940	460	480
PROVIDER SERVICE AREA		19,229	38,003	28,943	17,010	103,185	50,405	52,780
Projected 2016 Population								
42431	Madisonville	5,204	9,497	7,158	4,987	26,846	12,809	14,037
42408	Dawson Springs	1,311	2,343	1,869	1,364	6,887	3,343	3,544
42450	Providence	896	1,481	1,061	769	4,207	2,016	2,191
42442	Nortonville	686	1,175	877	509	3,247	1,605	1,642
42345	Greenville	1,826	3,828	2,975	2,334	10,963	5,320	5,643
42330	Central City	1,482	3,833	2,425	1,649	9,389	5,028	4,361
42445	Princeton	1,934	3,716	3,151	2,240	11,041	5,325	5,716
42413	Hanson	477	903	819	404	2,603	1,285	1,318
42410	Earlington	351	575	390	285	1,601	755	846
42217	Crofton	1,005	1,669	1,196	763	4,633	2,214	2,419
42404	Clay	462	877	719	440	2,498	1,261	1,237
42464	White Plains	351	690	506	309	1,856	908	948
42372	Sacramento	368	679	526	354	1,927	965	962
42441	Nebo	278	519	449	235	1,481	747	734
42325	Bremen	357	752	607	359	2,075	1,022	1,053
42409	Dixon	397	912	706	373	2,388	1,200	1,188
42456	Slaughters	360	627	490	299	1,776	875	901
42436	Manitou	250	476	437	204	1,367	684	683
42455	Sebree	704	1,152	767	544	3,167	1,555	1,612
42453	St. Charles	96	167	134	79	476	245	231
42344	Graham	205	349	239	162	955	462	493
42367	Powderly	178	346	246	158	928	448	480
PROVIDER SERVICE AREA		19,178	36,566	27,747	18,820	102,311	50,072	52,239

Exhibit 2.1 provides the percent difference for each zip code from estimated 2011 to projected 2016 as well as the ability to compare the percent difference to the state of Kentucky and the United States for comparison purposes. *Exhibit 2.1* illustrates that the overall population is projected to decrease by less than one percent over the five-year period compared to projected overall increases for Kentucky at almost three percent and the United States at approximately four percent. Note that the age category that utilizes health care services the most, 65 years and over, is projected to increase by more than 10 percent. This increase in the 65 years and over category will have a dramatic impact on both the amount and type of services required by the community.

Exhibit 2.1
Regional Medical Center Community Zip Codes
Estimated 2011 Population vs Projected 2016 Population Percent Difference

Zip Code	City	Under 15 years	15-44 years	45-64 years	65 years and over	Total	Male	Female
Percent Difference								
42431	Madisonville	-0.1%	-3.8%	-4.9%	9.4%	-1.2%	-0.8%	-1.5%
42408	Dawson Springs	-0.3%	-6.0%	-2.8%	9.5%	-1.3%	-1.3%	-1.3%
42450	Providence	0.6%	-6.8%	-8.8%	6.5%	-3.6%	-3.3%	-3.9%
42442	Nortonville	0.4%	-5.4%	-0.1%	14.4%	0.0%	0.1%	-0.1%
42345	Greenville	-2.8%	-2.0%	-5.7%	11.1%	-0.7%	-0.4%	-1.0%
42330	Central City	-3.5%	-3.6%	-5.9%	8.3%	-2.3%	-1.5%	-3.2%
42445	Princeton	-0.9%	-4.2%	-3.8%	10.6%	-0.8%	-0.5%	-1.0%
42413	Hanson	2.4%	-2.4%	0.5%	20.6%	2.4%	2.1%	2.7%
42410	Earlington	0.0%	-4.0%	-12.6%	6.3%	-3.8%	-3.2%	-4.3%
42217	Crofton	7.5%	6.0%	-0.9%	19.8%	6.4%	6.3%	6.5%
42404	Clay	-0.4%	-9.4%	-2.3%	7.6%	-3.1%	-3.4%	-2.7%
42464	White Plains	0.9%	-5.2%	-4.9%	18.8%	-0.6%	-1.1%	-0.2%
42372	Sacramento	-5.6%	-6.2%	-0.9%	9.3%	-2.1%	-2.2%	-2.0%
42441	Nebo	1.5%	-5.1%	-6.8%	19.9%	-1.2%	-2.1%	-0.3%
42325	Bremen	-3.5%	-8.2%	0.3%	11.5%	-1.9%	-2.7%	-1.2%
42409	Dixon	1.8%	-4.9%	-1.7%	15.5%	-0.1%	-0.7%	0.5%
42456	Slaughters	3.4%	-1.4%	-1.8%	18.2%	2.3%	2.5%	2.2%
42436	Manitou	4.2%	-0.8%	2.6%	25.9%	4.5%	4.4%	4.6%
42455	Sebree	1.1%	-4.8%	-4.7%	3.6%	-2.1%	-2.2%	-2.1%
42453	St. Charles	-5.0%	-5.1%	-5.0%	0.0%	-4.2%	0.4%	-8.7%
42344	Graham	-2.8%	1.5%	-3.2%	7.3%	0.2%	0.9%	-0.4%
42367	Powderly	-1.7%	-2.5%	-4.7%	8.2%	-1.3%	-2.6%	0.0%
PROVIDER SERVICE AREA		-0.3%	-3.8%	-4.1%	10.6%	-0.8%	-0.7%	-1.0%
KY 2011 Estimated (1,000s)		851	1,746	1,163	600	4,360	2,140	2,219
KY 2016 Projected (1,000s)		876	1,724	1,181	695	4,476	2,199	2,277
PERCENT DIFFERENCE		2.9%	-1.3%	1.5%	15.8%	2.7%	2.8%	2.6%
U.S. 2011 Estimated (1,000s)		62,661	125,854	80,789	41,347	310,651	153,278	157,373
U.S. 2016 Projected (1,000s)		65,357	125,839	83,934	47,902	323,032	159,466	163,566
PERCENT DIFFERENCE		4.3%	0.0%	3.9%	15.9%	4.0%	4.0%	3.9%

Source: The Nielson Company

Certain characteristics of a population can be factors in determining the health care services required by a community. The following is an analysis of the age distribution of the population for the primary community. The analysis is provided by zip code and provides a comparison to Kentucky and the United States.

Exhibit 2.2
Regional Medical Center Community Zip Codes
Estimated 2011 Population vs Projected 2016 Population with Percent Totals

Zip Code	City	Under 15 years	15-44 years	45-64 years	65 years and over	Total	Male	Female
Estimated 2011 Population								
42431	Madisonville	19.2%	36.3%	27.7%	16.8%	100.0%	47.5%	52.5%
42408	Dawson Springs	18.9%	35.7%	27.6%	17.9%	100.0%	48.5%	51.5%
42450	Providence	20.4%	36.4%	26.6%	16.5%	100.0%	47.8%	52.2%
42442	Nortonville	21.0%	38.2%	27.0%	13.7%	100.0%	49.4%	50.6%
42345	Greenville	17.0%	35.4%	28.6%	19.0%	100.0%	48.4%	51.6%
42330	Central City	16.0%	41.4%	26.8%	15.8%	100.0%	53.1%	46.9%
42445	Princeton	17.5%	34.9%	29.4%	18.2%	100.0%	48.1%	51.9%
42413	Hanson	18.3%	36.4%	32.1%	13.2%	100.0%	49.5%	50.5%
42410	Earlington	21.1%	36.0%	26.8%	16.1%	100.0%	46.9%	53.1%
42217	Crofton	21.5%	36.2%	27.7%	14.6%	100.0%	47.8%	52.2%
42404	Clay	18.0%	37.6%	28.6%	15.9%	100.0%	50.7%	49.3%
42464	White Plains	18.6%	39.0%	28.5%	13.9%	100.0%	49.1%	50.9%
42372	Sacramento	19.8%	36.8%	27.0%	16.5%	100.0%	50.1%	49.9%
42441	Nebo	18.3%	36.5%	32.2%	13.1%	100.0%	50.9%	49.1%
42325	Bremen	17.5%	38.7%	28.6%	15.2%	100.0%	49.6%	50.4%
42409	Dixon	16.3%	40.1%	30.0%	13.5%	100.0%	50.5%	49.5%
42456	Slaughters	20.0%	36.6%	28.7%	14.6%	100.0%	49.2%	50.8%
42436	Manitou	18.3%	36.7%	32.6%	12.4%	100.0%	50.1%	49.9%
42455	Sebree	21.5%	37.4%	24.9%	16.2%	100.0%	49.1%	50.9%
42453	St. Charles	20.3%	35.4%	28.4%	15.9%	100.0%	49.1%	50.9%
42344	Graham	22.1%	36.1%	25.9%	15.8%	100.0%	48.1%	51.9%
42367	Powderly	19.3%	37.8%	27.4%	15.5%	100.0%	48.9%	51.1%
TOTAL PROVIDER SERVICE AREA		18.6%	36.8%	28.0%	16.5%	100.0%	48.8%	51.2%
Projected 2016 Population								
42431	Madisonville	19.4%	35.4%	26.7%	18.6%	100.0%	47.7%	52.3%
42408	Dawson Springs	19.0%	34.0%	27.1%	19.8%	100.0%	48.5%	51.5%
42450	Providence	21.3%	35.2%	25.2%	18.3%	100.0%	47.9%	52.1%
42442	Nortonville	21.1%	36.2%	27.0%	15.7%	100.0%	49.4%	50.6%
42345	Greenville	16.7%	34.9%	27.1%	21.3%	100.0%	48.5%	51.5%
42330	Central City	15.8%	40.8%	25.8%	17.6%	100.0%	53.6%	46.4%
42445	Princeton	17.5%	33.7%	28.5%	20.3%	100.0%	48.2%	51.8%
42413	Hanson	18.3%	34.7%	31.5%	15.5%	100.0%	49.4%	50.6%
42410	Earlington	21.9%	35.9%	24.4%	17.8%	100.0%	47.2%	52.8%
42217	Crofton	21.7%	36.0%	25.8%	16.5%	100.0%	47.8%	52.2%
42404	Clay	18.5%	35.1%	28.8%	17.6%	100.0%	50.5%	49.5%
42464	White Plains	18.9%	37.2%	27.3%	16.6%	100.0%	48.9%	51.1%
42372	Sacramento	19.1%	35.2%	27.3%	18.4%	100.0%	50.1%	49.9%
42441	Nebo	18.8%	35.0%	30.3%	15.9%	100.0%	50.4%	49.6%
42325	Bremen	17.2%	36.2%	29.3%	17.3%	100.0%	49.3%	50.7%
42409	Dixon	16.6%	38.2%	29.6%	15.6%	100.0%	50.3%	49.7%
42456	Slaughters	20.3%	35.3%	27.6%	16.8%	100.0%	49.3%	50.7%
42436	Manitou	18.3%	34.8%	32.0%	14.9%	100.0%	50.0%	50.0%
42455	Sebree	22.2%	36.4%	24.2%	17.2%	100.0%	49.1%	50.9%
42453	St. Charles	20.2%	35.1%	28.2%	16.6%	100.0%	51.5%	48.5%
42344	Graham	21.5%	36.5%	25.0%	17.0%	100.0%	48.4%	51.6%
42367	Powderly	19.2%	37.3%	26.5%	17.0%	100.0%	48.3%	51.7%
TOTAL PROVIDER SERVICE AREA		18.7%	35.7%	27.1%	18.4%	100.0%	48.9%	51.1%
ESTIMATED 2011		18.6%	36.8%	28.0%	16.5%	100.0%	49.1%	50.9%
PROJECTED 2016 POPULATION		18.7%	35.7%	27.1%	18.4%	100.0%	49.1%	50.9%
PERCENT DIFFERENCE		-0.3%	-3.8%	-4.1%	10.6%	-0.8%	-0.7%	-1.0%
KENTUCKY 2011		20.2%	40.5%	26.0%	13.3%	100.0%	49.3%	50.7%
UNITED STATES 2011		20.2%	39.0%	26.0%	14.8%	100.0%	49.4%	50.6%

Source: The Nielson Company

Very similar to the 10 percent growth seen in the overall number of people in the 65 year and over category in *Exhibit 2*, *Exhibit 2.1* indicates that as a percent of total population for the community, the 65 year and over category will make up more than 18 percent of the total population in 2016 compared to the more than 16 percent in 2011. When compared to both the state of Kentucky and the United States, the community is more than 20 percent different.

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 community by ethnicity by illustrating the hispanic versus nonhispanic residents. In total, the population breakdown for the community is very comparable to the state of Kentucky. A review of the specific zip code areas does show a relatively large percentage of hispanic residents in the Sebree zip code.

Exhibit 3
Regional Medical Center Community Zip Codes
Estimated 2011 Population vs Projected 2016 Population with Percent Difference

Zip Code	City	Estimated 2011			Projected 2016			% Difference		% Total	
		Hispanic	Non-Hispanic	Total	Hispanic	Non-Hispanic	Total	Hispanic	Non-Hispanic	Hispanic	Non-Hispanic
42431	Madisonville	429	26,735	27,164	470	26,376	26,846	9.6%	-1.3%	1.8%	98.2%
42408	Dawson Springs	27	6,949	6,976	28	6,859	6,887	3.7%	-1.3%	0.4%	99.6%
42450	Providence	89	4,276	4,365	110	4,097	4,207	23.6%	-4.2%	2.6%	97.4%
42442	Nortonville	34	3,214	3,248	42	3,205	3,247	23.5%	-0.3%	1.3%	98.7%
42345	Greenville	117	10,925	11,042	130	10,833	10,963	11.1%	-0.8%	1.2%	98.8%
42330	Central City	91	9,522	9,613	104	9,285	9,389	14.3%	-2.5%	1.1%	98.9%
42445	Princeton	124	11,006	11,130	146	10,895	11,041	17.7%	-1.0%	1.3%	98.7%
42413	Hanson	22	2,519	2,541	24	2,579	2,603	9.1%	2.4%	0.9%	99.1%
42410	Earlington	15	1,649	1,664	15	1,586	1,601	0.0%	-3.8%	0.9%	99.1%
42217	Crofton	20	4,333	4,353	23	4,610	4,633	15.0%	6.4%	0.5%	99.5%
42404	Clay	24	2,553	2,577	31	2,467	2,498	29.2%	-3.4%	1.2%	98.8%
42464	White Plains	34	1,834	1,868	39	1,817	1,856	14.7%	-0.9%	2.1%	97.9%
42372	Sacramento	34	1,935	1,969	42	1,885	1,927	23.5%	-2.6%	2.2%	97.8%
42441	Nebo	6	1,493	1,499	7	1,474	1,481	16.7%	-1.3%	0.5%	99.5%
42325	Bremen	16	2,100	2,116	19	2,056	2,075	18.8%	-2.1%	0.9%	99.1%
42409	Dixon	34	2,356	2,390	43	2,345	2,388	26.5%	-0.5%	1.8%	98.2%
42456	Slaughters	37	1,699	1,736	47	1,729	1,776	27.0%	1.8%	2.6%	97.4%
42436	Manitou	7	1,301	1,308	7	1,360	1,367	0.0%	4.5%	0.5%	99.5%
42455	Sebree	578	2,658	3,236	737	2,430	3,167	27.5%	-8.6%	23.3%	76.7%
42453	St. Charles	2	495	497	2	474	476	0.0%	-4.2%	0.4%	99.6%
42344	Graham	1	952	953	3	952	955	200.0%	0.0%	0.3%	99.7%
42367	Powderly	8	932	940	9	919	928	12.5%	-1.4%	1.0%	99.0%
PROVIDER SERVICE AREA		1,749	101,436	103,185	2,078	100,233	102,311	18.8%	-1.2%	2.0%	98.0%
Kentucky (1,000s)		122	4,237	4,359	153	4,323	4,476	25.4%	2.0%	3.4%	96.6%
U.S. (1,000s)		49,991	260,660	310,651	57,396	265,636	323,032	14.8%	1.9%	17.8%	82.2%

Exhibit 4 shows the population of the community by race by illustrating three different categories, white, African American and other residents. In total, the population breakdown for the community is very comparable to the state of Kentucky. A review of the specific zip code areas does show a relatively large percentage of black residents in the Madisonville, Providence and Earlington zip code areas compared to other zip codes in the community.

**Exhibit 4
Regional Medical Center Community Zip Codes
Estimated 2011 Population vs Projected 2016 Population with Percent Difference**

Zip Code	City	Estimated 2011			Projected 2016			Percent Difference			Percent Total				
		White	Black	Other	White	Black	Other	White	Black	Other	White	Black	Other		
42431	Madisonville	23,675	2,647	842	27,164	2,702	932	26,846	-2.0%	2.1%	10.7%	-1.2%	86.5%	10.1%	3.5%
42408	Dawson Springs	6,819	55	102	6,976	52	114	6,887	-1.4%	-5.5%	11.8%	-1.3%	97.6%	0.8%	1.7%
42450	Providence	3,705	537	123	4,365	520	145	4,207	-4.4%	-3.2%	17.9%	-3.6%	84.2%	12.4%	3.4%
42442	Nortonville	3,163	40	45	3,248	36	51	3,247	-0.1%	-10.0%	13.3%	0.0%	97.3%	1.1%	1.6%
42345	Greenville	10,309	537	196	11,042	528	222	10,963	-0.9%	-1.7%	13.3%	-0.7%	93.2%	4.8%	2.0%
42330	Central City	8,624	824	165	9,613	856	181	9,389	-3.2%	3.9%	9.7%	-2.3%	89.0%	9.1%	1.9%
42445	Princeton	10,220	690	220	11,130	709	245	11,041	-1.3%	2.8%	11.4%	-0.8%	91.4%	6.4%	2.2%
42413	Hanson	2,467	27	47	2,541	32	58	2,603	1.9%	18.5%	23.4%	2.4%	96.5%	1.2%	2.2%
42410	Earlington	1,443	198	23	1,664	171	25	1,601	-2.6%	-13.6%	8.7%	-3.8%	87.8%	10.7%	1.6%
42217	Crofton	4,168	124	61	4,353	110	63	4,633	7.0%	-11.3%	3.3%	6.4%	96.3%	2.4%	1.4%
42404	Clay	2,502	33	42	2,577	31	50	2,498	-3.4%	-6.1%	19.0%	-3.1%	96.8%	1.2%	2.0%
42464	White Plains	1,819	21	28	1,868	20	31	1,856	-0.8%	-4.8%	10.7%	-0.6%	97.3%	1.1%	1.7%
42372	Sacramento	1,882	31	56	1,969	31	64	1,927	-2.7%	0.0%	14.3%	-2.1%	95.1%	1.6%	3.3%
42441	Nebo	1,457	16	26	1,499	19	28	1,481	-1.6%	18.8%	7.7%	-1.2%	96.8%	1.3%	1.9%
42325	Bremen	2,097	1	18	2,116	-	22	2,075	-2.1%	-100.0%	22.2%	-1.9%	98.9%	0.0%	1.1%
42409	Dixon	2,287	45	58	2,390	43	70	2,388	-0.5%	-4.4%	20.7%	-0.1%	95.3%	1.8%	2.9%
42456	Slaughters	1,698	10	28	1,736	11	37	1,776	1.8%	10.0%	32.1%	2.3%	97.3%	0.6%	2.1%
42436	Manitou	1,270	15	23	1,308	17	28	1,367	4.1%	13.3%	21.7%	4.5%	96.7%	1.2%	2.0%
42455	Sebree	2,928	17	291	3,236	22	365	3,167	-5.1%	29.4%	23.4%	-2.1%	87.8%	0.7%	11.5%
42453	St. Charles	489	2	6	497	2	8	476	-4.7%	0.0%	33.3%	-4.2%	97.9%	0.4%	1.7%
42344	Graham	945	3	5	953	2	4	955	0.4%	-33.3%	-20.0%	0.2%	99.4%	0.2%	0.4%
42367	Powderly	913	17	10	940	14	9	928	-0.9%	-17.6%	-10.0%	-1.3%	97.5%	1.5%	1.0%
PROVIDER SERVICE AREA		94,880	5,890	2,415	103,185	5,928	2,752	102,311	-1.3%	0.6%	14.0%	-0.8%	91.5%	5.8%	2.7%
Kentucky (1,000s)		3,850	341	168	4,359	360	200	4,476	1.7%	5.6%	19.0%	2.7%	87.5%	8.0%	4.5%
U.S. (1,000s)		223,623	38,661	48,367	310,651	40,530	54,914	323,032	1.8%	4.8%	13.5%	4.0%	70.5%	12.5%	17.0%

Source: The Nielson 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, labor force, employees by types of industry, employment rates, educational attainment and poverty for the community served by Regional Medical Center. These standard measures will be used to compare the socioeconomic status of the county internally as well as to the state.

Income and Employment

Exhibit 5 presents the average, median and per capita income for households in each zip code. Average income is projected to increase by approximately two to five percent between 2011 and 2016, while the median income is projected to increase slightly more than one to three percent and the average per capita is projected to increase approximately three to six percent.

Exhibit 5
Regional Medical Center Community Zip Codes
Estimated Family Income and Wealth for 2010 and 2015 with Percent Difference

Zip Code	City	Estimated 2011			Projected 2016			Percent Difference		
		Avg. Household Income	Median Household Income	Avg. Per Capita Income	Avg. Household Income	Median Household Income	Avg. Per Capita Income	Avg. Household Income	Median Household Income	Avg. Per Capita Income
42431	Madisonville	\$ 51,648	\$ 38,787	\$ 22,426	\$ 53,196	\$ 39,647	\$ 23,260	3.0%	2.2%	3.7%
42408	Dawson Springs	\$ 39,398	\$ 30,445	\$ 16,265	\$ 40,118	\$ 31,002	\$ 16,729	1.8%	1.8%	2.9%
42450	Providence	\$ 41,780	\$ 31,756	\$ 17,681	\$ 42,614	\$ 32,328	\$ 18,185	2.0%	1.8%	2.9%
42442	Nortonville	\$ 42,296	\$ 36,449	\$ 17,046	\$ 43,578	\$ 37,414	\$ 17,800	3.0%	2.6%	4.4%
42345	Greenville	\$ 48,469	\$ 34,803	\$ 20,324	\$ 49,576	\$ 35,572	\$ 20,993	2.3%	2.2%	3.3%
42330	Central City	\$ 43,300	\$ 33,227	\$ 16,925	\$ 44,698	\$ 34,097	\$ 17,554	3.2%	2.6%	3.7%
42445	Princeton	\$ 46,515	\$ 34,450	\$ 19,924	\$ 48,057	\$ 35,332	\$ 20,750	3.3%	2.6%	4.1%
42413	Hanson	\$ 64,252	\$ 52,907	\$ 25,059	\$ 66,221	\$ 53,973	\$ 26,084	3.1%	2.0%	4.1%
42410	Earlington	\$ 34,066	\$ 25,495	\$ 14,368	\$ 33,804	\$ 25,899	\$ 14,691	-0.8%	1.6%	2.2%
42217	Crofton	\$ 46,293	\$ 39,044	\$ 17,892	\$ 47,455	\$ 40,126	\$ 18,482	2.5%	2.8%	3.3%
42404	Clay	\$ 46,377	\$ 37,939	\$ 19,293	\$ 47,498	\$ 39,205	\$ 19,834	2.4%	3.3%	2.8%
42464	White Plains	\$ 44,517	\$ 35,227	\$ 17,573	\$ 47,126	\$ 36,453	\$ 18,410	5.9%	3.5%	4.8%
42372	Sacramento	\$ 45,910	\$ 36,187	\$ 19,498	\$ 47,954	\$ 37,536	\$ 20,290	4.5%	3.7%	4.1%
42441	Nebo	\$ 51,682	\$ 41,696	\$ 20,844	\$ 54,533	\$ 43,201	\$ 21,873	5.5%	3.6%	4.9%
42325	Bremen	\$ 43,856	\$ 36,144	\$ 17,815	\$ 45,067	\$ 37,014	\$ 18,522	2.8%	2.4%	4.0%
42409	Dixon	\$ 52,368	\$ 43,525	\$ 21,065	\$ 53,730	\$ 44,306	\$ 21,759	2.6%	1.8%	3.3%
42456	Slaughters	\$ 56,866	\$ 50,644	\$ 22,862	\$ 58,732	\$ 51,684	\$ 23,666	3.3%	2.1%	3.5%
42436	Manitou	\$ 66,652	\$ 50,539	\$ 26,171	\$ 69,551	\$ 51,860	\$ 26,997	4.3%	2.6%	3.2%
42455	Sebree	\$ 47,510	\$ 39,647	\$ 18,266	\$ 48,757	\$ 40,511	\$ 18,691	2.6%	2.2%	2.3%
42453	St. Charles	\$ 39,124	\$ 30,735	\$ 15,372	\$ 41,151	\$ 32,031	\$ 16,291	5.2%	4.2%	6.0%
42344	Graham	\$ 36,605	\$ 31,528	\$ 15,395	\$ 37,807	\$ 32,292	\$ 16,111	3.3%	2.4%	4.7%
42367	Powderly	\$ 32,310	\$ 26,687	\$ 14,174	\$ 33,211	\$ 27,278	\$ 14,723	2.8%	2.2%	3.9%
	Kentucky	\$ 53,560	\$ 40,080	\$ 21,970	\$ 55,025	\$ 41,058	\$ 22,666	2.7%	2.4%	3.2%
	United States	\$ 67,529	\$ 49,726	\$ 25,728	\$ 69,479	\$ 51,097	\$ 26,455	2.9%	2.8%	2.8%

Source: The Nielson Company

Exhibit 6 presents the average annual resident unemployment rates for Hopkins, Webster and Muhlenberg Counties in Kentucky and the United States. As *Exhibit 6* illustrates, unemployment rates for Hopkins County have continued to rise in recent years and still rank unfavorably when compared to the state and national averages.

Exhibit 6
Regional Medical Center Community
Unemployment Rates (%)
2006-2010

County	2006	2007	2008	2009	2010
Webster County	5.3	6.1	6.5	9.9	9.3
Hopkins County	6.0	6.1	7.5	9.5	9.4
Muhlenberg County	9.4	8.2	8.8	11.1	11.0
Kentucky	5.9	5.6	6.6	10.7	10.5
United States	4.6	4.6	5.8	9.3	9.6

Source: FDIC

According to Hospital management, Hopkins, Webster and Muhlenberg Counties are supported by major employers including: County Boards of Education, Regional Medical Center and Muhlenberg Community Hospital, Alliance Resource Partners, Carhartt, General Electric, Madisonville Community College and Wal-Mart Associates, Inc. *Exhibit 7* summarizes employment by major industry for the three counties.

Exhibit 7
Regional Medical Center Community
Employment by Major Industry
2010

Major Industries	Webster County		Hopkins County		Muhlenberg County		Total		US
		%		%		%		%	%
Goods-producing	767	26.7%	4,224	24.5%	2,116	23.1%	7,107	24.3%	14.7%
Natural Resources and Mining	134	4.7%	1,442	8.4%	1,015	11.1%	2,591	8.8%	1.4%
Construction	311	10.8%	516	3.0%	354	3.9%	1,181	4.0%	4.3%
Manufacturing	322	11.2%	2,266	13.1%	747	8.1%	3,335	11.4%	9.0%
Service-providing	1,356	47.2%	9,549	55.4%	4,686	51.1%	15,591	53.2%	68.4%
Trade, Transportation, and Utilities	785	27.3%	3,089	17.9%	1,613	17.6%	5,487	18.7%	19.1%
Information	11	0.4%	150	0.9%	104	1.1%	265	0.9%	2.1%
Financial Activities	92	3.2%	533	3.1%	252	2.7%	877	3.0%	5.8%
Professional and Business Services	75	2.6%	733	4.3%	312	3.4%	1,120	3.8%	13.1%
Education and Health Services	275	9.6%	2,944	17.1%	1,427	15.6%	4,646	15.9%	14.6%
Leisure and Hospitality	40	1.4%	1,440	8.4%	784	8.5%	2,264	7.7%	10.2%
Other Services	78	2.7%	660	3.8%	194	2.1%	932	3.2%	3.4%
Federal Government	46	1.6%	174	1.0%	580	6.3%	800	2.7%	2.3%
State Government	63	2.2%	1,099	6.4%	403	4.4%	1,565	5.3%	3.6%
Local Government	640	22.3%	2,197	12.7%	1,390	15.1%	4,227	14.4%	11.0%
Total Employment	2,872	100.0%	17,243	100.0%	9,175	100.0%	29,290	100.0%	100.0%

Source: U.S. Department of Census

Major employers by county with more than 50 employees include the following:

Exhibit 8
Regional Medical Center Community
Employment by Top Employers (> 50 Employees)

Top Employers	Year	County		
	Est.	Webster	Hopkins	Muhlenberg
Alliance Resource Partners	1971		1,224	
Ahlstrom Filtration LLC	1974		138	
Armstrong Coal	2006		161	
B&K Wood Products	2010		90	
Berry Plastics	2002		128	
Carhartt Customer Service Center	1999		700	
City of Madisonville			300	
County of Hopkins			170	
GE Aircraft Engine Div	1980		607	
Gourmet Express LLC	2007			135
Greenville Quarry and Quality Blacktopping	1948			60
Hibbs Electromechanical Inc	1991		65	
Hopkins County			9	
Hopkins County Board of Education			1,130	
International Automotive Components Group	1994		182	
Jennmar of West Kentucky Inc	2006		99	
J-Lok Corporation	2008		75	
Land O'Frost Inc	2006		142	
Madisonville Community College	1968		231	
Muhlenberg Community Hospital				500
Muhlenberg County Board of Education				777
Muhlenberg Medical Center	2001			90
MultiCare	1995		120	90
Pheonix Fabricators & Erectors	1987	50		
Pioneer Plastics Inc	1981	55		
Plastic Products Co. Inc.	1996			79
SCHOTT Gemtron	2000		100	
Trover Health System	1953		1,572	
UC Milk Co LLC	1927		175	
Webster County Board of Education		191		

Source: KY Cabinet for Economic Development

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 Commonwealth of Kentucky and the United States.

Exhibit 9
Regional Medical Center Community
Poverty Estimate: Percentage of Total Population in Poverty and Median Household Income
2009 and 2010

County	2009		Median	2010		Median
	All Persons	Under Age 18	Household Income	All Persons	Under Age 18	Household Income
Webster County	17.1%	22.7%	\$ 40,803	15.1%	21.6%	\$ 41,516
Hopkins County	20.7%	30.3%	\$ 36,518	19.3%	29.5%	\$ 39,738
Muhlenberg County	19.2%	26.5%	\$ 35,163	21.0%	30.0%	\$ 37,614
Kentucky	18.4%	25.3%	\$ 40,061	18.9%	26.1%	\$ 40,089
United States	14.3%	20.0%	\$ 50,221	15.3%	21.6%	\$ 50,046

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

Exhibit 9 presents the percentage of total population in poverty and median household income for each county. In 2010, a family of two adults and two children was considered poor if their annual household income fell below \$22,050 and Kentucky is consistently ranked one of the poorest states in the country. Poverty rates for Hopkins and Muhlenberg Counties rank unfavorably when compared to the state averages. Median household income for Hopkins and Muhlenberg Counties ranks unfavorable to state and national averages.

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 the Commonwealth of Kentucky and the United States.

Exhibit 10
Regional Medical Center Community
Health Insurance Coverage Status by Age (Under 65 years) and Income (At or Below 400%) of Poverty
2009

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
Webster County	2,148	19.0%	9,177	81.0%	1,975	19.0%	6,379	76.4%
Hopkins County	6,750	17.8%	31,243	82.2%	6,161	16.2%	21,414	77.7%
Muhlenberg County	4,574	17.9%	20,960	82.1%	4,242	16.6%	15,363	78.4%
Kentucky	601,743	16.5%	3,037,811	83.5%	552,677	15.2%	2,008,313	78.4%

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 the Commonwealth of Kentucky.

Exhibit 11
Regional Medical Center Community
Educational Attainment by Age - Total Population
2000

State/ County	Age Cohort				
	18-24	25-34	35-44	45-64	65+
<u>Completing High School</u>					
Webster County	70.2%	81.0%	80.6%	73.8%	48.1%
Hopkins County	69.6%	81.8%	78.2%	75.2%	48.5%
Muhlenberg County	64.8%	77.7%	73.1%	70.2%	41.4%
Kentucky	74.9%	84.2%	82.3%	75.2%	50.4%
<u>Bachelor's Degree or More</u>					
Webster County	1.9%	8.1%	6.9%	7.8%	5.4%
Hopkins County	1.7%	8.9%	10.5%	13.4%	7.5%
Muhlenberg County	1.6%	10.3%	7.0%	10.0%	4.5%
Kentucky	5.8%	20.8%	18.1%	18.0%	10.2%
<u>Graduate or Professional Degree</u>					
Webster County	0.4%	1.7%	3.3%	3.9%	1.7%
Hopkins County	0.0%	2.1%	4.0%	7.4%	3.2%
Muhlenberg County	0.0%	3.5%	3.0%	6.6%	2.7%
Kentucky	0.4%	5.6%	6.8%	9.1%	4.4%

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. Persons aged 25 and older have significantly less educational attainment than the state as a whole. *Exhibit 11* indicates approximately 10 percent of the population for Hopkins and Muhlenberg Counties obtain a Bachelor's degree or more which is about 50 percent of the state's average. Levels reported in *Exhibit 11* are significantly less than National averages.

Health Status of the Community

This section of the assessment reviews the health status of Hopkins, Muhlenberg and Webster County residents. As in the previous section, comparisons are provided with the state of Kentucky. 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 Regional Medical Center 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 2010*, 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
Lack of exercise	Cardiovascular disease Depression

Lifestyle
Primary Disease Factor

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. However, law does not require reporting the incidence of a particular disease, except when the public health is potentially endangered. More than 50 infectious diseases in Kentucky must be reported to county health departments. Except for Acquired Immune Deficiency Syndrome (AIDS), most of these reportable diseases currently result in comparatively few deaths.

Due to limited morbidity data, this health status report relies heavily on death and death rate statistics for leading causes of death in Hopkins, Muhlenberg and Webster Counties, and the state of Kentucky. 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.

Leading Causes of Death

Exhibit 12 reflects the leading causes of death for Webster, Hopkins and Muhlenberg County residents and compares the rates, per thousand, to the state of Kentucky average rates, per thousand.

Exhibit 12
Regional Medical Center Community
Selected Causes of Resident Deaths: Number and Rate (2005)

	Webster Number	Rate	Muhlenberg Number	Rate	Hopkins Number	Rate	Kentucky Number	Rate	Percent Difference
Total Deaths, All Causes	146	1,032.6	330	1,045.5	559	1,197.9	39,471	946.0	21.0%
Malignant Neoplasm	36	254.6	65	205.9	97	207.9	9,343	223.9	-7.7%
Female Breast	1	7.1	5	31.4	5	20.6	573	26.9	-30.6%
Diabetes Mellitus	3	21.2	9	28.5	17	36.4	1,168	28.0	23.1%
Diseases of the Heart	37	261.7	94	297.8	142	304.3	10,572	253.4	16.7%
Cerebrovascular Diseases	10	70.7	25	79.2	33	70.7	2,117	50.7	28.3%
Pneumonia and Influenza	5	35.4	17	53.9	16	34.3	996	23.9	30.3%
Bronchitis, Emphysema, and Asthma	11	77.8	22	69.7	45	96.4	2,545	61.0	36.7%
Chronic Liver Disease and Cirrhosis	2	14.1	7	22.2	5	10.7	374	9.0	15.9%
Congenital Anomalies	1	7.1	2	6.3	1	2.1	128	3.1	-47.6%
Unintentional Injuries	5	35.4	20	63.4	32	68.6	2,264	54.3	20.8%
Homicide	1	7.1	-	-	2	4.3	212	5.1	-18.6%

Source: KY Division of Epidemiology and Health Planning

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

Exhibit 13
Regional Medical Center Community
Comparison of Rates for Selected Causes of Death: Rate per 1,000 Residents: Hopkins County
2005

Selected Cause of Death	Number of Deaths	County Crude Rate	County Adjusted Rate	KY Adjusted Rate	2009 US Adjusted Rate	Percent Difference from US
Total Deaths, All Causes	559	1197.9	999.4	920.5	741.0	-19.5%
Malignant Neoplasm	97	207.9	172.7	214.5	173.6	-19.1%
Diabetes Mellitus	17	36.4	30.8	27.0	20.9	-22.6%
Diseases of the Heart	142	304.3	249.9	246.4	179.8	-27.0%
Cerebrovascular Diseases	33	70.7	56.6	49.8	40.6	-18.5%
Pneumonia and Influenza	16	34.3	27.9	23.5	16.2	-31.1%
Chronic lower respiratory diseases	45	96.4	78.6	59.5	42.2	-29.1%
Chronic Liver Disease and Cirrhosis	5	10.7	9.2	8.4	9.2	9.5%
Unintentional Injuries	32	68.6	66.8	53.7	37.0	-31.1%
Homicide	2	4.3	4.0	5.1	5.9	15.7%

Source: KY Division of Epidemiology and Health Planning

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

Exhibit 13.1
Regional Medical Center Community
Comparison of Rates for Selected Causes of Death: Rate per 1,000 Residents: Webster County
2005

Selected Cause of Death	Number of Deaths	County Crude Rate	County Adjusted Rate	KY Adjusted Rate	2009 US Adjusted Rate	Percent Difference from US
Total Deaths, All Causes	146	1032.6	860.5	920.5	741.0	-19.5%
Malignant Neoplasm	36	254.6	210.7	214.5	173.6	-19.1%
Diabetes Mellitus	3	21.2	17.3	27.0	20.9	-22.6%
Diseases of the Heart	37	261.7	210.1	246.4	179.8	-27.0%
Cerebrovascular Diseases	10	70.7	58.5	49.8	40.6	-18.5%
Pneumonia and Influenza	5	35.4	29.1	23.5	16.2	-31.1%
Chronic lower respiratory diseases	11	77.8	66.7	59.5	42.2	-29.1%
Chronic Liver Disease and Cirrhosis	2	14.1	11.4	8.4	9.2	9.5%
Unintentional Injuries	5	35.4	38.8	53.7	37.0	-31.1%
Homicide	1	7.1	7.3	5.1	5.9	15.7%

Source: KY Division of Epidemiology and Health Planning

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

Exhibit 13.2
Regional Medical Center Community
Comparison of Rates for Selected Causes of Death: Rate per 1,000 Residents: Muhlenberg County
2005

Selected Cause of Death	Number of Deaths	County Crude Rate	County Adjusted Rate	KY Adjusted Rate	2009 US Adjusted Rate	Percent Difference from US
Total Deaths, All Causes	330	1045.5	847.2	920.5	741.0	-19.5%
Malignant Neoplasm	65	205.9	170.7	214.5	173.6	-19.1%
Diabetes Mellitus	9	28.5	22.1	27.0	20.9	-22.6%
Alzheimer's Disease	9	28.5	21.8	26.9	23.4	-13.0%
Diseases of the Heart	94	297.8	237.9	246.4	179.8	-27.0%
Cerebrovascular Diseases	25	79.2	62.8	49.8	40.6	-18.5%
Pneumonia and Influenza	17	53.9	40.5	23.5	16.2	-31.1%
Chronic lower respiratory diseases	22	69.7	54.6	59.5	42.2	-29.1%
Chronic Liver Disease and Cirrhosis	7	22.2	17.9	8.4	9.2	9.5%
Unintentional Injuries	20	63.4	55.5	53.7	37.0	-31.1%

Source: KY Division of Epidemiology and Health Planning

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 three counties that comprise the majority of the community will be used to compare the relative health status of each county to the state of Kentucky 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 2011 health outcomes for the three counties that comprise the majority of the community for Trover Regional Medical Center. Each measure is described and includes a confidence interval or error margin surrounding it – if a measure is above the state average and the state average is beyond the error margin for the county, then further investigation is recommended.

Hopkins County

Health Outcomes--rankings are based on an equal weighting of one length of life (mortality) measure and four quality of life (morbidity) measures. While most of Hopkins County health outcomes were comparable to the state of Kentucky (ranking 69 and 68 out of 120 counties), each measure was significantly below national benchmarks with opportunities for improvement.

**Exhibit 14
Regional Medical Center Community
Hopkins County Health Rankings - Health Outcomes (2011)**

	Hopkins County	Error Margin	National Benchmark	KY	Rank (of 120)
<i>Mortality</i>					
Premature death - Years of potential life lost before age 75 per 100,000 population (age-adjusted)	9,766	8,723-10,808	5,564	8,859	69
<i>Morbidity</i>					
Poor or fair health - Percent of adults reporting fair or poor health (age-adjusted)	22%	19-26%	10%	22%	68
Poor physical health days - Average number of physically unhealthy days reported in past 30 days (age-adjusted)	4.5	3.7-5.2	2.6	4.7	
Poor mental health days - Average number of mentally unhealthy days reported in past 30 days (age-adjusted)	4.2	3.4-5.0	2.3	4.3	
Low birthweight - Percent of live births with low birthweight (<2500 grams)	9.9%	9.0-10.8%	6%	8.9%	

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 Hopkins County and shows that Hopkins County has significant room for improvement in the following areas:

- Health Behavior/Adult Obesity
- Health Behavior/Sexually Transmitted Diseases
- Health Behavior/Teen Birth Rate
- Clinical Care/Diabetic Screening
- Social & Economic Factors/Children in Poverty and Children in Single Parent Households

**Exhibit 14.1
Regional Medical Center Community
Hopkins County Health Rankings - Health Factors (2011)**

	Hopkins County	Error Margin	National Benchmark	KY	Rank (of 120)
<i>Health Behaviors</i>					72
Adult smoking - Percent of adults that report smoking at least 100 cigarettes and that they currently smoke	26.3%	22-31%	15%	27.8%	
Adult obesity - Percent of adults that report a BMI >= 30	33.1%	28-38%	25%	31.2%	
Excessive drinking - Percent of adults that report excessive drinking in the past 30 days	9.1%	7-13%	8%	10.7%	
Motor vehicle crash death rate - Motor vehicle deaths per 100K population	23.5	18-29	12	22.4	
Sexually transmitted infections - Chlamydia rate per 100K population	332.3		83	286.8	
Teen birth rate - Per 1,000 female population, ages 15-19	67.5	62-73	22	52.2	
<i>Clinical Care</i>					8
Uninsured adults - Percent of population under age 65 without health insurance	20.0%	17-24%	13%	19.0%	
Primary care physicians - Ratio of population to primary care physicians	425:1		631:1	922:1	
Preventable hospital stays - Hospitalization rate for ambulatory-care sensitive conditions per 1,000 Medicare enrollees	79.0	74-84	52	105.0	
Diabetic screening - Percent of diabetic Medicare enrollees that receive HbA1c screening	63.0%	54-71%	89%	82.0%	
Mammography screening - Percent of female Medicare enrollees that receive mammography screening	59.0%	50-69%	74%	62.0%	
<i>Social & Economic Factors</i>					45
High school graduation - Percent of ninth grade cohort that graduates in 4 years	84.0%		92%	84.0%	
Some college - Percent of adults aged 25-44 years with some post-secondary education	50.0%		68%	54.0%	
Children in poverty - Percent of children under age 18 in poverty	27.0%	20-33%	11%	23.0%	
Inadequate social support - Percent of adults without social/emotional support	20.0%	16-25%	14%	20.0%	
Children in single-parent households - Percent of children that live in household headed by single parent	35.0%		20%	32.0%	
Homocide rate - Deaths due to homocide per 100,000 population (age-adjusted)	-		1	5.0	
<i>Physical Environment</i>					49
Air pollution-particulate matter days - Annual number of unhealthy air quality days due to fine particulate matter	-		-	2	
Air pollution-ozone days - Annual number of unhealthy air quality days due to ozone	-		-	2	-
Access to healthy foods - Healthy food outlets include grocery stores and produce stands/farmers' markets	44.0%		92%	44.0%	
Access to recreational facilities - Rate of recreational facilities per 100,000 population	6.0		17	8.0	

Source: Countyhealthrankings.org

Webster County

Health Outcomes--rankings are based on an equal weighting of one length of life (mortality) measure and four quality of life (morbidity) measures. While most of Webster County health outcomes were comparable to the state of Kentucky (ranking 68 and 65 out of 120 counties), each measure was significantly below national benchmarks with opportunities for improvement.

Exhibit 15
Regional Medical Center Community
County Health Rankings - Health Outcomes (2011)

	Webster County	Error Margin	National Benchmark	KY	Rank (of 120)
<i>Mortality</i>					
Premature death - Years of potential life lost before age 75 per 100,000 population (age-adjusted)	9,757	7,944-11,569	5,564	8,859	68
<i>Morbidity</i>					
Poor or fair health - Percent of adults reporting fair or poor health (age-adjusted)	24%	17-32%	10%	22%	65
Poor physical health days - Average number of physically unhealthy days reported in past 30 days (age-adjusted)	3.6	2.4-4.8	2.6	4.7	
Poor mental health days - Average number of mentally unhealthy days reported in past 30 days (age-adjusted)	3.4	2.1-4.6	2.3	4.3	
Low birthweight - Percent of live births with low birthweight (<2500 grams)	10.4%	8.7-12.0%	6%	8.9%	

Source: Countyhealthrankings.org

Similar to Hopkins County, health outcomes for Webster County residents were actually comparable to the state of Kentucky (ranking 68 and 65 out of 120 counties). However, each measure was below national benchmarks and requires further investigation.

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 Webster County and shows that Webster County has significant room for improvement in the following areas:

- Health Behavior/Adult Obesity
- Health Behavior/Sexually Transmitted Disease
- Health Behavior/Teen Birth Rate
- Clinical Care/Diabetic Screening
- Social & Economic Factors/Children in Poverty and Children in Single Parent Households

**Exhibit 15.1
Regional Medical Center Community
County Health Rankings - Health Factors (2011)**

	Webster County	Error Margin	National Benchmark	Rank KY (of 120)
<i>Health Behaviors</i> 83				
Adult smoking - Percent of adults that report smoking at least 100 cigarettes and that they currently smoke	25.0%	17-34%	15%	27.8%
Adult obesity - Percent of adults that report a BMI >= 30	33.0%	27-41%	25%	31.2%
Excessive drinking - Percent of adults that report excessive drinking in the past 30 days	17.0%	10-28%	8%	10.7%
Motor vehicle crash death rate - Motor vehicle deaths per 100K population	31.0	20-42	12	22.4
Sexually transmitted infections - Chlamydia rate per 100K population	161.0		83	286.8
Teen birth rate - Per 1,000 female population, ages 15-19	65.0	56-74	22	52.2
<i>Clinical Care</i> 103				
Uninsured adults - Percent of population under age 65 without health insurance	23.0%	19-27%	13%	19.0%
Primary care physicians - Ratio of population to primary care physicians	2,733:1		631:1	922:1
Preventable hospital stays - Hospitalization rate for ambulatory-care sensitive conditions per 1,000 Medicare enrollees	106.0	95-116	52	105.0
Diabetic screening - Percent of diabetic Medicare enrollees that receive HbA1c screening	73.0%	55-92%	89%	82.0%
Mammography screening - Percent of female Medicare enrollees that receive mammography screening	55.0%	35-75%	74%	62.0%
<i>Social & Economic Factors</i> 23				
High school graduation - Percent of ninth grade cohort that graduates in 4 years	92.0%		92%	84.0%
Some college - Percent of adults aged 25-44 years with some post-secondary education	43.0%		68%	54.0%
Children in poverty - Percent of children under age 18 in poverty	23.0%	17-29%	11%	23.0%
Inadequate social support - Percent of adults without social/emotional support	15.0%	9-24%	14%	20.0%
Children in single-parent households - Percent of children that live in household headed by single parent	28.0%		20%	32.0%
Homocide rate - Deaths due to homocide per 100,000 population (age-adjusted)	-		1	5.0
<i>Physical Environment</i> 97				
Air pollution-particulate matter days - Annual number of unhealthy air quality days due to fine particulate matter	2		-	2
Air pollution-ozone days - Annual number of unhealthy air quality days due to ozone	-		-	2
Access to healthy foods - Healthy food outlets include grocery stores and produce stands/farmers' markets	80.0%		92%	44.0%
Access to recreational facilities - Rate of recreational facilities per 100,000 population	-		17	8.0

Source: Countyhealthrankings.org

Muhlenberg County

Health Outcomes--rankings are based on an equal weighting of one length of life (mortality) measure and four quality of life (morbidity) measures. While most of Muhlenberg County health outcomes were comparable to the state of Kentucky (ranking 70 and 61 out of 120 counties), each measure was significantly below national benchmarks with opportunities for improvement.

**Exhibit 16
Regional Medical Center Community
County Health Rankings - Health Outcomes (2011)**

	Muhlenberg County	Error Margin	National Benchmark	KY	Rank (of 120)
<i>Mortality</i>					
Premature death - Years of potential life lost before age 75 per 100,000 population (age-adjusted)	9,815	8,569-11,061	5,564	8,859	70
<i>Morbidity</i>					
Poor or fair health - Percent of adults reporting fair or poor health (age-adjusted)	21%	18-25%	10%	22%	61
Poor physical health days - Average number of physically unhealthy days reported in past 30 days (age-adjusted)	4.5	3.7-5.4	2.6	4.7	
Poor mental health days - Average number of mentally unhealthy days reported in past 30 days (age-adjusted)	4.4	3.4-5.5	2.3	4.3	
Low birthweight - Percent of live births with low birthweight (<2500 grams)	9.5%	8.4-10.6%	6%	8.9%	

Source: Countyhealthrankings.org

Similar to Hopkins County, health outcomes for Muhlenberg County residents were actually comparable to the state of Kentucky (ranking 70 and 61 out of 120 counties). However, each measure was below national benchmarks and requires further investigation.

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 Muhlenberg County and shows that Muhlenberg County has significant room for improvement in the following areas:

- Health Behavior/Motor Vehicle Crash Rates
- Health Behavior/Sexually Transmitted Diseases
- Health Behavior/Teen Birth Rate
- Clinical Care/ Primary Care Physicians
- Social & Economic Factors/Children in Poverty and Children in Single Parent Households

**Exhibit 16.1
Regional Medical Center Community
County Health Rankings - Health Factors (2011)**

	Muhlenberg County	Error Margin	National Benchmark	KY	Rank (of 120)
<i>Health Behaviors</i>					73
Adult smoking - Percent of adults that report smoking at least 100 cigarettes and that they currently smoke	31.0%	26-37%	15%	27.8%	
Adult obesity - Percent of adults that report a BMI >= 30	31.0%	26-37%	25%	31.2%	
Excessive drinking - Percent of adults that report excessive drinking in the past 30 days	10.0%	6-16%	8%	10.7%	
Motor vehicle crash death rate - Motor vehicle deaths per 100K population	35.0	27-43	12	22.4	
Sexually transmitted infections - Chlamydia rate per 100K population	273.0		83	286.8	
Teen birth rate - Per 1,000 female population, ages 15-19	63.0	57-69	22	52.2	
<i>Clinical Care</i>					70
Uninsured adults - Percent of population under age 65 without health insurance	21.0%	17-24%	13%	19.0%	
Primary care physicians - Ratio of population to primary care physicians	1,564:1		631:1	922:1	
Preventable hospital stays - Hospitalization rate for ambulatory-care sensitive conditions per 1,000 Medicare enrollees	138.0	130-146	52	105.0	
Diabetic screening - Percent of diabetic Medicare enrollees that receive HbA1c screening	78.0%	67-89%	89%	82.0%	
Mammography screening - Percent of female Medicare enrollees that receive mammography screening	66.0%	55-78%	74%	62.0%	
<i>Social & Economic Factors</i>					60
High school graduation - Percent of ninth grade cohort that graduates in 4 years	84.0%		92%	84.0%	
Some college - Percent of adults aged 25-44 years with some post-secondary education	41.0%		68%	54.0%	
Children in poverty - Percent of children under age 18 in poverty	29.0%	22-37%	11%	23.0%	
Inadequate social support - Percent of adults without social/emotional support	21.0%	16-27%	14%	20.0%	
Children in single-parent households - Percent of children that live in household headed by single parent	25.0%		20%	32.0%	
Homicide rate - Deaths due to homicide per 100,000 population (age-adjusted)	-		1	5.0	
<i>Physical Environment</i>					57
Air pollution-particulate matter days - Annual number of unhealthy air quality days due to fine particulate matter	-		-	2	
Air pollution-ozone days - Annual number of unhealthy air quality days due to ozone	-		-	2	
Access to healthy foods - Healthy food outlets include grocery stores and produce stands/farmers' markets	36.0%		92%	44.0%	
Access to recreational facilities - Rate of recreational facilities per 100,000 population	6.0		17	8.0	

Source: Countyhealthrankings.org

Hopkins County Health Synopsis: Hopkins County has a favorable supply of primary care physicians and low rates of motor vehicle deaths, diabetes diagnoses and breast and colorectal cancer mortality. The county is challenged though by higher-than desirable rates of smoking, cardiovascular deaths, uninsured residents and infant mortality. Also, too many of the county's adults fail to engage in regular physical activity and the county has very high rates of occupational fatalities and low birth weights. Reducing smoking can help lower lung cancer mortality rates and lessening exposure to secondhand smoke, a particularly important goal for children and pregnant women. Increased exercise and improved nutrition can lower the risk of cardiovascular disease, diabetes, cancer and other health conditions.

Webster County Health Synopsis: Webster County faces some serious health challenges. Despite these problems, the county has strengths that indicate the potential for reducing health risks and saving lives. The county has comparatively low rates of infant mortality and occupational fatalities. Challenges that can effectively be addressed at the community level include obesity, teen birth rates, excessive drinking and sexually transmitted infections. Other health problems for which the county has some of the state's highest rates are days of limited activity, physical inactivity and colorectal cancer. Though lower than the state average, the county's smoking rate and rate of sexually transmitted infections is higher than the national average. Reductions in smoking would help reduce low birth weight deliveries, infant mortality and lung cancer deaths. Improved nutrition and increased physical activity will also help reduce obesity and the risk for diabetes, cardiovascular and other diseases. Regular primary care visits and screenings can reduce the risks diabetes and breast, colorectal, prostate and other forms of cancer.

Muhlenberg County Health Synopsis: Muhlenberg County also faces some serious health challenges. Despite these problems, the county has strengths that indicate the potential for reducing health risks and saving lives. The county has comparatively low rates of infant mortality and colon cancer. Challenges that can effectively be addressed at the community level include smoking, low birth weights, obesity, cardiovascular disease and teen birth rates. Though lower than the state average, the county's smoking rate is higher than the national average as well as that of many states. Reductions in smoking would help reduce low birth weight deliveries and lung cancer deaths. Improved nutrition and increased physical activity will also help reduce obesity and the risk for diabetes, cardiovascular and other diseases. Regular primary care visits and screenings can reduce the risks of breast, colorectal, prostate and other forms of cancer.

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 is 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 Hopkins, Webster and Muhlenberg Counties.

Hospitals and Health Centers

Regional Medical Center has 410 acute beds and is the only hospital located in the county. Residents of the community also take advantage of services provided by hospitals in neighboring counties. *Exhibit 17* summarizes hospital services available to the residents of Hopkins, Webster and Muhlenberg Counties:

Exhibit 17
Regional Medical Center Community
Summary of Acute Care Hospitals

		Facility Type	Miles from Regional	Bed Size	Annual Discharges	Annual Patient Revenue (000 s)
Muhlenberg Community Hospital	440 Hopkinsville Street, Greeneville KY 42345	Acute Care	19	90	2,101	\$ 82,489,967
Ohio County Hospital	1211 Old Main Street, Hartford, KY 42347	Critical Access	34	25	1,236	\$ 44,136,433
Jennie Stuart Medical Center	320 West 18th Street, Hopkinsville, KY 42240	Acute Care	33	194	6,349	\$ 230,700,296
Owensboro Medical Health System	811 East Parrish Avenue, Owensboro, KY 42303	Acute Care	36	434	18,851	\$ 731,179,000
Methodist Hospital Union County	4604 US Highway 60 W, Morganfield, KY 42437	Critical Access	32	25	548	\$ 38,730,702
Methodist Hospital	1305 North Elm Street, Henderson, KY 42420	Acute Care	36	184	5,146	\$ 268,173,381
Trigg County Hospital	254 Main Street, Cadiz, KY 42211	Critical Access	37	25	485	\$ 16,460,390
Crittendon County Hospital	520 W Gum Street, Marion, KY 42064	Acute Care	33	48	1,390	\$ 28,445,789
Caldwell County Hospital	100 Medical Center Drive, Princeton, KY 42445	Critical Access	31	25	654	\$ 28,151,854

Source: Costreportdata.com

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

Caldwell County Hospital – Located in Princeton, Kentucky, Caldwell County Hospital is a critical access hospital approximately a 45 minute drive southwest of Madisonville. The services provided by Caldwell County Hospital are very basic and more limited than those provided by Regional Medical Center.

Crittenden County Hospital – Crittenden County Hospital (CCH) is located in Marion, Kentucky, approximately one-hour southwest of Madisonville. CCH provides a full range of acute care, long-term care, psychiatric inpatient, outpatient and ancillary services. CCH Has applied for a level IV trauma center that is equipped to care for complicated emergency situations.

Jennie Stuart Medical Center – Located in Hopkinsville, Kentucky, Jennie Stuart Medical Center is approximately a 45 minute drive south from Madisonville. The services provided by Jennie Stuart Medical Center are similar to those provided by Regional Medical Center and include acute care and ancillary services.

Methodist Hospital – Located in Henderson, Kentucky, Methodist Hospital is approximately a half-hour drive from Madisonville. The services provided by Methodist Hospital are similar to those provided by Regional Medical Center and include acute care and ancillary services.

Methodist Hospital Union County – Located in Morganfield, Kentucky, Methodist Hospital Union County is a critical access hospital approximately a one-hour drive from Madisonville. The services provided by Methodist Hospital Union County are very basic and more limited than those provided by Regional Medical Center.

Ohio County Hospital – Located in Hartford, Kentucky, Ohio County Hospital is another critical access hospital approximately a one-hour drive from Madisonville. Much like the services provided by Methodist Hospital Union County, the services provided by Ohio County Hospital are very basic and more limited than those provided by Regional Medical Center and other larger acute care hospitals in and around the community.

Owensboro Medical Health System – Owensboro Medical Health System (OMHS) is located in Owensboro, Kentucky, approximately one-hour northeast of Madisonville. OMHS provides a full range of acute care, long-term care, psychiatric inpatient, outpatient and ancillary services. OMHS is also a level III trauma center that is equipped to care for complicated emergency situations referred by Regional Medical Center.

Muhlenberg Community Hospital – Located in Greenville, Kentucky, Muhlenberg Community Hospital is approximately a half-hour drive southeast of Madisonville. Muhlenberg Community Hospital offers services such as medical-surgical, maternity, laboratory and radiology.

Trigg County Hospital – Located in Cadiz, Kentucky, Trigg County Hospital is a critical access hospital approximately one and a half-hour drive southwest from Madisonville. The services provided by Trigg County Hospital are very basic and more limited to those provided by Regional Medical Center.

Hospital Market Share

The market share of a hospital relative to that of its competitors may be based largely on the services required by patients and the availability of those services at each facility. For this study, the market share of Regional Medical Center was considered based on the type of services required by those patients in the community. The ability to attain a certain relative market share (percentage) of the community varies based on a number of factors, including the services provided, geographical location and accessibility of each competing facility. *Exhibit 18* presents the relative market share of each hospital that had discharges of residents from the community (Webster, Hopkins and Muhlenberg Counties). This table presents an analysis of data for the three (3) most currently available years, showing the percentage of total discharges from each hospital. This information provides an excellent idea of summary market share as well as the outmigration of patients from the community. For 2010, Regional Medical Center maintained approximately 58 percent of all discharges from the community with Muhlenberg Community Hospital capturing about 17 percent and OMHS capturing around nine percent of all discharges.

Exhibit 18
Regional Medical Center Community
Patient Origin Analysis: Acute Care Discharges by Hospital (2008 through 2010)

	2008		2009		2010	
	Total Discharges	%	Total Discharges	%	Total Discharges	%
Regional Medical Center	7,629	58.5%	7,498	58.8%	6,919	58.3%
Muhlenberg Community Hospital	2,666	20.5%	2,262	17.7%	2,049	17.3%
Ohio County Hospital	13	0.1%	22	0.2%	7	0.1%
Jennie Stuart Medical Center	146	1.1%	175	1.4%	145	1.2%
Owensboro Medical Health System	977	7.5%	1,037	8.1%	1,016	8.6%
Methodist Hospital Union County	19	0.1%	17	0.1%	16	0.1%
Methodist Hospital	618	4.7%	687	5.4%	706	5.9%
Trigg County Hospital	1	0.0%	2	0.0%	-	0.0%
Crittendon County Hospital	32	0.2%	47	0.4%	32	0.3%
Other Providers	929	7.1%	1,009	7.9%	978	8.2%
Total	13,030	100.0%	12,756	100.0%	11,868	100.0%

Source: KHA InfoSuite for In Patient Data

After surveying the results of the analysis of acute care discharges, it appears that the residents of Webster, Hopkins and Muhlenberg Counties only minimally utilize other area hospitals including Jennie Stuart Medical Center, Hopkinsville, Kentucky and Methodist Hospital, Morganfield, Kentucky. Regional Medical Center, Muhlenberg Community Hospital and OMHS account for almost 85 percent of the total market for hospital services.

According to management, managed care has had little impact on utilization at Regional Medical Center. National and regional managed care plans, such as Health Maintenance Organizations, have found operating in rural environments to be extremely difficult, as well as costly. Management anticipates the impact from further implementation of managed care plans in Evansville and Nashville to be negligible. A large proportion of Regional Medical Center's discharges are Medicare and Medicaid, further minimizing the impact of commercial managed care.

Other Health Care Facilities and Providers

Trover Healthcare Convenient Care – Located in the Madisonville Wal-Mart, this clinic, a wholly owned subsidiary of Trover Health System, is staffed by certified nurse practitioners and provides various primary care services including stay well services, screenings and counseling.

Multi-Care – Multi-Care is a division of Cooperative Health Services, Inc., a wholly owned subsidiary of OMHS. Several family practitioners and internal medicine physicians practice from this facility, located in downtown Madisonville. Multi-Care also provides urgent care family medicine, physical therapy, lab and radiology services.

Bridgewater Medical Center – Located on the north side of Madisonville, this clinic is staffed by two physicians and certified nurse practitioners and provides various primary care services including stay well services, screenings and counseling.

Hopkins County Health Department – A physician directs public health nursing to serve individuals and families. The department also provides a WIC (Women, Infants and Children) Support Program for families who meet certain nutritional and financial guidelines. Other services include family planning, adult health, HIV and sexually transmitted disease clinics and blood pressure, diabetes and cancer screenings.

Hopkins County Community Clinic – Located in Madisonville, this free clinic provides medical and pharmaceutical care to financially qualified working uninsured, while providing opportunities for health science students to experience service learning opportunities first hand.

Community Health Centers of Western Kentucky – This health center is a nonprofit, private corporation located in downtown Greenville, Kentucky. Community Health Centers of Western Kentucky is a Federally Qualified Health Center or "Community Health Center" that is committed to providing comprehensive, quality health care services to those who might otherwise be excluded from the health care systems. The health center has six providers specializing in the areas of pediatric, family practice and OB/GYN.

Muhlenberg Medical Center (MMC) – Located in Powderly, Kentucky, MMC is a full service health care center that offers primary care physicians, nurse practitioners, lab/x-ray services, cat scan, mammography, bone density, ultrasound, nuclear medicine, physical therapy and cardiac stress tests and studies. MMC also has a walk-in clinic Monday – Thursday 7:30 am – 5:30 pm. Specialists that come to MMC weekly include cardiology, oncology, ENT, orthopedics, gastroenterology, ophthalmology, neurology, allergy, nephrology, podiatry, surgery, pulmonology and OB/ GYN. In 2009 MMC became a wholly owned subsidiary of Trover Health System.

Muhlenberg County Health Department – A physician directs public health nursing to serve individuals and families. Located in Central City, Kentucky, the department also provides a WIC (Women, Infants and Children) support program for families who meet certain nutritional and financial guidelines. Other services include family planning, adult health, HIV and sexually transmitted disease clinics and blood pressure, diabetes and cancer screenings.

Webster County Health Department – A physician directs public health nursing to serve individuals and families. Located in Dixon, Kentucky, the department also provides a WIC (Women, Infants and Children) support program for families who meet certain nutritional and financial guidelines. Other services include family planning, adult health, HIV and sexually transmitted disease clinics and blood pressure, diabetes and cancer screenings.

Cardiology Consultants, PSC – Cardiology Consultants PSC is a medical professional organization established by Deepak Kapadia, M.D. Cardiology Consultants PSC, a community-based health care corporation, is committed to treating and preventing cardiac disease for the people of Western Kentucky with focus on Hopkins and surrounding counties.

Urology Specialty Care – Dr. Anna M. D'Amico – Located in Madisonville, this office is equipped with minor surgery, laboratory, CT scan, X-ray and ultrasound facilities so that routine work may be done in the office.

Pennyroyal Center – Pennyroyal Center is a comprehensive community mental health center providing services for mental health, intellectual and developmental disabilities and substance abuse with four full service clinics located in Hopkinsville, Madisonville, Greenville and Princeton.

Health First Community Health Center (two locations in Webster County) – Health First Community Health Center is a federally qualified health center and offers a variety of health care services to families residing in its communities. Services range from primary care assistance to dietary planning and coaching. Health First CHC is completely dedicated to its patients' well-being and lifestyles. Health First CHC works with community partners to provide affordable medication options. Health First CHC has locations in Providence, Kentucky and Clay, Kentucky.

Sebree Medical Center – The Sebree Medical Center is owned by the Henderson Regional Hospital Foundation, and opened in June 1984. This facility is located in Sebree (Webster County), Kentucky, and is staffed by a local physician who provides general medical care for the surrounding area.

Webster County Family Medicine Center – The Webster County Family Medicine Center, located in Dixon, Kentucky, is staffed by a family practice physician, RNs and radiologic technologists. This facility provides routine family medical care and care for minor emergencies to the citizens and is owned and operated by Methodist Hospital.

Other Health Care Resources Include:

Central City Family Clinic – Located in Central City, Kentucky

Dialysis Center of Central City – Located in Central City, Kentucky

Family Practice of Greenville – Located in Greenville, Kentucky

Welborn Family Practice – Located in Greenville, Kentucky

Cole Clinic – Located in Providence, Kentucky

Sebree Clinic – Located in Sebree, Kentucky

Sebree Family Practice Clinic – Located in Sebree, Kentucky

**Additional individual practitioners and specialists provide medical services to the community. A summary of physicians by specialty is included in Exhibit 23.*

Estimated Demand for Physician Office Visits and Hospital Services

In order to define existing services and develop future plans that may affect the operations of Regional Medical Center, this study includes an analysis of estimated demand for physician office visits, hospital emergency room visits and hospital discharges using national averages and population estimates. Current and future unmet need can be evaluated based on the changes in the size of the market for certain services as determined by applying these national average use rates to the population of the community. *Exhibit 19* summarizes estimated 2011 and projected 2016 physician office visits, emergency department visits and hospital discharges using national average use rates from the National Center for Health Statistics.

**Exhibit 19
Regional Medical Center Community
Physician Office Visits, Emergency Department Visits, and Discharges**

Estimated 2011

Age	2011 Community Population	Physician Office Visits per Person	Estimated Physician Office Visits	Emergency Department Visits per Person	Estimated Emergency Department Visits	Hospital Discharges per Person	Estimated Hospital Discharges
0-14	19,229	2.37	45,573	0.35	6,730	0.0392	754
15-44	38,003	1.92	72,966	0.37	14,061	0.0932	3,542
45-64	28,943	3.20	92,618	0.26	7,525	0.1241	3,592
65+	17,010	5.74	97,637	0.43	7,314	0.3416	5,811
Total	103,185		308,793		35,631		13,698
Primary Care Visits		71.5%	220,787				
Specialty Care Visits		28.5%	88,006				
Total			308,793				

Projected 2016

Age	2016 Community Population	Physician Office Visits per Person	Projected Physician Office Visits	Emergency Department Visits per Person	Projected Emergency Department Visits	Hospital Discharges per Person	Projected Hospital Discharges
0-14	19,178	2.37	45,452	0.35	6,712	0.0392	752
15-44	36,566	1.92	70,207	0.37	13,529	0.0932	3,408
45-64	27,747	3.20	88,790	0.26	7,214	0.1241	3,443
65+	18,820	5.74	108,027	0.43	8,093	0.3416	6,429
Total	102,311		312,476		35,549		14,032
Primary Care Visits		71.5%	223,420				
Specialty Care Visits		28.5%	89,056				
Total			312,476				

Based on management’s analysis of market share, Regional Medical Center can sustain its current utilization as it relates to physician office visits, emergency department visits and hospital discharges. Given the flat but stable, market projections, it would appear that Regional Medical Center would be unable to obtain any additional market share of significance.

Without any significant operational changes, Regional Medical Center’s market share should remain approximately even through the next five years. Examination of the population demographics suggests that the aging of the “baby boom” population will actually slightly increase the overall utilization of hospital and primary care services within the community. For example, the projected change in the age category 45-64 shows a significant increase.

While the age category 45-64 is projected to increase more than nine percent from 2011 to 2016, the overall population of the community is projected to increase by only a slight amount. The prospect for significant volume increases from changes in the market demographics is unlikely.

Exhibit 20 illustrates the percentage change in the calculated utilization from *Exhibit 19* as an estimated percentage increase in utilization from 2011 to 2016. To increase utilization, Regional Medical Center must increase its market share within the community through operational changes. Simply relying on the increase of the market’s size and changing demographics for additional utilization is not a reliable option.

Exhibit 20
Regional Medical Center Community
Estimated Difference in Utilization: Physician Office Visits,
Emergency Room Visits and Hospital Discharges
Estimated 2011 and Projected 2016

	Estimated 2011	Projected 2016	Percent Difference
Primary Care Physician Office Visits	220,787	223,420	1.2%
Specialty Care Physician Office Visits	88,006	89,056	1.2%
Total Estimated Physician Office Visits	308,793	312,476	1.2%
Emergency Department Visits	35,631	35,549	-0.2%
Hospital Discharges	13,698	14,032	2.4%

Exhibits 21 and *22* provide detailed analysis of estimated acute care discharges, ambulatory procedures, hospital outpatient department visits and physician office visits. These exhibits categorize the utilization for estimated 2011 and projected 2016 by different age categories to assess possible growth areas. A review of each of the charts indicates no significant percentage increases or decreases in any category. However, potential market growth does exist in a limited number of acute care areas. Note that there are projected decreases in the obstetrics/gynecology acute discharge categories.



Exhibit 21
Regional Medical Center Community
Estimated and Projected Number of Ambulatory Surgery Procedures by Procedure Category and Age: Provider Service Area

Procedure Category	Estimated 2011			Projected 2016			Market Difference Percent				
	Total	Under 15 years	15-44 years	45-64 years	65 years and over	Under 15 years		15-44 years	45-64 years	65 years and over	
Total Provider Service Area Population	103,185	19,229	38,003	28,943	17,010	102,311	19,178	36,566	27,747	18,820	
All procedures	14,006	793	3,060	4,757	5,395	14,265	791	2,944	4,560	5,970	1.9%
Operations on the nervous system	554	4	149	249	152	554	4	143	239	168	0.0%
Operations on the eye	2,626	46	85	473	2,023	2,818	45	82	453	2,238	7.3%
Operations on the ear	298	212	33	32	21	297	211	31	31	24	-0.3%
Operations on the nose, mouth, and pharynx	798	226	268	221	83	787	226	258	212	92	-1.4%
Operations on the respiratory system	200	14	25	83	79	204	14	24	80	87	2.0%
Operations on the cardiovascular system	432	0	44	195	193	443	0	43	187	213	2.5%
Operations on the digestive system	3,131	62	665	1,192	1,212	3,185	62	640	1,142	1,341	1.7%
Operations on the urinary system	666	24	100	230	312	686	24	96	221	345	3.0%
Operations on the male genital organs	219	47	53	54	65	222	47	51	52	72	1.2%
Operations on the female genital organs	734	4	462	205	62	715	4	445	197	69	-2.6%
Operations on the musculoskeletal system	1,792	54	629	791	317	1,769	54	605	759	351	-1.3%
Operations on the integumentary system	1,047	40	286	447	275	1,047	40	275	428	304	0.0%
Miscellaneous diagnostic and therapeutic procedures	1,412	51	237	546	578	1,442	51	228	523	639	2.1%



Exhibit 22
Regional Medical Center Community
Estimated and Projected Number of Acute Care Discharges by Medical Diagnostic Category and Age: Provider Service Area

Procedure Category	Under 15 years		Estimated 2011 45-64 years		65 years and over		Projected 2016 45-64 years		65 years and over		Market Difference Percent	
	Total	19,229	38,003	28,943	17,010	102,311	19,178	36,566	27,747	18,820		
All Conditions	13,688	813	3,293	3,409	6,173	14,077	811	3,168	3,268	6,830		2.8%
Infectious and parasitic diseases	380	49	52	87	192	395	49	50	84	212		3.9%
Neoplasms	680	12	87	248	333	702	12	84	238	368		3.2%
Endocrine, nutritional & metabolic diseases, and immunity disorders	701	60	118	198	325	722	60	113	190	359		3.1%
Diseases of the blood and blood-forming organs	178	18	33	40	86	184	18	32	39	95		3.5%
Mental Disorders	820	40	382	271	126	807	40	368	260	139		-1.5%
Diseases of the nervous system and sense organs	218	25	41	54	97	224	25	39	52	108		3.0%
Diseases of the circulatory system	2,793	10	136	771	1,876	2,956	10	131	739	2,076		5.8%
Diseases of the respiratory system	1,459	217	105	302	835	1,530	217	101	289	923		4.9%
Diseases of the digestive system	1,437	78	262	438	658	1,478	78	252	420	728		2.9%
Diseases of the genitourinary system	773	27	177	203	366	797	26	170	195	405		3.1%
Complications of pregnancy, childbirth, and puerperium	158	0	158	0	0	152	0	152	0	0		-3.8%
Diseases of the skin and subcutaneous tissue	278	17	65	86	110	284	17	63	83	121		2.0%
Diseases of the musculoskeletal system and connective tissue	803	12	95	279	417	832	12	91	267	461		3.6%
Congenital anomalies	68	45	10	9	4	68	45	10	9	5		-0.6%
Certain conditions originating in the perinatal period	64	64	0	0	0	64	64	0	0	0		-0.3%
Symptoms, signs, and ill defined conditions	90	19	24	26	22	91	19	23	25	24		0.3%
Injury and poisoning	1,119	76	252	290	501	1,151	76	243	278	554		2.8%
Supplementary classifications	1,652	26	1,294	106	226	1,623	26	1,245	102	250		-1.8%

Estimated Demand for Physician Services

There are several methodologies for estimating physician needs within a community using physician-to-population ratios. These methodologies have been applied to the population of the community to assist with the determination of future need for additional primary care and/or specialty care physicians.

Exhibit 23 provides four (4) different need methodologies widely recognized in the health care industry. These industry methodologies are based on studies that attempt to reflect physician demand in the community based on a variety of factors. J.P. Weiner, Hart et al. and GMENAC models are based on the ideal number of physicians required to manage care for a specific population, while the Hicks & Glenn methodology is based on current physician utilization patterns and certain productivity levels.

Exhibit 23
Summary of Physician Need by Specialty: Provider Service Area
Projected 2016

Physician Specialty	J.P. Weiner	Hart et al.	GMENAC	Hicks & Glenn	Average	2011 Physician Supply*	Potential Need
Primary Care Physician Full Time Equivalents							
General and Family Practice	30.0	43.6	25.6	13.82	28.24	61.0	32.8
Internal Medicine	23.8	20.5	29.2	13.31	21.71	16.0	(5.7)
Pediatrics	13.4	15.9	12.6	7.41	12.33	6.0	(6.3)
Psychiatry	12.3	7.4	16.2	-	11.94	1.0	(10.9)
Obstetrics and Gynecology	11.7	11.6	9.7	5.22	9.54	8.0	(1.5)
Primary Care Physicians	91.2	98.8	93.3	39.8	83.8	92.0	8.2
Specialty Care Physician Full Time Equivalents							
General Surgery	11.0	9.0	10.1	3.53	8.42	14.0	5.6
Orthopedic Surgery	6.7	6.5	6.3	3.77	5.83	4.0	(1.8)
Ophthalmology	5.7	5.6	4.9	2.91	4.78	2.0	(2.8)
Cardiology	5.0	5.1	3.3	2.47	3.96	0.7	(3.3)
Pathology	4.3	1.8	5.1	-	3.75	0.4	(3.4)
Neurology	2.8	2.4	2.3	-	2.48	7.5	5.0
Otolaryngology	2.8	3.1	3.4	1.55	2.69	3.0	0.3
Dermatology	2.6	2.7	2.9	1.57	2.43	1.0	(1.4)
Gastroenterology	2.5	3.0	2.7	-	2.72	2.5	(0.2)
Hematology/ Oncology	1.9	2.5	-	-	2.20	1.0	(1.2)
Pulmonary Disease	1.8	1.9	-	-	1.89	1.8	(0.1)
Plastic Surgery	1.7	-	1.1	-	1.44	1.0	(0.4)
Allergy	1.1	1.4	5.4	-	2.67	0.5	(2.2)
Nephrology	1.1	1.3	-	-	1.23	6.0	4.8
Anesthesiology	9.4	9.3	-	-	9.36	6.0	(3.4)
Radiology	8.8	14.0	6.8	-	9.88	5.0	(4.9)
Emergency Medicine	5.7	5.3	-	-	5.52	10.0	4.5
Urology	3.2	3.4	3.2	1.41	2.80	2.0	(0.8)
Reumatology	0.9	1.0	-	-	0.97	-	(1.0)
Endocrinology	0.8	1.0	-	-	0.92	2.0	1.1
Infectious Disease	0.6	0.6	-	-	0.61	-	(0.6)
Total Physicians	171.7	179.9	151.0	57.0	160.3	162.4	2.0

* Source: www.arf.hrsa.gov

Despite constant recruitment efforts, physicians eventually retire or move out of the area. The succession of established physicians that have served the community for several years is one of the most challenging tasks faced by rural hospital administrators. Established physicians can be responsible for significant portions of hospital utilization and their departure can have significant financial repercussions.

Exhibit 23 compares an average of the physician need methodologies to the estimated physician supply for 2011 to provide a better assessment of the unmet need for primary care and specific specialty care physicians. The overall estimated primary care physician supply for 2011 is at or below three of the four physician need methodologies.

Several of the physicians included in the 2011 physician supply totals are beyond or approaching the age of 65. Should all or some of these physicians decide to retire within the next few years, the unmet need for primary care physicians could increase dramatically (2016 physician supply could drop significantly without proper attention). The need to address physician succession planning is vital to sustaining primary care services in the community.

Exhibit 23 also shows the community demand for several of the specialty care services.

Key Informant Interviews

Interviewing key informants (community stakeholders) 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 25 key informants were conducted over a three-day period in October 2011. Interviewees 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.

A representative from Trover contacted all individuals nominated for interviewing. Her knowledge of the community, and the personal relationships she held with the potential interviewees added validity to the data collection process. If the respective key informant agreed to an interview, an interview time and place was scheduled. Most of the interviews were conducted at Trover's Regional Medical Center. In some instances, interviews were conducted at the interviewees' workplace.

All interviews were conducted 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 Hopkins, Webster and Muhlenberg County 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 in Microsoft Word. Themes in the data were identified and representative quotes have been drawn from the data to illustrate the themes. Interviewees 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 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 and community college
- Local city and county government
- Public health agencies
- Industry
- Faith community
- Medical providers

These health care and nonhealth care professionals provided insight into the health status of Hopkins, Webster and Muhlenberg Counties through a 10-question interview (refer to *Appendix B*).

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.

Eighty-seven percent of the key informants rated the health and quality of life in their county as "good", "fair" or "5 on scale of 1 to 10". Even though the key informants consistently reported the health and quality of life was good, interviewees repeatedly noted that there were extreme diversities in health and quality of life for certain residents within the community. Economic circumstances are seen to contribute largely to the dichotomy between the haves and have-nots.

When asked whether the health and quality of life had improved, declined or stayed the same, 15 key informants noted that health and quality of life had improved over the last few years. Most of the remaining key informants noted that health and quality of life had stayed the same over the last few years.

Key informants noted that expanded services at Trover and other medical providers contributed to the overall improvement of health and quality of life in the community. Also noted was a coordinated effort and focus on community health education. Examples of this effort include a) the Healthy Communities Coalition, b) increased education at schools including a summer nutrition program and c) the county health department initiative to implement nonsmoking in the community. School based clinics operated by the health department and the Hopkins County Community Clinic were noted by multiple key informants as positively impacting the health and quality of life. Services provided by Hopkins County Community Clinic are for individuals who are employed but uninsured. Many key informants mentioned the community clinic was a big asset to the community in regards to improving access to health services. The fact that the clinic is only open for a limited number of hours was repeatedly mentioned as a negative. Key informants would like to see the hours expanded at the clinic; additionally, many suggested the clinic provide additional services.

Overall, key informants value Trover's impact on community health and recognize the Hospital as an asset to the community. The regional culture, surrounding 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 lack of jobs are seen as detriment to community health.

"The cultural pattern is a tough nut to crack."

"We need to change how we look at living."

"The community is blessed to have a facility like Trover."

"In many areas the school is the community. We need to work with the schools to improve health through education and screenings."

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. We also asked the key informants to provide their opinions as to why they thought these populations were underserved or in need. We asked each key informant to consider the specific populations they serve or those with which they usually work. Responses to this question varied.

Respondents felt the quality of life and health was greatly impacted based on socioeconomic status. Children being raised in households with fewer financial resources were considered in need due to lack of access to services, both medical and dental. Additionally, healthy nutrition for children in these households was limited due to the cost of fruits and vegetables. Persons who live in isolated areas within the community were also reported in this category. Transportation was felt to be a major barrier for persons living in rural areas with few financial resources. Although Pennyryle Allied Community Services (PACS) is available to most of the community, persons must contact and schedule PACS transportation several days in advance. If persons require transportation for an illness, they do not have the luxury of waiting several days to obtain transportation. Additionally, key informants felt these persons would not be likely to leave their community for health, wellness or

education. It was suggested schools should be utilized in these areas in order to address health needs or a mobile clinic should be utilized to bring health services to these areas.

Newly uninsured/underinsured are considered to have issues accessing care. Although services are available, the newly uninsured/underinsured do not have necessary knowledge regarding how to access care if they do not have insurance. Respondents repeatedly noted additional needs for resources in this area. Suggestions included a Health Resource Directory, training by employers when layoffs or closings occur, or additional training through the school systems.

Several key informants mentioned the growing Hispanic population, particularly in Webster County. The language barrier and lack of legal status for many of these immigrant workers limits the health care services they are able to access. They are able to utilize services such as the UK Dental Clinic, but only with the assistance of translators and persons who take initiative to schedule appointments and provide transportation. Efforts to bridge the service gaps for this population are being addressed by several agencies. Additional collaboration with employers of migrant workers was suggested as a way to increase health and wellness as well as access to services for this population.

The elderly population is faced with challenges with accessing care due to limited transportation, fixed income and pride. Several programs such as PACS, Meals on Wheels and the Sr. Citizens Center were regarded as positively supporting this population.

Many key informants recognized that the mentally ill experience significant health issues and have a lower quality of life compared to the rest of the community. An overwhelming sentiment existed among the key informants that the community did not have enough mental health providers, the amount of time to get into to see mental health providers was too long and the community lacked sufficient outpatient mental health services. Many thought that the available services were focused on the treatment of youth and for substance abuse.

“70% of kids are on free lunch program.”

“Many services available to the Hispanic population are limited due to the fact that they don’t have a medical card.”

“Lack of funding for mental health services is really putting a stress on the mental health systems and ultimately the medical health system.”

“Fast food is cheaper than healthy food.”

“Where people consider their HOME is a barrier. Persons living in rural areas have barriers and are not motivated to seek care. In many outlying areas, the school is the community. To address health needs, you need to be in schools or out in the community.”

3. Barriers

The key informants were asked what barriers or problems keep community residents from obtaining necessary health services in their community. Responses from key informants include illiteracy, pride, lack of education and communication, lack of transportation and general decline in economic conditions.

Lack of education and communication surrounding health issues and the availability of health resources is seen as a primary barrier to health services. Education surrounding access to health services for the newly uninsured or underinsured persons is also identified as a community need. People do not understand how to access services and there is limited media access for the local

community to receive information regarding education and screenings offered. There is also a sense that health agencies do not cooperate and work together in offering services.

Being a rural community with no public transportation system is viewed as being a barrier to accessing regular health care for those without personal transportation. Those interviewed believe it is difficult to reach out to isolated or marginalized people in the community. There is a lack of transportation for low-income residents to receive services and a lack of personal “know-how” of the medically indigent for accessing needed services.

As previously noted, people’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.

“Services and resources are available at almost all levels but folks do not take advantage of the access.”

“The biggest barrier is a lack of communication between agencies. People don’t know what services are provided by whom. This is a bigger problem than the financial barrier.”

“Education of what services are available and how to access services is a problem.”

“Many people do not understand that there are ways to access care without insurance.”

“So many people are just trying to get by that health care and preventive measures falls way below food and shelter. This will take a generation to change.”

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 county. The issues identified most frequently were:

1. Drugs-illegal and prescriptions
2. Obesity and lack of physical activities
3. Lack of mental health services

Other issues that were reported are a lack of after-hours urgent care facilities and a lack of dental providers and dental services for poor populations and migrant workers. Cancer and heart disease were reported as primary health conditions impacting the community.

“Drugs or substance abuse has impacted everyone in the county.”

“County has a great system of parks (walking trails), YMCA, Curves, swimming pools. People do not take advantage of these.”

“Residents need to incorporate healthy lifestyle in their everyday life so instead of getting in your car and going places you would opt to walk the trail to a nearby restaurant.”

Key Findings

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

- Quality of health is not 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.
- Trover Health System and the Hospital are seen as a significant asset to the community. Most persons interviewed recognize the high-quality of care is available right here in Madisonville as compared to most of the other rural counties in the Commonwealth of Kentucky.
- There is a lack of access for mental health services, particularly outpatient services.
- Drug and alcohol abuse are seen as a health and quality of life issue.
- Key informants voiced positive opinions regarding Hopkins County Community Clinic that is available only for the working poor. Hopkins County Community Clinic is seen as a positive asset to the community. Key informants support the expansion of services and the hours of operation.
- Transportation may be an issue for elderly, single-family households and people living outside the city limits.
- Abuse of prescription drugs through excess prescribing and fraudulent activities has become a significant problem.
- Method of delivering health information and other messages is a problem given the various media options. The Hospital should work toward being the trusted leader in the community regarding innovative health education, screenings and initiatives. The Hospital should also take the lead role in bringing agencies and organizations together in addressing community health needs.
- There is a significant need for after hour nonemergent care in various locations (including Muhlenberg).
- Specific populations lack general knowledge regarding health services and/or how to access those health services.

Community Health Survey

A community survey was conducted by Trover in order to gather broad community input regarding health issues. The survey was launched on October 28, 2011, and was closed on November 30, 2011.

The broad survey was intended to gather information regarding overall health of the community. The results of this survey yield information on different health and community factors. Areas surveyed include demographics and socioeconomic characteristics, behavioral risk factors, health conditions and access to health resources

Methodology

A web-based survey tool, Question Pro, was utilized to conduct an electronic survey. Paper surveys, which were identical to the electronic survey, were also distributed to populations who may not have access to the internet or generationally are more likely to complete a paper survey. Electronic and paper surveys were circulated to the residents of the primary community. Scheduled below is the survey distribution report.

Exhibit 24
Regional Medical Center Community
Summary of Web-based and Paper-based Survey

Organization	Type of Organization	Type of Survey
<i>Hopkins County</i>		
Health Department	Health/healthcare	Paper surveys to patients
Hopkins County Community Clinic		Paper surveys to patients in waiting rooms
Trover Health System		online via website
Centering Pregnancy Program		Paper surveys to patients
Madisonville Community College	Educational system	Online surveys for staff and enrolled students
MCC Senior Nursing students		Paper surveys to students
Public School System		Online survey to school personnel
United Way	Social services	Online for United Way agencies
Interagency		online survey for interagency members
Madisonville-Hopkins Co. Chamber of Commerce	Business	online survey to chamber members
First Baptist Church	Churches (religious)	Paper surveys to congregation
Wesley Chapel C.M.E. Church		Paper surveys to congregation
Carter's Chapel		Paper surveys to congregation
Christ the King Catholic Church		Paper surveys to congregation
Hopkins Co. Senior Citizen Center	Senior citizen center	Paper surveys
First United Bank	Banking	Online to employees
McCoy & McCoy	Environment/business	Online to employees
<i>Webster County</i>		
Community Health First Clinic	Health/healthcare	Online to employees
Public School System	Educational system	Online survey to school personnel
Interagency	Social services	Online surveys to interagency members
Webster Senior Citizen Center	Senior citizen center	Paper surveys
<i>Muhlenberg County</i>		
Muhlenberg County Schools	Education	Online surveys to staff
Chamber of Commerce	Business	Online surveys to staff
Muhlenberg County Health Dept.	Health/Healthcare	Paper surveys to patients in waiting room
UK Cooperative Extension Service Homemakers	Social	Paper surveys to homemakers

There were 364 surveys completed and returned comprised of 260 electronic surveys and 104 paper surveys. Socio-demographic characteristics such as age, education, income and employment status were fairly comparable to the most recent census data. Over 80 percent of the survey respondents were female

which is more than the 50 percent of the population that is female in the community. Additionally, representation of those individuals 66 and older is less than that reported in the latest census data.

Survey Instrument

The survey instrument used for this study is 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 survey instrument was developed by Trover representatives in conjunction with BKD.

Community Health Survey Results

The actual survey 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 actual survey results has also been included in *Appendix C* for each question to allow for a more detailed analysis. Health needs indicated by the survey results are:

- ***Assessment of Personal Health***

When asked to assess their personal health status, 26 percent of the respondents described their health as being “excellent”, while 59 percent stated that their overall health was “good.”

When asked to rate their community as a “healthy community”, less than 10 percent of the respondents indicated their community was healthy or very healthy. More than 35 percent of the respondents indicated their community was unhealthy.

- ***Health Care Access Issues***

Over 90 percent of the respondents reported having health insurance with almost 70 percent of health insurance being provided by private insurance companies. Health care access issues are primarily related to costs. Respondents noted the following reasons for not receiving medical care:

1. Health insurance did not cover procedure or test
2. Deductible or co-pay was too high
3. Cost of prescription was too high

Only nine percent of respondents noted they did not receive medical care because they were unable to schedule an appointment when needed.

- ***Lifestyle Behavioral Risk Factors***

Proper diet and nutrition seem to be a challenge as only 11 percent of the respondents report eating the daily recommended servings of fruits and vegetables. Of the respondents, 28 percent report exercising at least three times per week and 28.45 percent of the respondents report that they never exercise. When asked about exercising at least five times per week, nearly 50 percent of the respondents answered “never”. Nearly 11 percent of the respondents always smoke cigarettes. Use of seat belts is high (over 86 percent) and when applicable, respondents’ children use seat belts and/or child safety seats.

- ***Social and Mental Health***

Over 16 percent of the respondents reported being stressed out ALWAYS. Almost 77 percent responded that they were SOMETIMES stressed out. Almost 26 percent of the respondents rated their stress level as High or Very High. Almost 26 percent of the respondents reported that they did less than they would like because of mental health or emotional issues.

There were 23 percent surveyed who reported that their current employment is stressful, while almost 34 percent reported that finances are stressful. Nearly 50 percent of the respondents worry about losing their job.

What do citizens say about the health of their community?

The five most important “health problems:”

1. Obesity
2. Drug abuse (illegal and prescription)
3. Cancer
4. Heart disease and stroke
5. Diabetes

The five most “risky behaviors:”

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

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

1. Affordable and available health care
2. Clean and safe environment
3. Job availability
4. Emergency response services
5. Healthy behaviors and lifestyles

Additional items to consider in planning

Respondents were asked to provide input as to what items Trover should consider in planning for the next three years. The following items were recurring suggestions provided:

1. Trover should try to increase the level of community involvement, especially in the areas of health promotion and disease programs.
2. Increased wellness programs that include general education and preventive procedures/screenings.
3. The need to recruit qualified specialists was noted repeatedly.
4. Additional mental health services that include drug abuse programs and services to deal with depression. The community needs more mental health providers.

Prioritization of Identified Health Needs

The management of Regional Medical Center has accomplished much over the past several years and continues to work on the development and implementation of programs and initiatives that work toward the improvement of community health and wellness. Primary and secondary data from this assessment process will be a valuable resource for future planning. The community input findings obtained through interviews and the community survey should be especially useful in understanding residents’ needs about community health. The findings provide the Hospital a lot of information to act on. In order to facilitate prioritization of identified health needs, a ranking and prioritization process was used and is described below.

Analysis of community health information, key informant interviews and the community health survey were all used to assess the health needs of the community as follows in *Exhibit 25*:

Exhibit 25
Regional Medical Center
Ranking of Community Health Needs

Health Problem	Ability to evaluate and measure outcomes based on data	How many people are affected by the issue?	What are the consequences of not addressing this problem?	Prevalence of common themes	Total Score	* Weighted Score
Diseases of the Heart	4	4	4	4	16	24
Adult Obesity	4	4	4	4	16	24
Cancer	4	4	4	4	16	24
Adult Smoking	4	4	4	2	14	22
Affordable Healthcare	3	4	4	3	14	22
Access to Healthy Foods	4	4	3	3	14	21
Respiratory	4	3	4	1	12	19
Mental Health	4	3	3	3	13	19
Access to Recreational Facilities/Limited Physical Activity	3	4	3	2	12	19
Sexually Transmitted Disease	4	4	2	1	11	17
Children in Poverty	4	4	2	1	11	17
Alcohol Abuse	3	3	3	2	11	17
Diabetes	4	2	3	1	10	15
Teen Birth Rate	3	3	2	1	9	14
Uninsured Residents	3	3	2	1	9	14
Dental Health	3	2	2	2	9	13
Diabetic Screening	3	2	2	1	8	12
Motor Vehicle Crashes	3	2	2	1	8	12
Infant Mortality	3	2	2	1	8	12
Low Birth Weight	4	1	2	1	8	11
Drug Abuse	3	0	3	2	8	11
Access to Specialists	3	1	2	2	8	11
Transportation	2	2	2	1	7	11
Shortage of Physicians (Webster County)	3	1	2	1	7	10

Health needs were ranked based on four factors:

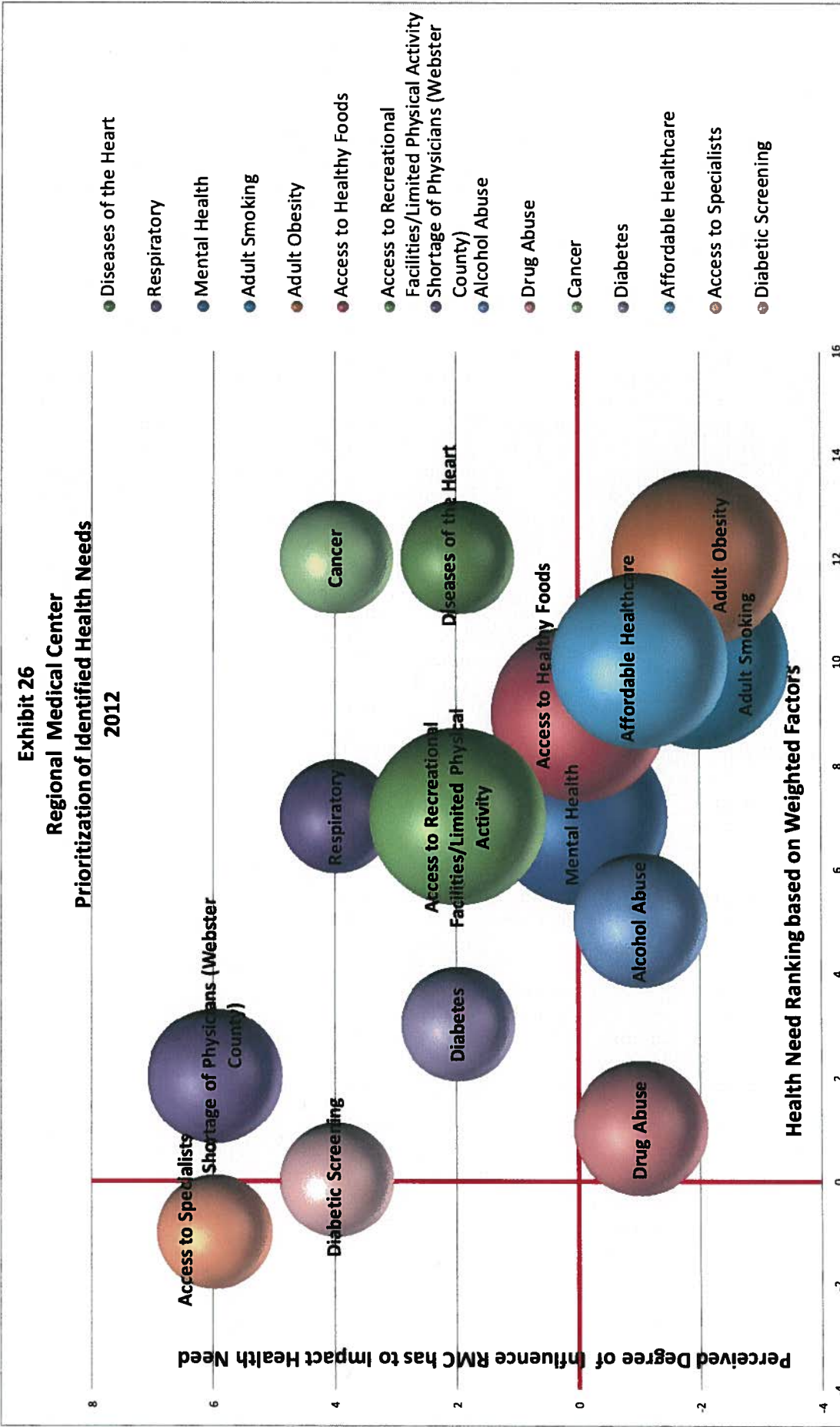
1. The ability of Regional Medical Center to evaluate and measure outcomes.
2. How many people are affected by the issue or size of the issue?
3. What are the consequences of not addressing this problem?
4. Prevalence of common themes.

Health needs were then prioritized and charted on *Exhibit 26* taking into account their overall ranking, the degree to which Regional Medical Center can influence long-term change and the identified health needs impact on overall health.

Utilizing the statistical median (12) as the horizontal axis, the weighted-average ranking was plotted on *Exhibit 26*. Next, each identified health need was assigned a value between 1 and 12 representing the perceived degree of influence Regional Medical Center has on impacting health outcomes related to the identified health need. Utilizing the statistical median (6) as the vertical axis, this value was charted.

Lastly, each health need was evaluated and assigned a rating between 1 and 12 regarding the health needs impact on overall health. Those health needs receiving the highest rating are represented by the largest spheres.

The graphical representation included on *Exhibit 26* is intended to aid in identifying health priorities for the organization. By addressing those needs in the upper right quadrant, overall community health will likely improve as these needs have the greatest impact on overall health and the Hospital is more likely to influence a positive impact on these needs. Additionally, the largest circles represent the most significant health needs of the community



Considerations for Meeting Identified Health Needs

After compiling and analyzing all of the data in this assessment, we recommend that management consider the following benchmarking, targets, ideas and strategies during its implementation plans. Some of the strategies will address multiple needs. These lists are not intended to be exhaustive and do not imply there is only one way to address the identified health needs.

Access to Care

Access to care, uninsured residents, affordable health care, access to physicians and access to specialists were some of the health needs with the highest priority. Increasing access to both routine medical care and medical insurance are vital steps in improving the health of the community.

**Exhibit 26.1
Regional Medical Center
Access to Care
Leading Health Indicators**

Health People 2020 Objective	Healthy People 2020 Target	RMC Benchmark	
Persons with medical insurance (1)			
Hopkins County	100.00%	80.00%	-
Webster County	100.00%	77.00%	-
Muhlenberg County	100.00%	79.00%	-
Increase the proportion of persons with a usual primary care provider (2)			
Hopkins County	83.90%	72.00%	-
Webster County	83.90%	79.00%	-
Muhlenberg County	83.90%	87.00%	+

Benchmark Sources: (1) US Census Bureau (2) BRFSS

Recommendations to improve community health related to access to care include the following:

- Extended services and increased hours of operation at the Hopkins County Community Clinic for the working poor.
- Recruitment of additional specialists to the community as well as increased collaboration among specialists and other agencies such as school programs, clinics, etc.
- The implementation of a community health resource center to be located within Regional Medical Center which would provide assistance to those needing access to health resources. Additionally, routine screening and education sessions could be provided at the resource center.
- The compilation of a health resource directory providing the listing of available health resources in the community with primary contact information for each resource.

- Education sessions for the newly unemployed and underemployed regarding how to access health services including clear information as to what agencies provide which services.
- Strive to be the “thought leader” and convener of agencies serving the health needs of the community.

Obesity

Adult obesity, access to healthy foods and access to recreational facilities are some of the highest ranked health needs in the community. Additionally, changes in these areas can have a high impact to the overall health of the community.

The rate of obesity is increasing in the state of Kentucky. The counties representing the community for Regional Medical Center have rankings in the bottom quartile of the state for adult obesity. Nearly one in three adults in the community are obese. Lack of physical activity, poor dietary choices and obesity are linked with the increased risk of several medical conditions.

Exhibit 26.2
Regional Medical Center
Obesity
Leading Health Indicators

Health People 2020 Objective	Healthy People 2020 Target	RMC Benchmark	
------------------------------	----------------------------	---------------	--

Adults who are obese

Hopkins County	30.60%	33.10%	-
Webster County	30.60%	33.00%	-
Muhlenberg County	30.60%	31.00%	-

Benchmark Source: County Health Rankings

Recommendations to improve the obesity rate are as follows:

- A community-wide fitness initiative led by Trover focusing on fitness, nutrition and physical activity.
- Expansion of the walking trail.

Substance Abuse

Substance abuse includes the use of legal and illegal substances. The problem likely impacts every member of the community. Prescription drug abuse was highlighted during the key informant interview process. Additionally, Kentucky has the second highest rate of adult smoking in the United States. The state’s average rate of adult smoking is 27.8 percent with Hopkins, Webster and Muhlenberg Counties having rates of 26.3 percent, 25.0 percent and 31.0 percent, respectively. Cigarette smoking is the leading avoidable cause of preventable death in Kentucky and the nation.

Key informant interviews reflected drug and alcohol abuse as a health and quality of life issue impacting the community. The community health survey indicated that drug abuse was one of the five most important health problems impacting the community.

**Exhibit 26.3
Regional Medical Center
Substance Abuse
Leading Health Indicators**

Health People 2020 Objective	Healthy People 2020 Target	RMC Benchmark	
Cigarette smoking (1)			
Hopkins County	12.00%	26.30%	-
Webster County	12.00%	25.00%	-
Muhlenberg County	12.00%	31.00%	-

Recommendations to improve substance abuse include:

- Education and monitoring of prescription drug abuse. Physicians should focus on decreasing prescription drug abuse.
- Increased education and training in the school-based programs regarding substance abuse.
- Increased outpatient programs for substance abuse.
- Smoke free campus.

Clinical Preventative Services (Diseases of the Heart and Cancer)

Cardiovascular disease is the leading cause of death in Kentucky. Approximately 26 percent of all deaths occur from cardiovascular disease within the defined community annually. According to United States Cancer statistics, 1999-2007, Kentucky’s incident rate for cancer is 605.3 per 100,000 persons. This ranks Kentucky with the second worst cancer rate in the United States. Cancer is the second leading cause of death for the defined community in the assessment.

Clinical preventive services, such as routine disease screening and scheduled immunizations, are key to reducing death and disability and improving the Nation’s health. These services both prevent and detect illnesses and diseases—from flu to cancer—in their earlier, more treatable stages, significantly reducing the risk of illness, disability, early death and medical care costs (Healthy People 2020).

**Exhibit 26.4
Regional Medical Center
Clinical Preventive Services (Diseases of the Heart and Cancer)
Leading Health Indicators**

Health People 2020 Objective	Healthy People 2020 Target	RMC Benchmark	
Adults who receive a breast screening based on the most recent guidelines (1)			
Hopkins County	81.1	59%	+
Webster County	81.1	55%	+
Muhlenberg County	81.1	66%	+
Reduce coronary heart disease deaths per 100,000 persons (2)			
Hopkins County	100.8	239.2	-
Webster County	100.8	261.7	-
Muhlenberg County	100.8	297.8	-

Benchmark Source: (1) County Health Rankings (2) KY Data Center - Vital Statistics

Strategies that address this priority area should consider the following:

- Provision of increased clinical preventive services.
- Logistical factors such as transportation.
- Health disparities related to the growing hispanic population in Webster County.
- The challenges faced by the elderly population should be considered.

Mental and Emotional Well Being

Regional Medical Center’s assessment indicated strong feelings concerning the lack of access for mental health services in the community.

**Exhibit 26.5
Regional Medical Center
Mental and Emotional Well Being
Leading Health Indicators**

Health People 2020 Objective	Healthy People 2020 Target	RMC Benchmark	
	suicides/100,000		
Reduce suicide rate			
Hopkins County	10.2	15.00	-
Webster County	10.2	19.00	-
Muhlenberg County	10.2	13.00	-

Benchmark Source: County Health Rankings

Strategies that address this priority area should consider the following:

- Increase the number of mental health providers.
- Increase depression screenings by primary care physicians.

Health Issues of Uninsured Persons, Low-Income Persons and Minority Groups

Certain key informants were selected due to their positions working with low-income and uninsured populations. Several key informants were selected due to their work with minority populations. Based on information obtained through key informant interviews and the community health survey, the following chronic diseases and health issues were identified:

- Uninsured/low income population
 - ✓ Access to specialists
 - ✓ Dental care
 - ✓ Mental and emotional health
- Hispanic population
 - ✓ Dental care
 - ✓ Prenatal care
 - ✓ Access to care due to not having legal status

APPENDIX A
ACKNOWLEDGEMENTS

Acknowledgements

The project Steering Committee was the convening body for this project. Many other individuals including community residents, key informants and community-based organizations contributed to this community health needs assessment.

Project Steering Committee

Special thanks to all of the following committee members for their time and commitment to this project:

Robert Brooks, Vice President, Education and Research, Trover Health System
Leigh England, Director of Education, Trover Health System
Natalie Begley, Coordinator, UK Center for Rural Health/Madisonville

Key Informants

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

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David Bolt, Chief Executive Officer, Health First, Community Health Center
Donald E. Carroll, County Judge Executive, Hopkins County Government Center
Deborah Cox, Dean of Academic Affairs, Madisonville Community College
Pat Hammack, Coordinator, Kentucky Delta Project
Betty Hendrix, R.N., B.S.N., Muhlenberg County Health Department
Rickey Hoskins, Insurance Agency Manager, Kentucky Farm Bureau
Rita Jungblom, Psy.D.-Clinic Coordinator, Pennyroyal Center-Madisonville
Mary King, Director, Hopkins County Community Clinic
Dr. Joe Leonard, Pastor, First Baptist Church-Madisonville
Jack Morris, Director, Hopkins County Health Department
Jat Mountjoy, Practice Administrator, Multi Care Specialists
Lorie Oglesby, Human Resource Director, Trover Health System
Lieutenant Mark Phaup, Madisonville City Police
Martha Pleasant, Education Coordinator, West Area Health Education Center
Kevin Raynes, Migrant Teacher/ESL Instructor, Sebree Elementary School
Linda Sandage, Assistant to Mayor David Jackson, City of Madisonville
Chip Tate, Director, United Way of the Coalfield
Chad Townsend, County Magistrate, Webster County Government
Bruce West, Human Resource Director, McCoy & McCoy Laboratories
Harriet Whitaker, President, Madisonville-Hopkins County Chamber of Commerce
Barrie Wilkerson, Human Resource Director, Modern Welding Company of Kentucky, Inc.
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Vicki Yonts, Program Manager, Felix E. Martin Jr. Foundation

Community Health Needs Survey

Thank you to the following individuals who assisted with distributing the community health needs survey:

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Pam Starks, Hopkins County Senior Citizen Center
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Dianne Campbell, Wesley Chapel C.M.E. Church
Pam Carter, Carter's Chapel
Deborah Cox, Madisonville Community College
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Mary King, Hopkins County Community Clinic
Jim McMurtrie, First Baptist Church
Lisa Miller, Hopkins County Health Department
Martha Pleasant, Christ the King Catholic Church
Judy Rhoads, Madisonville Community College
Chip Tate, United Way
LeAnn Todd, Trover Health System – Women's Center
Bruce West, McCoy & McCoy
Harriet Whitaker, Madisonville-Hopkins County Chamber of Commerce
Bobbi Wilcox, Interagency

Webster County

Kristi Higdon, Interagency
Ladonna Pollard, Webster Senior Citizen Center
Kim Winstead, Health First, Community Health Center
Melissa Wolfe, Webster County Board of Education

Muhlenberg County

Betty Hendrix, Muhlenberg County Health Department
Laura Holt, UK Cooperative Extension Service Homemakers
Gail Johnson, Muhlenberg County Schools and Muhlenberg Chamber of Commerce

APPENDIX B
KEY INFORMANT INTERVIEW PROTOCOL

KEY INFORMANT INTERVIEW

Community Health Needs Assessment for:

Trover Health System

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 Muhlenberg 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 Muhlenberg
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.

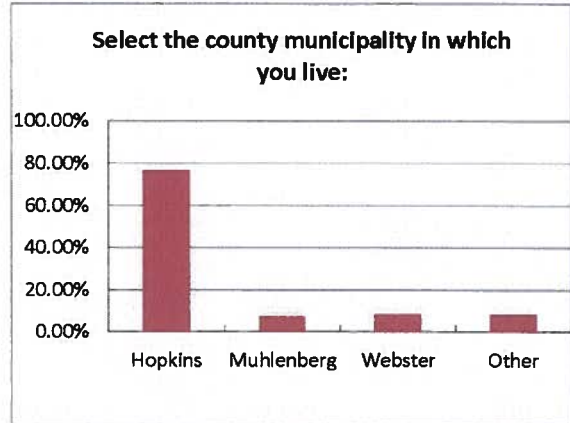
APPENDIX C
COMMUNITY HEALTH SURVEY DETAIL RESULTS

Appendix: Community Health Survey Detail Results

Survey Report : Trover 2011 CHNA FINAL

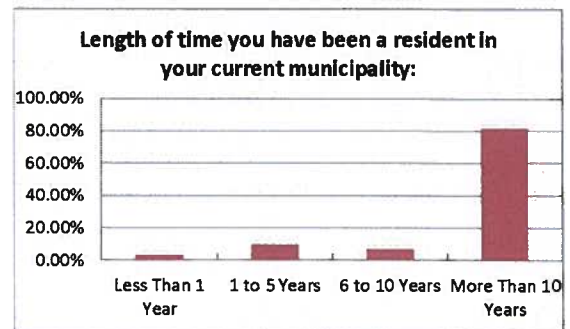
1. Select the county municipality in which you live:

Hopkins	76.49%
Muhlenberg	7.03%
Webster	8.11%
Other	8.38%
Count	370



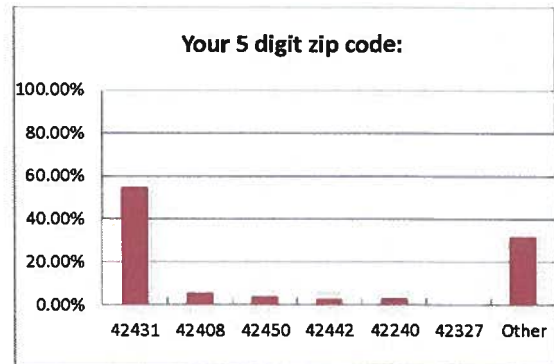
2. Length of time you have been a resident in your current municipality:

Less Than 1 Year	2.70%
1 to 5 Years	9.19%
6 to 10 Years	6.49%
More Than 10 Years	81.62%
Count	370



3. Your 5 digit zip code:

42431	54.59%
42408	5.41%
42450	3.51%
42442	2.16%
42240	2.70%
42327	0.27%
Other	31.35%
Count	370

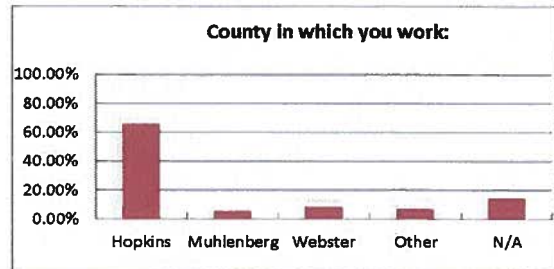


Appendix: Community Health Survey Detail Results

Survey Report : Trover2011 CHNA FINAL

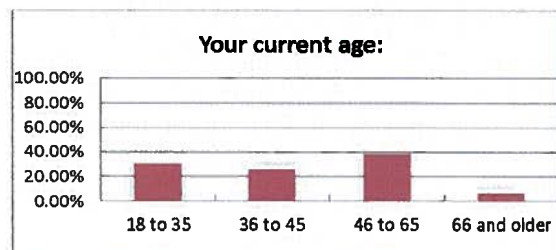
4. County in which you work:

Hopkins	65.67%
Muhlenberg	5.18%
Webster	8.17%
Other	6.54%
N/A	14.44%
Count	367



5. Your current age:

18 to 35	30.33%
36 to 45	25.41%
46 to 65	37.70%
66 and older	6.56%
Count	368



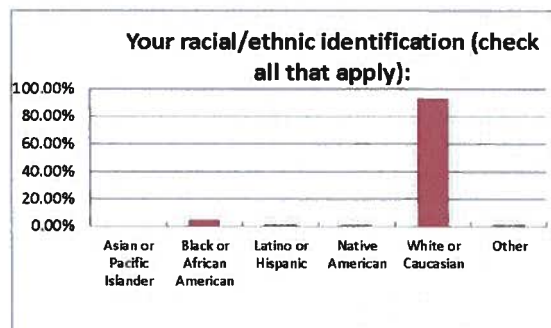
6. Your sex:

Female	82.51%
Male	17.49%
Count	366



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

Asian or Pacific Islander	0.00%
Black or African American	4.55%
Latino or Hispanic	0.80%
Native American	0.80%
White or Caucasian	92.78%
Other	1.07%
Count	374

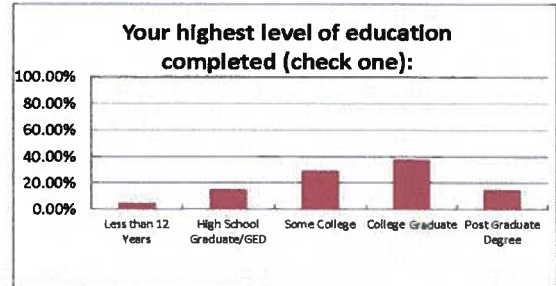


Appendix: Community Health Survey Detail Results

Survey Report : Trover 2011 CHNA FINAL

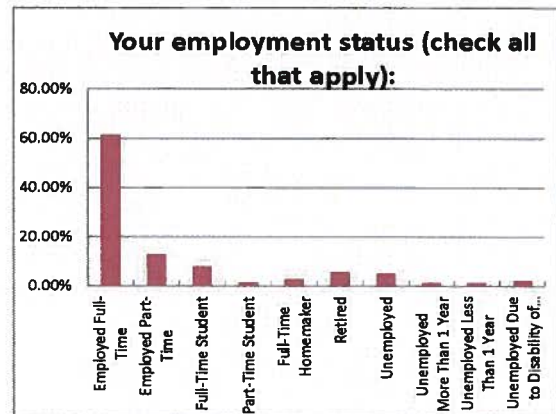
8. Your highest level of education completed (check one):

Less than 12 Years	4.34%
High School Graduate/GED	14.63%
Some College	29.00%
College Graduate	37.40%
Post Graduate Degree	14.63%
Count	369



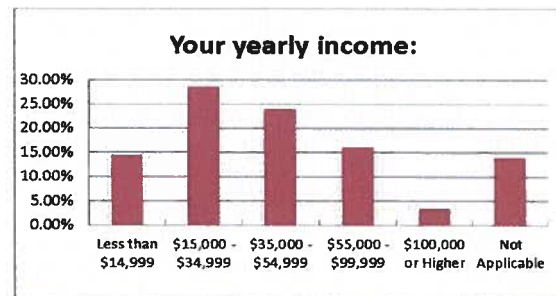
9. Your employment status (check all that apply):

Employed Full-Time	61.11%
Employed Part-Time	12.63%
Full-Time Student	7.58%
Part-Time Student	1.26%
Full-Time Homemaker	2.53%
Retired	5.30%
Unemployed	5.05%
Unemployed More Than 1 Year	1.26%
Unemployed Less Than 1 Year	1.26%
Unemployed Due to Disability of Illness	2.02%
Count	396



10. Your yearly income:

Less than \$14,999	14.40%
\$15,000 - \$34,999	28.53%
\$35,000 - \$54,999	23.82%
\$55,000 - \$99,999	16.07%
\$100,000 or Higher	3.32%
Not Applicable	13.85%
Count	361

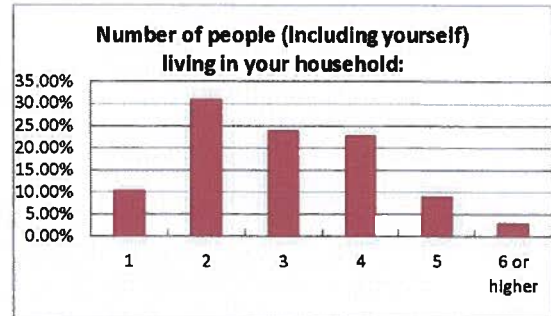


Appendix: Community Health Survey Detail Results

Survey Report : Trover 2011 CHNA FINAL

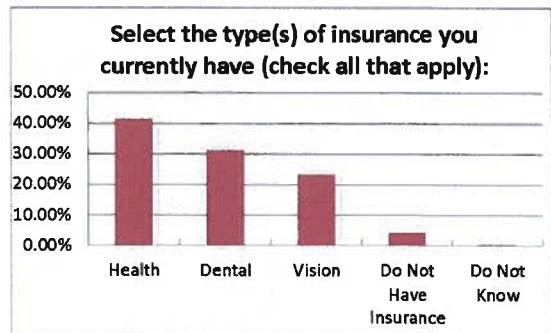
11. Number of people (including yourself) living in your household:

1	10.33%
2	30.98%
3	23.91%
4	22.83%
5	8.97%
6 or higher	2.99%
Count	368



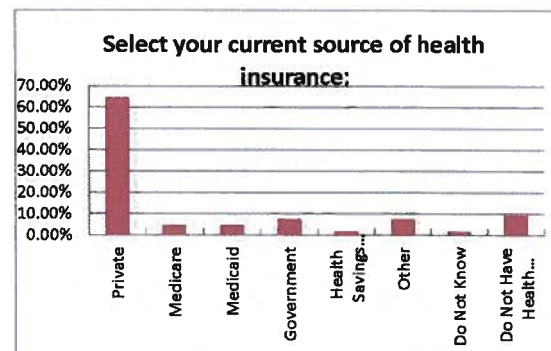
12. Select the type(s) of insurance you currently have (check all that apply):

Health	41.15%
Dental	31.17%
Vision	23.19%
Do Not Have Insurance	4.11%
Do Not Know	0.37%
Count	802



13. Select your current source of health insurance:

Private	64.41%
Medicare	4.52%
Medicaid	4.24%
Government	7.34%
Health Savings Account	1.69%
Other	7.06%
Do Not Know	1.69%
Do Not Have Health Insurance	9.04%
Count	354

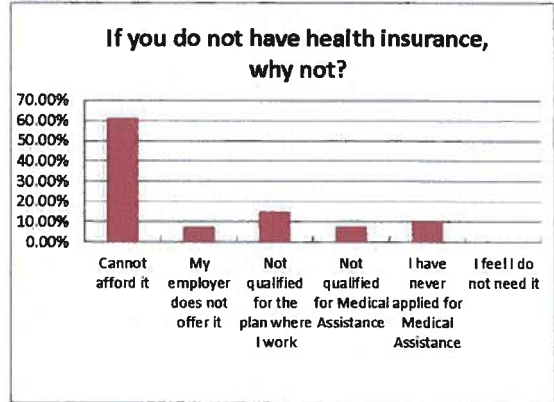


Appendix: Community Health Survey Detail Results

Survey Report : Trover 2011 CHNA FINAL

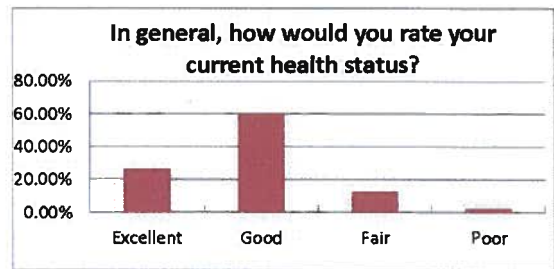
14. If you do not have health insurance, why not?

Cannot afford it	60.98%
My employer does not offer it	7.32%
Not qualified for the plan where I work	14.63%
Not qualified for Medical Assistance	7.32%
I have never applied for Medical Assistance	9.76%
I feel I do not need it	0.00%
Count	41



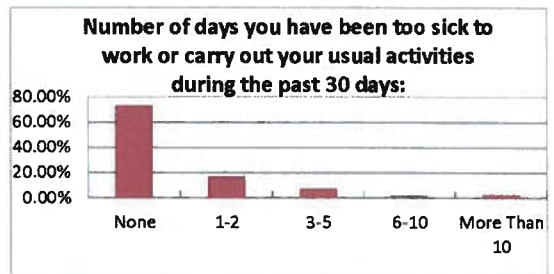
15. In general, how would you rate your current health status?

Excellent	26.09%
Good	59.24%
Fair	12.50%
Poor	2.17%
Count	366



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

None	73.22%
1-2	16.67%
3-5	6.83%
6-10	1.37%
More Than 10	1.91%
Count	366

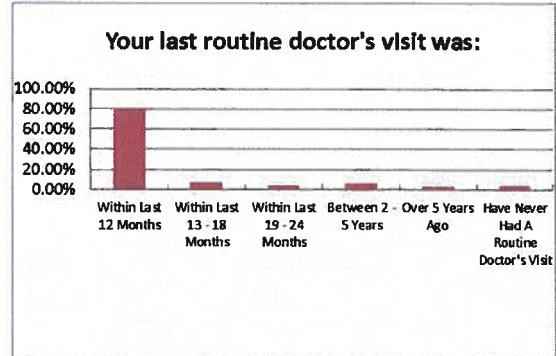


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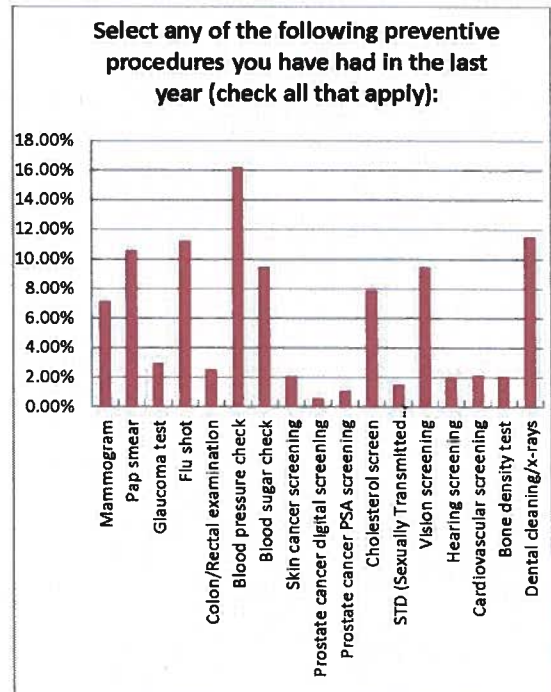
17. Your last routine doctor's visit was:

Within Last 12 Months	78.96%
Within Last 13 - 18 Months	6.28%
Within Last 19 - 24 Months	3.28%
Between 2 - 5 Years	5.19%
Over 5 Years Ago	3.01%
Have Never Had A Routine Doctor's Visit	3.28%
Count	366



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

Mammogram	7.13%
Pap smear	10.57%
Glaucoma test	2.92%
Flu shot	11.21%
Colon/Rectal examination	2.51%
Blood pressure check	16.18%
Blood sugar check	9.40%
Skin cancer screening	2.04%
Prostate cancer digital screening	0.58%
Prostate cancer PSA screening	1.05%
Cholesterol screen	7.83%
STD (Sexually Transmitted Disease) screening	1.52%
Vision screening	9.46%
Hearing screening	1.93%
Cardiovascular screening	2.10%
Bone density test	2.04%
Dental cleaning/x-rays	11.51%
Count	1712

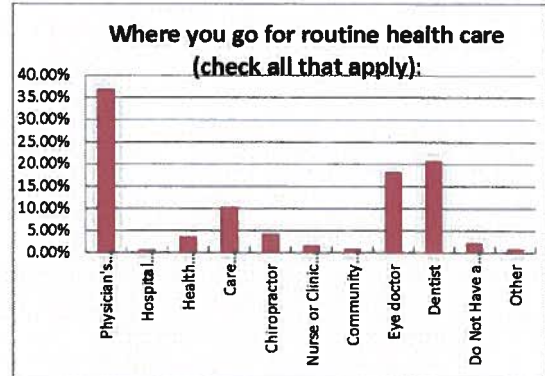


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Survey Report : Trover 2011 CHNA FINAL

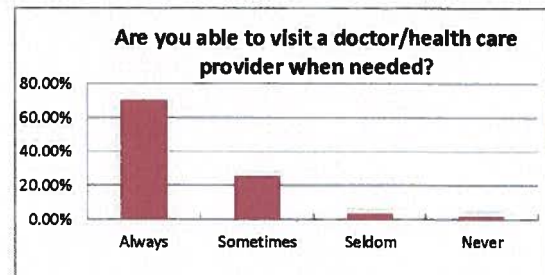
19. Where you go for routine health care (check all that apply):

Physician's Office	36.89%
Hospital Emergency Room	0.61%
Health Department Clinic	3.55%
Care Center/Urgent Care	10.29%
Chiropractor	4.29%
Nurse or Clinic at My Place of Employment	1.59%
Community Free Clinic	0.86%
Eye doctor	18.14%
Dentist	20.71%
Do Not Have a Health Care Provider	2.21%
Other	0.86%
Count	816



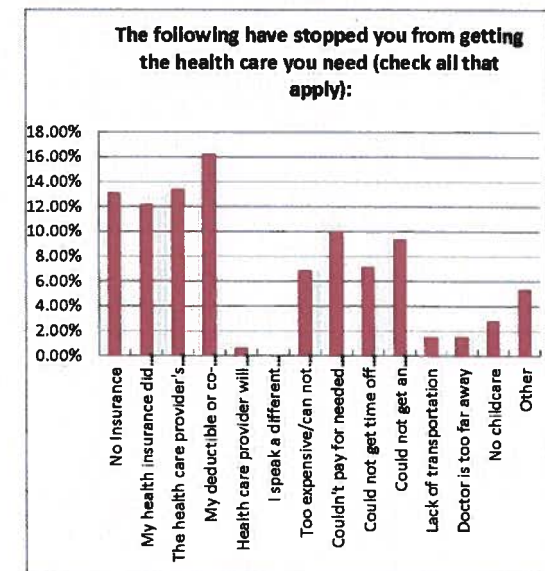
20. Are you able to visit a doctor/health care provider when needed?

Always	69.86%
Sometimes	25.21%
Seldom	3.29%
Never	1.64%
Count	365



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

No insurance	13.08%
My health insurance did not cover, approve or pay for what I needed	12.15%
The health care provider's hours did not fit my schedule	13.40%
My deductible or co-payment was too high	16.20%
Health care provider will not take my insurance	0.62%
I speak a different language or am from a different culture	0.00%
Too expensive/can not afford insurance premiums	6.85%
Couldn't pay for needed prescription medicine	9.97%
Could not get time off from work to go	7.17%
Could not get an appointment	9.35%
Lack of transportation	1.56%
Doctor is too far away	1.56%
No child care	2.80%
Other	5.30%
Count	321

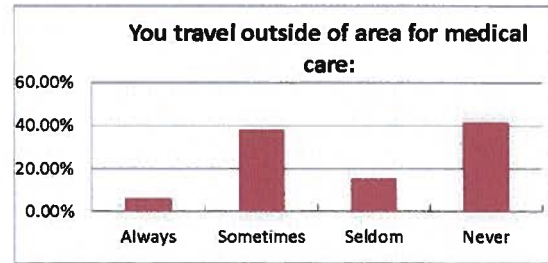


Appendix: Community Health Survey Detail Results

Survey Report : Trover 2011 CHNA FINAL

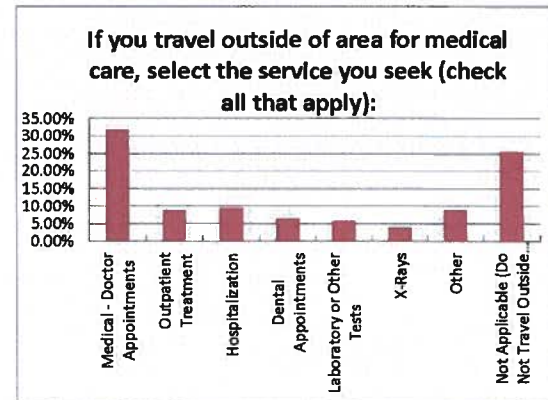
22. You travel outside of area for medical care:

Always	5.98%
Sometimes	37.77%
Seldom	14.95%
Never	41.30%
Count	368



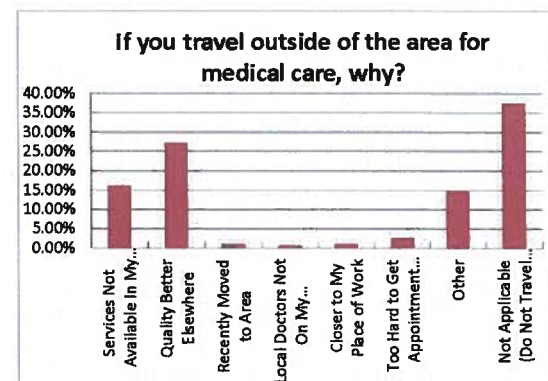
23. If you travel outside of area for medical care, select the service you seek (check all that apply):

Medical - Doctor Appointments	31.76%
Outpatient Treatment	8.78%
Hospitalization	9.46%
Dental Appointments	6.31%
Laboratory or Other Tests	5.63%
X-Rays	3.83%
Other	8.78%
Not Applicable (Do Not Travel Outside Area for Medical Care)	25.45%
Count	444



24. If you travel outside of the area for medical care, why?

Services Not Available In My Own Community	16.04%
Quality Better Elsewhere	27.04%
Recently Moved to Area	0.94%
Local Doctors Not On My Insurance Plan	0.63%
Closer to My Place of Work	0.94%
Too Hard to Get Appointment for Local Doctor	2.52%
Other	14.47%
Not Applicable (Do Not Travel Outside Area for Medical Care)	37.42%
Count	318

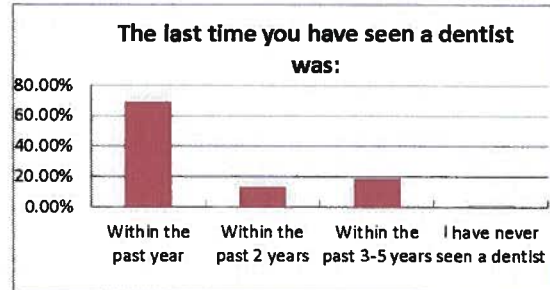


Appendix: Community Health Survey Detail Results

Survey Report : Trover 2011 CHNA FINAL

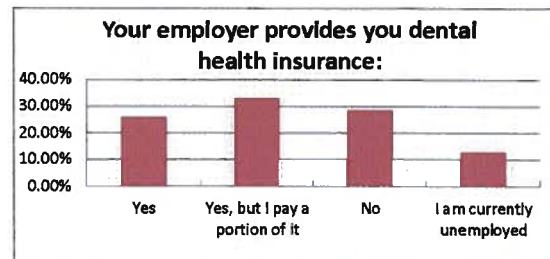
25. The last time you have seen a dentist was:

Within the past year	68.77%
Within the past 2 years	12.88%
Within the past 3-5 years	18.08%
I have never seen a dentist	0.27%
Count	365



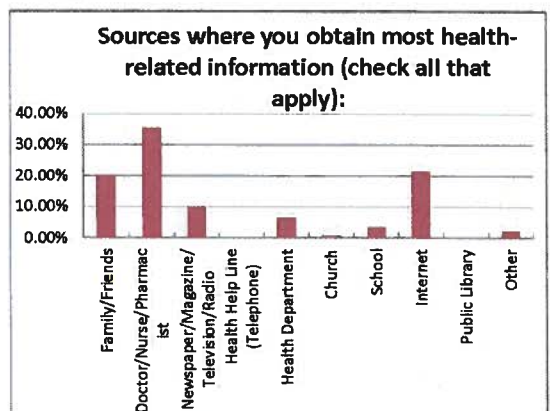
26. Your employer provides you dental health insurance:

Yes	25.82%
Yes, but I pay a portion of it	32.97%
No	28.57%
I am currently unemployed	12.64%
Count	364



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

Family/Friends	19.95%
Doctor/Nurse/Pharmacist	35.23%
Newspaper/Magazine/Television/Radio	9.85%
Health Help Line (Telephone)	0.38%
Health Department	6.31%
Church	0.88%
School	3.41%
Internet	21.46%
Public Library	0.25%
Other	2.27%
Count	792

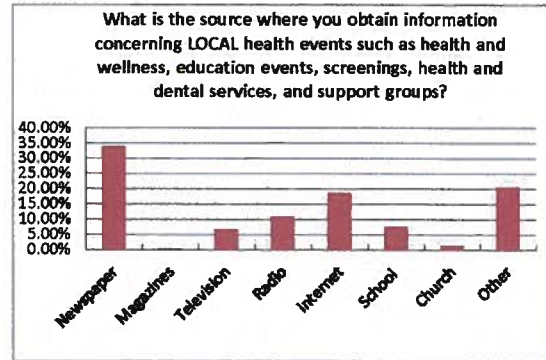


Appendix: Community Health Survey Detail Results

Survey Report : Trover 2011 CHNA FINAL

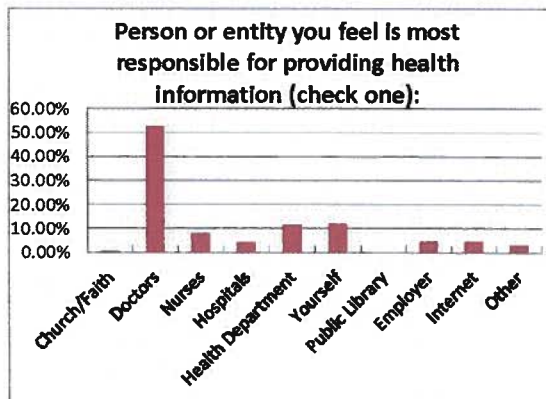
28. What is the source where you obtain information concerning LOCAL health events such as health and wellness, education events, screenings, health and dental services, and support groups?

Newspaper	33.88%
Magazines	0.33%
Television	6.58%
Radio	10.86%
Internet	18.75%
School	7.57%
Church	1.32%
Other	20.72%
Count	304



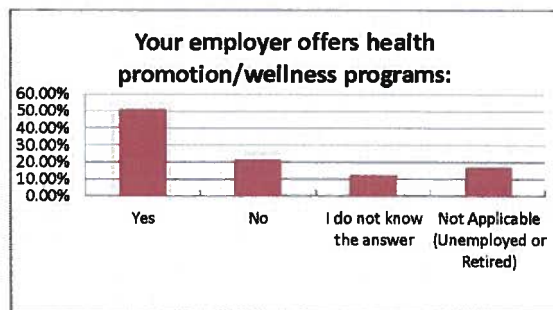
29. Person or entity you feel is most responsible for providing health information (check one):

Church/Faith	0.32%
Doctors	52.40%
Nurses	7.99%
Hospitals	4.15%
Health Department	11.50%
Yourself	11.82%
Public Library	0.00%
Employer	4.47%
Internet	4.47%
Other	2.88%
Count	313



30. Your employer offers health promotion/wellness programs:

Yes	50.82%
No	20.77%
I do not know the answer	11.75%
Not Applicable (Unemployed or Retired)	16.67%
Count	366



Appendix: Community Health Survey Detail Results

Survey Report : Trover 2011 CHNA FINAL

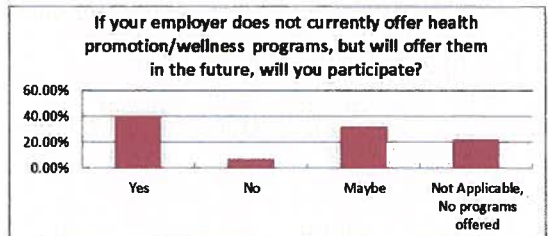
31. If your employer offers health promotion/wellness programs, you participate:

Always	11.11%
Sometimes	33.33%
Seldom	9.91%
Never	12.01%
Not Applicable, No programs offered	33.63%
Count	333



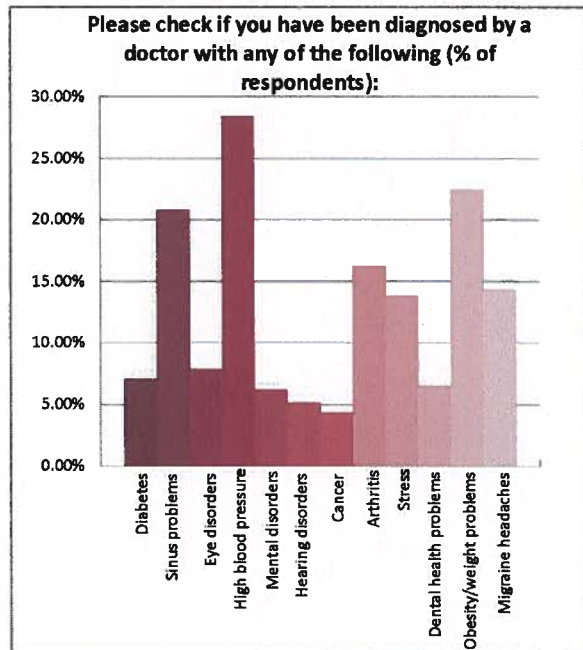
32. If your employer does not currently offer health promotion/wellness programs, but will offer them in the future, will you participate?

Yes	39.50%
No	6.58%
Maybe	31.97%
Not Applicable, No programs offered	21.94%
Count	319



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

Diabetes	4.04%	7.03%
Stroke	0.47%	0.81%
Sinus problems	11.96%	20.81%
Epilepsy	0.31%	0.54%
Alcohol abuse	0.16%	0.27%
Eye disorders	4.50%	7.84%
TB	0.16%	0.27%
Memory loss	0.47%	0.81%
High blood pressure	16.30%	28.38%
Heart Disease	1.71%	2.97%
Sickle cell anemia	0.16%	0.27%
Kidney Disease	1.40%	2.43%
Mental disorders	3.57%	6.22%
Hearing disorders	2.95%	5.14%
Lupus	0.31%	0.54%
Glaucoma	0.93%	1.62%
Cancer	2.48%	4.32%
Asthma	4.04%	7.03%
Infant death	0.00%	0.00%
Liver disease	0.31%	0.54%
Gonorrhea	0.00%	0.00%
HIV/AIDS	0.00%	0.00%
Arthritis	9.32%	16.22%
Stress	7.92%	13.78%
Dental health problems	3.73%	6.49%
Lung or respiratory disease	0.78%	1.35%
Obesity/weight problems	12.89%	22.43%
Drug abuse/addiction	0.16%	0.27%
Migraine headaches	8.23%	14.32%
Hepatitis	0.62%	1.08%
Family violence	0.16%	0.27%
Count	644	370



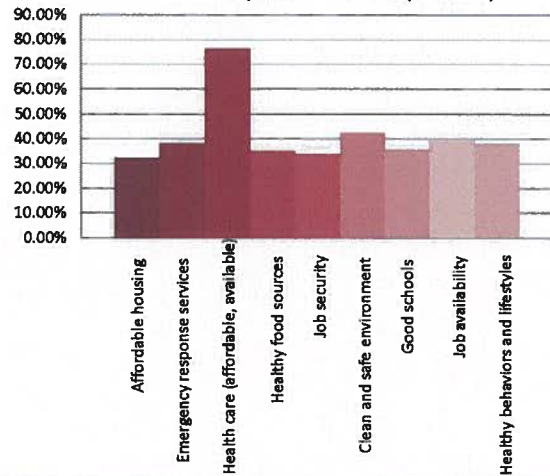
Appendix: Community Health Survey Detail Results

Survey Report : Trover 2011 CHNA FINAL

34. 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:

Affordable housing	6.56%	32.16%
Disability services (safe, affordable, availiat	1.65%	8.11%
Emergency response services (ambulance	7.77%	38.11%
Health care (affordable, available)	15.54%	76.22%
Healthy food sources (affordable, accessib	7.11%	34.86%
Job security	6.83%	33.51%
Childcare (safe, affordable, available)	3.42%	16.76%
Clean and safe environment	8.60%	42.16%
Emergency preparedness	2.37%	11.62%
Good schools	7.22%	35.41%
Healthy behaviors and lifestyles	7.71%	37.84%
Job availability	8.15%	40.00%
Low adult death and disease rates	0.61%	2.97%
Low crime/safe neighborhoods	3.75%	18.39%
Low level of child abuse	1.43%	7.03%
Nursing home care/assisted living/senior h	2.64%	12.97%
Parks and recreation facilities	1.93%	9.46%
Prenatal health care (affordable, available)	3.25%	15.95%
Low infant death rate	0.55%	2.70%
Pedestrian/bicycle safety	0.44%	2.16%
Public transportation	2.04%	10.00%
Other (please specify)	0.44%	2.16%
Count	1815	370

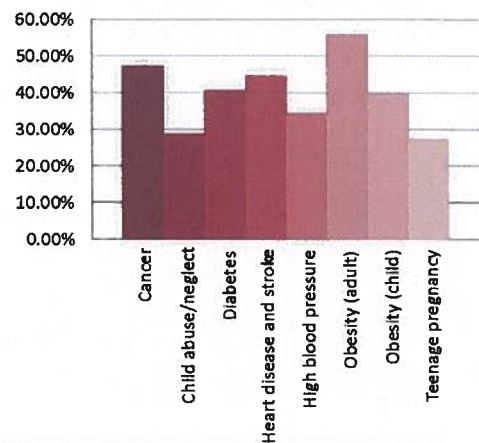
In the following list, please mark what you think are the FIVE MOST IMPORTANT FACTORS FOR A "HEALTHY COMMUNITY". (Based on % of Respondents):



35. 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:

Aging problems (e.g. arthritis, hearing/vision los	4.19%	20.54%
Availability of ambulance service	0.77%	3.78%
Cancer	9.64%	47.30%
Child abuse/neglect	5.84%	28.65%
Dementia/Alzheimer's	2.31%	11.35%
Dental problems	3.25%	15.95%
Diabetes	8.26%	40.54%
Domestic abuse	2.48%	12.16%
Elder abuse/neglect	1.43%	7.03%
Firearm related injuries	0.22%	1.08%
Heart disease and stroke	9.09%	44.59%
High blood pressure	6.99%	34.32%
Industrial/farming injuries	0.39%	1.89%
Infectious diseases (Hepatitis, TB, etc.)	0.61%	2.97%
Lead poisoned children	0.11%	0.54%
Mental health problems	4.19%	20.54%
Motor vehicle crash injuries	0.77%	3.78%
Obesity (adult)	11.34%	55.68%
Obesity (child)	8.09%	39.73%
Poor birth outcomes (prematurity, low birth weig	0.72%	3.51%
Rape/sexual assault	0.55%	2.70%
Respiratory/lung disease	2.64%	12.97%
School violence/ bullying	3.03%	14.86%
Sexually transmitted diseases	2.31%	11.35%
Suicide	1.32%	6.49%
Teenage pregnancy	5.56%	27.30%
Underage drinking	2.37%	11.62%
Other (please specify)	1.54%	7.57%
Count	1816	370

In the following list, please mark what you think are the FIVE MOST IMPORTANT "HEALTH PROBLEMS" in our community. (Based on % of Respondents):

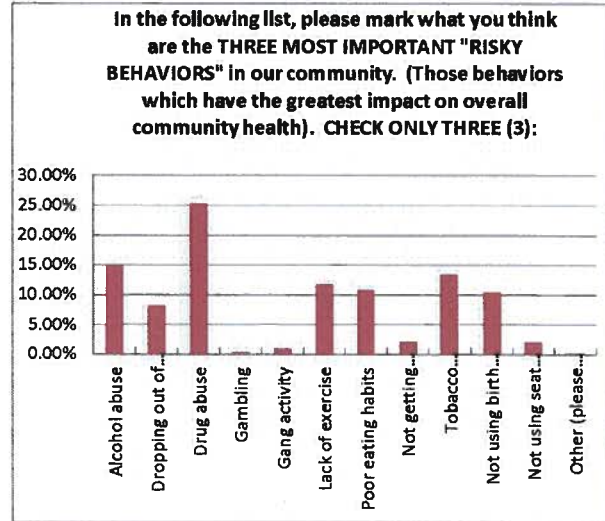


Appendix: Community Health Survey Detail Results

Survey Report : Trover 2011 CHNA FINAL

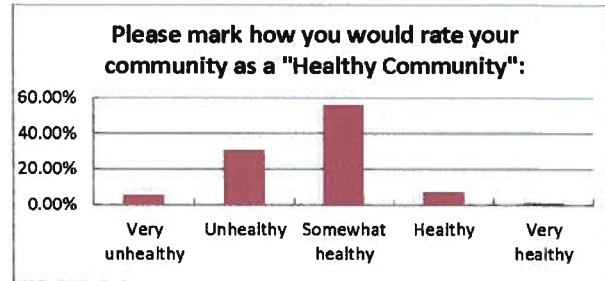
36. In the following list, please mark what you think are the THREE MOST IMPORTANT "RISKY BEHAVIORS" in our community. (Those behaviors which have the greatest impact on overall community health). CHECK ONLY THREE (3):

Alcohol abuse	14.90%
Dropping out of school	8.17%
Drug abuse	25.25%
Gambling	0.27%
Gang activity	1.00%
Lack of exercise	11.63%
Poor eating habits	10.81%
Not getting "shots" to prevent disease	2.09%
Tobacco use/second hand smoke	13.35%
Not using birth control/unsafe sexual practices	10.35%
Not using seat belts/child safety seats/helmets	2.00%
Other (please specify)	0.18%
Count	1101



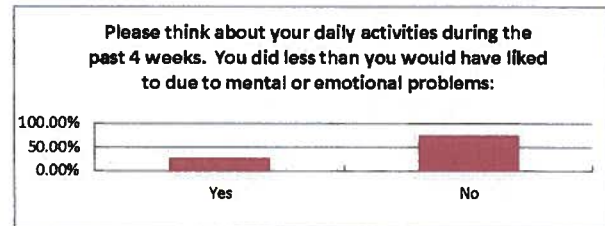
37. Please mark how you would rate your community as a "Healthy Community":

Very unhealthy	5.23%
Unhealthy	30.58%
Somewhat healthy	55.92%
Healthy	7.16%
Very healthy	1.10%
Count	363



38. 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:

Yes	25.83%
No	74.17%
Count	360

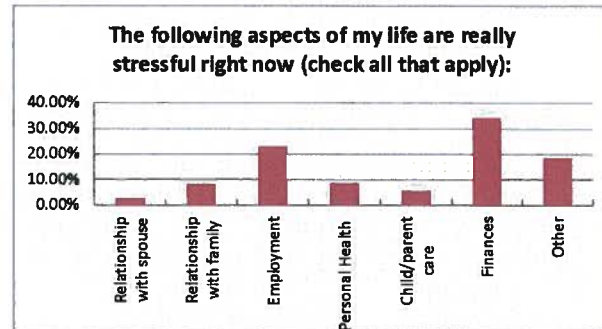


Appendix: Community Health Survey Detail Results

Survey Report : Trover 2011 CHNA FINAL

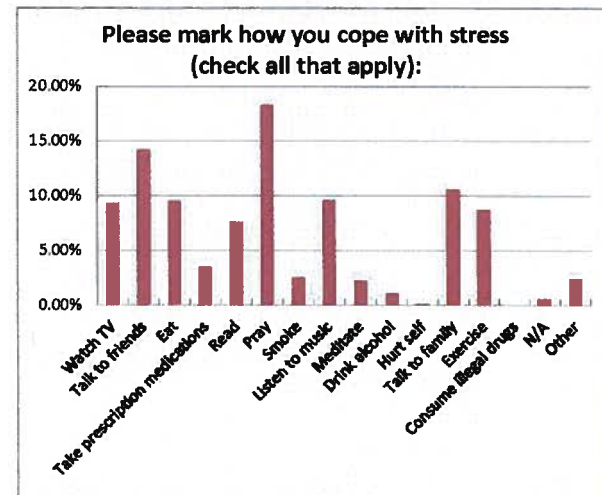
39. The following aspects of my life are really stressful right now (check all that apply):

Relationship with spouse	2.34%
Relationship with family	8.20%
Employment	22.66%
Personal Health	8.59%
Child/parent care	5.47%
Finances	33.98%
Other	18.75%
Count	256



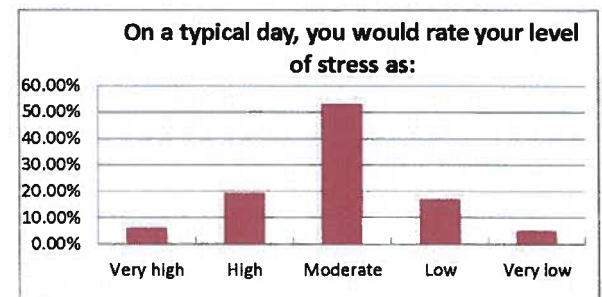
40. Please mark how you cope with stress (check all that apply):

Watch TV	9.28%
Talk to friends	14.16%
Eat	9.52%
Take prescription medications	3.50%
Read	7.57%
Pray	18.31%
Smoke	2.52%
Listen to music	9.60%
Meditate	2.20%
Drink alcohol	1.06%
Hurt self	0.08%
Talk to family	10.58%
Exercise	8.71%
Consume illegal drugs	0.00%
N/A	0.57%
Other	2.36%
Count	1229



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

Very high	5.83%
High	19.17%
Moderate	53.06%
Low	16.94%
Very low	5.00%
Count	360



Appendix: Community Health Survey Detail Results

Survey Report : Trover 2011 CHNA FINAL

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

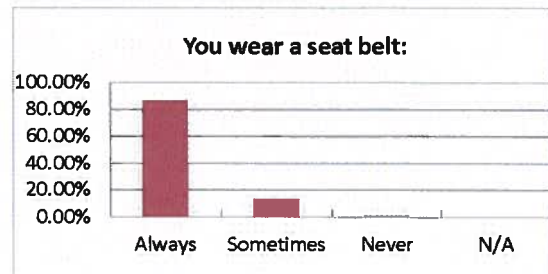
Every day	6.63%
3-5 times	21.82%
1-2 times	43.09%
None	28.45%
Count	362



Question 43:

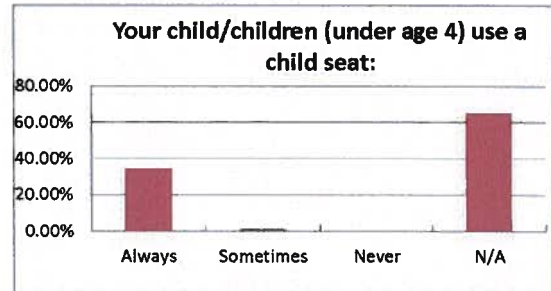
You wear a seat belt:

Always	86.31%
Sometimes	12.85%
Never	0.84%
N/A	0.00%
Count	358
Mean	1.15



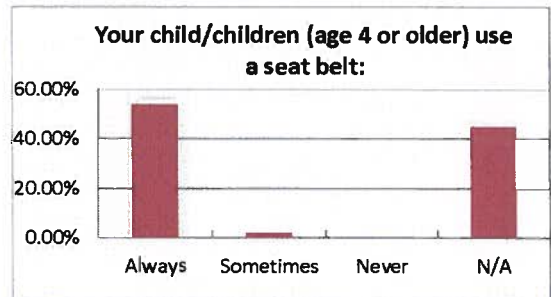
Your child/children (under age 4) use a child seat:

Always	34.29%
Sometimes	0.86%
Never	0.00%
N/A	64.86%
Count	350
Mean	2.95



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

Always	53.58%
Sometimes	1.72%
Never	0.00%
N/A	44.70%
Count	349
Mean	2.36



Appendix: Community Health Survey Detail Results

Survey Report : Trover 2011 CHNA FINAL

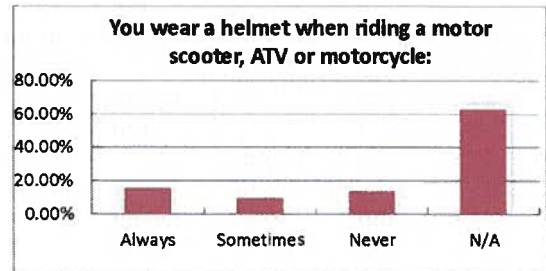
You wear a helmet when riding a bicycle, rollerblading or skateboarding:

Always	10.32%
Sometimes	4.87%
Never	16.62%
N/A	68.19%
Count	349
Mean	3.43



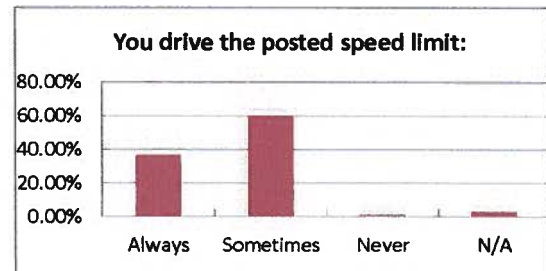
You wear a helmet when riding a motor scooter, ATV or motorcycle:

Always	15.14%
Sometimes	9.43%
Never	13.14%
N/A	62.29%
Count	350
Mean	3.23



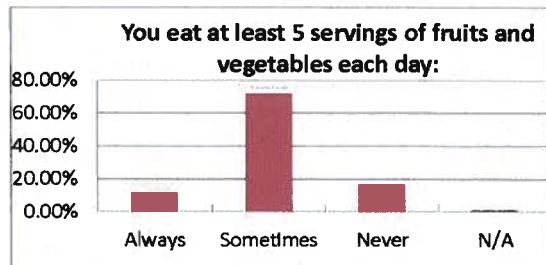
You drive the posted speed limit:

Always	36.47%
Sometimes	60.11%
Never	0.85%
N/A	2.56%
Count	351
Mean	1.70



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

Always	11.08%
Sometimes	71.88%
Never	16.19%
N/A	0.85%
Count	352
Mean	2.07



Appendix: Community Health Survey Detail Results

Survey Report : Trover 2011 CHNA FINAL

You eat fast food more than once a week:

Always	23.36%
Sometimes	61.54%
Never	14.53%
N/A	0.57%
Count	351
Mean	1.92



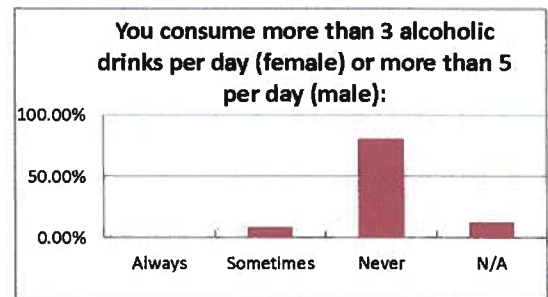
You exercise at a moderate pace at least 30 minutes per day, 5 days per week:

Always	12.08%
Sometimes	37.64%
Never	47.47%
N/A	2.81%
Count	356
Mean	2.41



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

Always	0.00%
Sometimes	7.69%
Never	80.34%
N/A	11.97%
Count	351
Mean	3.04

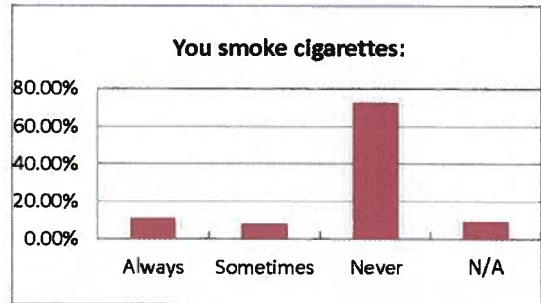


Appendix: Community Health Survey Detail Results

Survey Report : Trover 2011 CHNA FINAL

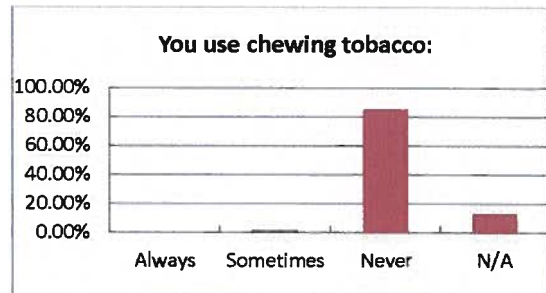
You smoke cigarettes:

Always	10.73%
Sometimes	7.63%
Never	72.60%
N/A	9.04%
Count	354
Mean	2.80



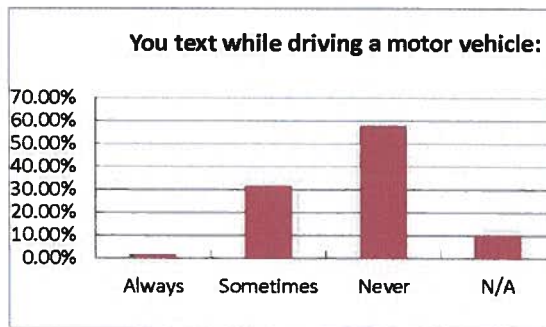
You use chewing tobacco:

Always	0.28%
Sometimes	1.71%
Never	84.90%
N/A	13.11%
Count	351
Mean	3.11



You text while driving a motor vehicle:

Always	1.43%
Sometimes	31.43%
Never	57.71%
N/A	9.43%
Count	350
Mean	2.75



Appendix: Community Health Survey Detail Results

Survey Report : Trover2011 CHNA FINAL

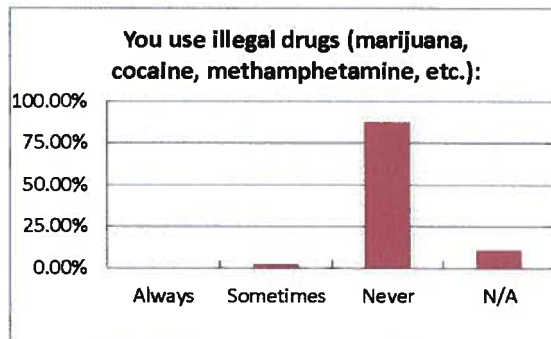
You are exposed to secondhand smoke in your home or at work:

Always	11.43%
Sometimes	22.29%
Never	59.14%
N/A	7.14%
Count	350
Mean	2.62



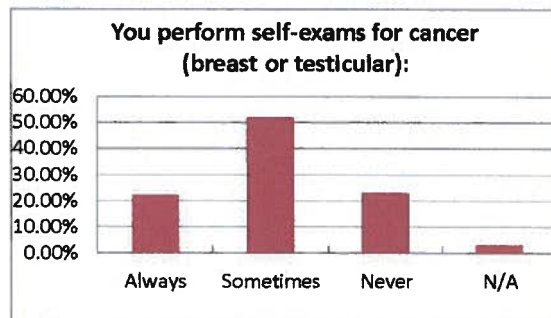
You use illegal drugs (marijuana, cocaine, methamphetamine, etc.):

Always	0.28%
Sometimes	1.99%
Never	87.22%
N/A	10.51%
Count	352
Mean	3.08



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

Always	22.06%
Sometimes	51.86%
Never	22.92%
N/A	3.15%
Count	349
Mean	2.07



Appendix: Community Health Survey Detail Results

Survey Report : Trover 2011 CHNA FINAL

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

Always	86.65%
Sometimes	12.50%
Never	0.57%
N/A	0.28%
Count	352
Mean	1.14



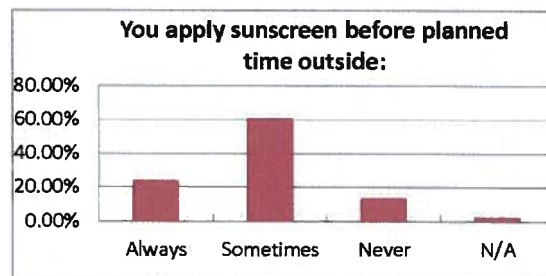
You wash your hands with soap and water before preparing and eating meals:

Always	83.05%
Sometimes	15.82%
Never	0.56%
N/A	0.56%
Count	354
Mean	1.19



You apply sunscreen before planned time outside:

Always	23.80%
Sometimes	60.34%
Never	13.60%
N/A	2.27%
Count	353
Mean	1.94

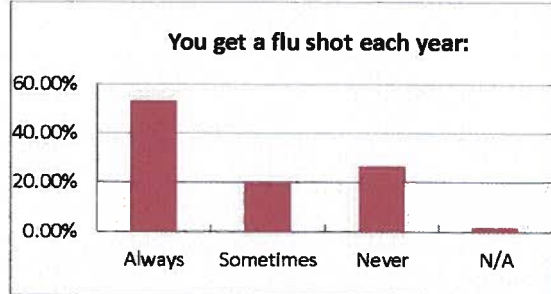


Appendix: Community Health Survey Detail Results

Survey Report : Trover 2011 CHNA FINAL

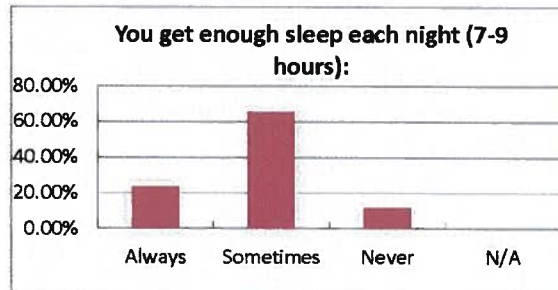
You get a flu shot each year:

Always	52.97%
Sometimes	19.26%
Never	26.35%
N/A	1.42%
Count	353
Mean	1.76



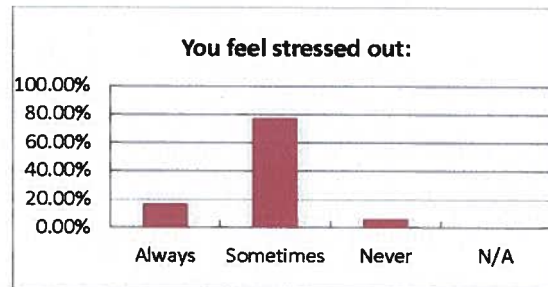
You get enough sleep each night (7-9 hours):

Always	23.23%
Sometimes	65.16%
Never	11.33%
N/A	0.28%
Count	353
Mean	1.89



You feel stressed out:

Always	16.33%
Sometimes	76.79%
Never	6.02%
N/A	0.86%
Count	349
Mean	1.91



Appendix: Community Health Survey Detail Results

Survey Report : Trover 2011 CHNA FINAL

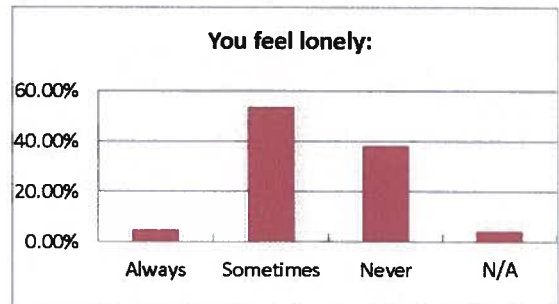
You feel happy about your life:

Always	41.13%
Sometimes	56.34%
Never	2.54%
N/A	0.00%
Count	355
Mean	1.61



You feel lonely:

Always	4.80%
Sometimes	53.39%
Never	37.85%
N/A	3.95%
Count	354
Mean	2.41



You worry about losing your job:

Always	7.67%
Sometimes	41.76%
Never	34.94%
N/A	15.63%
Count	352
Mean	2.59

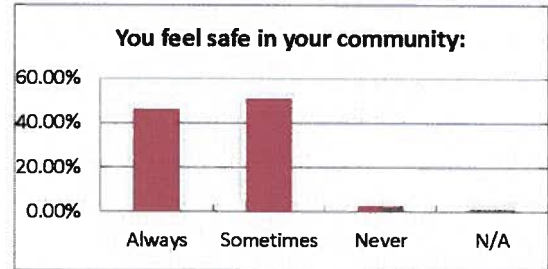


Appendix: Community Health Survey Detail Results

Survey Report : Trover 2011 CHNA FINAL

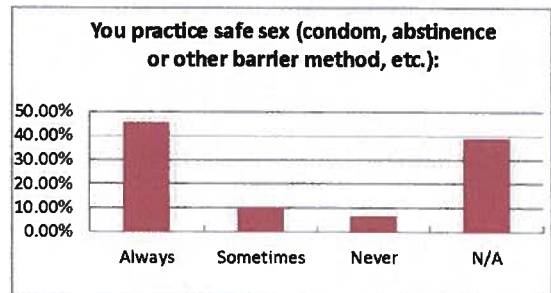
You feel safe in your community:

Always	46.07%
Sometimes	50.84%
Never	2.25%
N/A	0.84%
Count	356
Mean	1.58



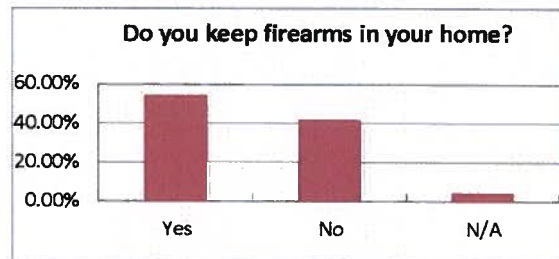
You practice safe sex (condom, abstinence or other barrier method, etc.):

Always	45.33%
Sometimes	9.35%
Never	6.52%
N/A	38.81%
Count	353
Mean	2.39



44. Do you keep firearms in your home?

Yes	54.34%
No	41.46%
N/A	4.20%
Count	357

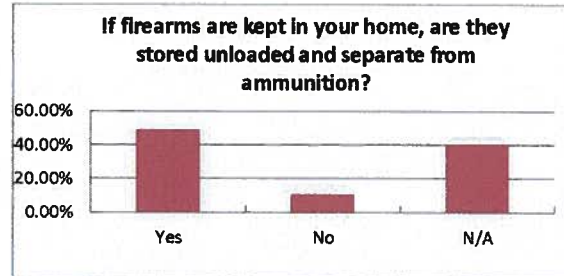


Appendix: Community Health Survey Detail Results

Survey Report : Trover 2011 CHNA FINAL

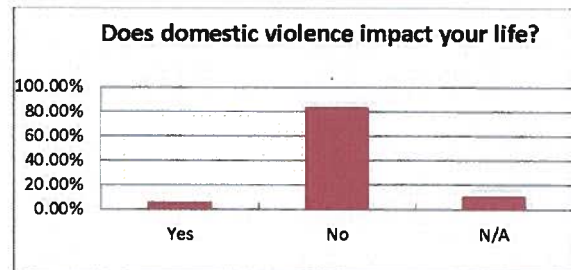
45. If firearms are kept in your home, are they stored unloaded and separate from ammunition?

Yes	48.82%
No	10.59%
N/A	40.59%
Count	340



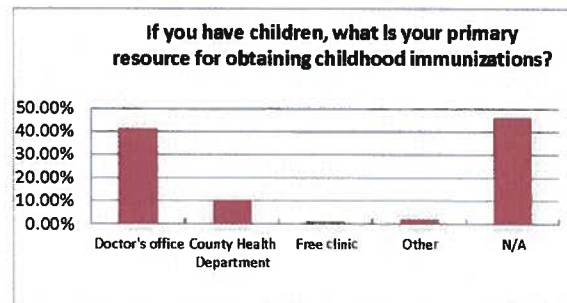
46. Does domestic violence impact your life?

Yes	5.60%
No	83.47%
N/A	10.92%
Count	357



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

Doctor's office	40.91%
County Health Department	10.30%
Free clinic	0.91%
Other	1.82%
N/A	46.06%
Count	330



APPENDIX D
SOURCES

Sources

2011.1 Nielson Demographic Update, The Nielson Company, April 2011

Regional Economic Conditions (RECON). 2006-2010, Federal Deposit Insurance Corporation, 8 Dec. 2011 <<http://www2.fdic.gov/recon/index.asp>>

United States Department of Labor: Bureau of Labor Statistics. 2010. U.S. Department of Census. 8 Nov. 2011 <<http://www.bls.gov/cew/>>.

ThinkKentucky. Community Information, Madisonville, Hopkins County. 2011. Kentucky Cabinet for Economic Development 8 Nov. 2011 <<http://www.thinkkentucky.com>>.

ThinkKentucky. Community Information, Providence, Webster County. 2011. Kentucky Cabinet for Economic Development 8 Nov. 2011 <<http://www.thinkkentucky.com>>.

ThinkKentucky. Community Information, Muhlenberg County. 2011. Kentucky Cabinet for Economic Development 8 Nov. 2011 <<http://www.thinkkentucky.com>>.

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

2009 Poverty and Median Income Estimates – Counties, U.S. Census Bureau, Small Areas Estimate Branch, December 2010.

2008 Poverty and Median Income Estimates – Counties, U.S. Census Bureau, Small Areas Estimate Branch, November 2009.

2007 Poverty and Median Income Estimates – Counties, U.S. Census Bureau, Small Areas Estimate Branch, December 2008.

2009 Health Insurance Coverage Status for Counties and States: Interactive Tables. U.S. Census Bureau, Small Area Health Insurance Estimates. 13 Jan. 2012 <<http://www.census.gov/did/www/sahie/data/2009/tables.html>>.

Kentucky State Data Center. Educational Attainment by Age for Kentucky, ADDs and Counties. 1990 & 2000. University of Louisville, Urban & Public Affairs. 13 Jan. 2012. <<http://ksdc.louisville.edu/1education.htm>>.

Kentucky County Health Profiles: Leading Causes of Death. 2005. Kentucky Cabinet for Health and Family Services. 8 Nov. 2011 <<http://chfs.ky.gov/dph/epi/cohealthprofiles.htm>>.

County Health Rankings: Mobilizing Action Toward Community Health. 2011. Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute. 30 Nov. 2011 <<http://www.countyhealthrankings.org>>.

Community Health Status Indicators: CHSI 2009. U.S. Department of Health & Human Services. 8 Nov. 2011 <<http://communityhealth.hhs.gov/>>.

InfoSuite: 2008-2010. Kentucky Hospital Association.

HealthyPeople.gov. 2011. U.S. Department of Health and Human Services. 30 Nov. 2011 <<http://www.healthypeople.gov/>>.