Community Health Needs Assessment & Implementation Plan

July 1, 2013 – June 30, 2016

Mission Statement

Highlands Regional Medical Center is a not-for-profit community medical center committed to its charitable mission of serving individuals regardless of their ability to pay. HRMC, in partnership with its medical staff, employees and other community resources will develop a healthier community by providing a safe hospital environment, health education, and the promotion of wellness.

Vision Statement

Highlands Regional Medical Center is an independent organization committed to being the premier health care provider that:

- Serves the communities of the Big Sandy Region;
- Delivers superior quality, services and access;
- Aligns with its physicians for mutual success;
- Continually improves and strives for excellence.

Table of Contents

I. INTRODUCTION

Highlands Regional Medical Center (HRMC) is a 184-licensed bed community owned, not-for-profit hospital located in Prestonsburg, Kentucky. Highlands' service area is Floyd, Johnson, Martin, and Magoffin counties with a combined population of approximately 90,000 residents. Highlands Health System, a community-owned, not-for-profit health system, is the parent company for HRMC, the Highlands Center for Autism, Highlands Foundation, and Highlands Home Health. The hospital has approximately 600 employees. The President/Chief Executive Officer of Highlands Health System is Harold C. Warman, Jr.

HRMC contracted with the Community and Economic Development Initiative of Kentucky (CEDIK), Cooperative Extension-based center at the University of Kentucky that provides technical assistance to rural hospitals and health providers in Kentucky, in the spring of 2012 to conduct a Community Health Needs Assessment (CHNA). In 2010, Congress enacted the Patient Protection and Affordable Care Act (PPACA) in an effort to enhance the quality of health care. The PPACA requires non-profit hospitals to complete a CHNA every three years. HRMC collaborated with Saint Joseph Martin, a critical access hospital located in Martin, Floyd County, Kentucky, to develop and participate in a formal county-wide process to identify and address key areas that would improve the health and well-being of Floyd County. Highlands' health needs assessment process was also extended to Johnson, Martin, and Magoffin counties. HRMC is responsible for prioritizing and creating an implementation strategy for the identified needs that arise as a result of the CHNA.

CEDIK was engaged to assist HRMC in the process to meet the requirements of the PPACA by facilitating our process in the development of our community health needs assessment. Figure 1 provides a brief overview of how CEDIK implements the CHNA process. CEDIK worked with the Director/Community Development at Highlands to identify volunteers from the community who would be willing to serve on the Community Steering Committee. This committee was representative of individuals involved in public health, those who serve disadvantaged populations, community members, and organizations with an interest in the quality of health care in our community. The steering committee conducted and facilitated focus groups and disseminated surveys in each of the four counties. The diversity of the steering committee dictates the success of the CHNA to truly represent the needs of the community.

CEDIK worked with Highlands in the collection of data that was used to determine the community health needs. This data includes economic and health data for the community, hospital utilization data, and compiling results from surveys that were created for HRMC and Saint Joseph Martin.

CEDIK compiled the data, identified priorities based on the focus groups and surveys, and presented the draft report to the HRMC. Highlands Senior Leadership reviewed the draft document; key objectives were identified, goals established, and an implementation strategy developed. Hospital management prepared the final draft document which is presented to the Board of Directors for their final approval. The CHNA document will be posted to the hospital website. The CHNA is considered adopted and having met the PPACA mandate.

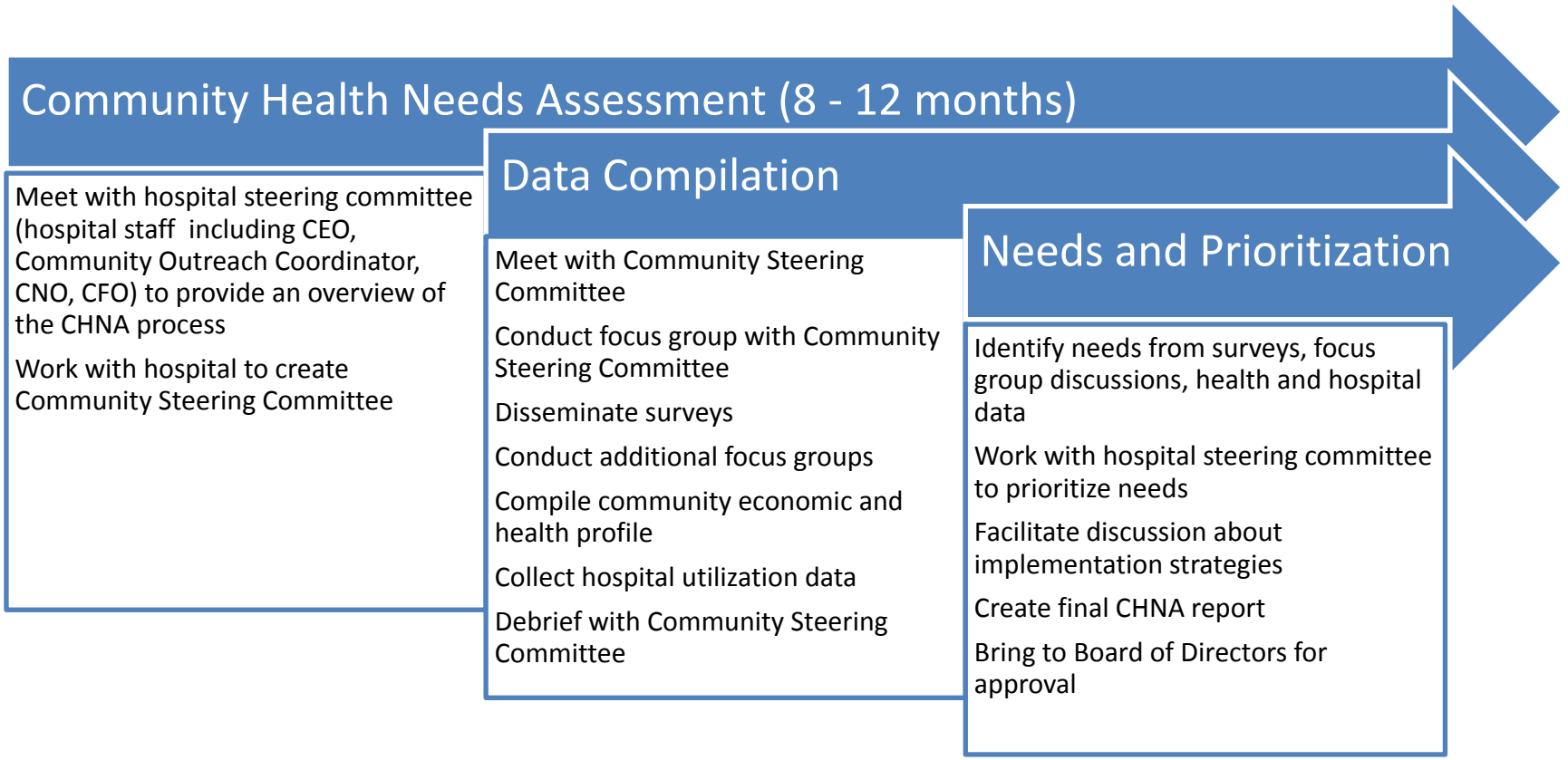

Figure 1 CEDIK's CHNA Process

II. DESCRIPTION OF THE COMMUNITY SERVED BY HIGHLANDS

Highlands Regional Medical Center serves the residents of Floyd, Johnson, Magoffin, and Martin Counties in Kentucky. Highlands is located in Prestonsburg, Floyd County, in Eastern Kentucky. Lexington, Kentucky is the closest large city to Prestonsburg. Highlands' 4-county service area is made up of many rural communities. Figure 1 provides an overview of the location of Highlands. In 2010, the population of Floyd County was 39,451 and there are roughly 3,238 individuals residing in the city of Prestonsburg. There are two other hospitals in Floyd County: Saint Joseph Martin in Martin, Kentucky and McDowell ARH in McDowell, Kentucky (southeast of Prestonsburg). Nearly 44% of the inpatient discharges at HRMC originate from Floyd County, 22.2% from Johnson County, 12.1% from Magoffin County, and 9.6% from Martin County. (See Table 4 discussed in greater detail in section IV).

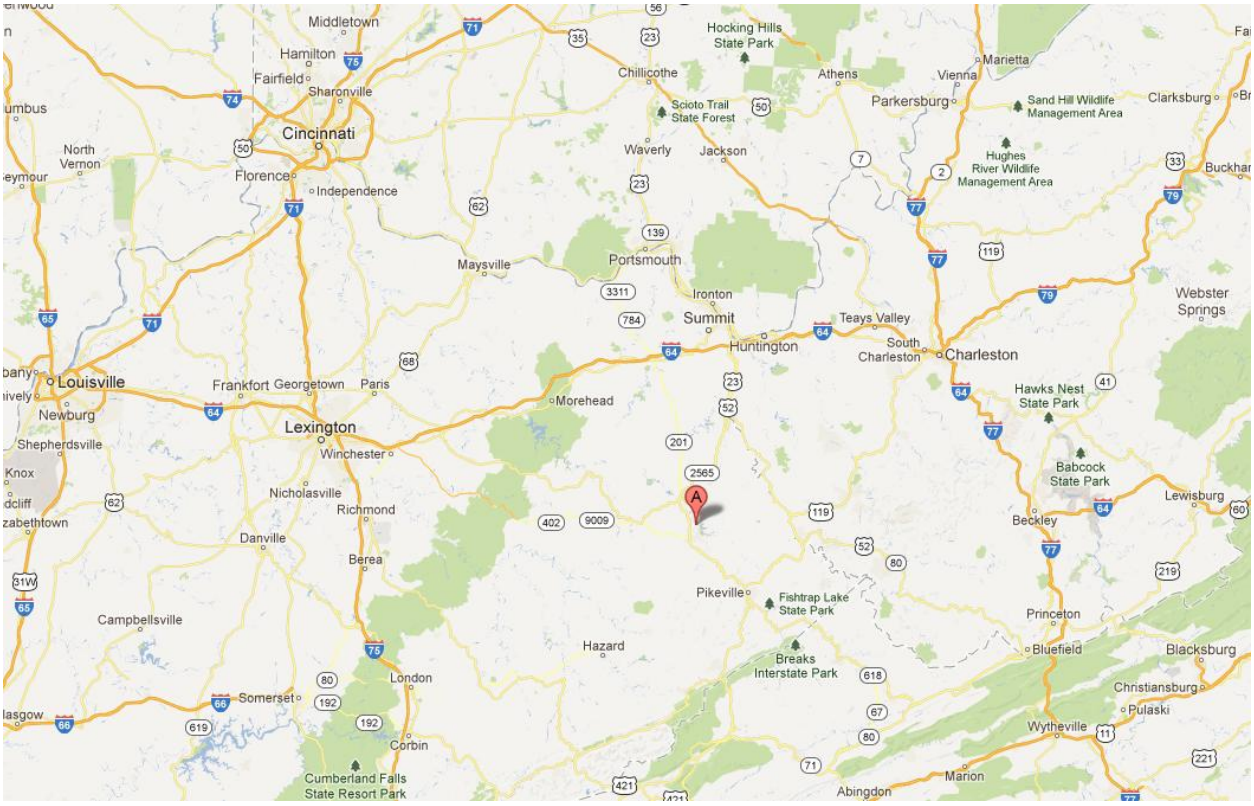

Figure 2 Highlands Regional Medical Center Location

III. COMMUNITY STEERING COMMITTEE

The Community Steering Committee is a vital part to the CHNA process. These individuals represent organizations and agencies from Highlands' service area. In particular, the individuals who were willing to volunteer allowed the hospital to get input from populations that were often not engaged in conversations about their health needs. CEDIK provided a list of potential agencies and organizations that would facilitate broad input. Specifically, the list included individuals serving the local health departments, the school systems, Cooperative Extension Agencies, public housing,

senior citizens, local government, other healthcare providers (Big Sandy Health Care, EMS, etc.), social work, Big Sandy Area Development District, and small businesses.

Highlands Regional Medical Center and St. Joseph Martin chose to combine the process for their CHNA because both hospitals are located in the same county. As a result, there was one Community Steering Committee. St. Joseph Martin is a critical access hospital (25 beds) and serves predominantly Floyd County residents. However, there was ample representation from Floyd County and the entire HRMC service area to allow for this combined steering committee. Table 1 provides an overview of those individuals who were willing to serve on the Community Steering Committee and the organizations they represent. There was tremendous representation by the local health departments, the regional planning districts (Big Sandy Area Development District), other healthcare providers, senior citizen centers, and local government.

The Community Steering Committee met twice as a group at Jenny Wiley State Park in Prestonsburg in June, 2012 and again in September, 2012. Each hospital had a representative welcomed and thanked the individuals for assisting in the process; afterward the hospital representative excused themselves. CEDIK asked that hospital representatives not be present during any focus group discussions or debriefing with the Community Steering Committee to encourage open dialogue.

Table 1 Highlands Regional Medical Center Community Steering Committee

Name	Organization	Title/Position
Denise Thomas	Big Sandy Area Development District	Community & Economic Dev. Associate
Terry Trimble	Big Sandy Area Development District	Executive Assistant
Deborah Ramey	Martin County Health Department	Martin County Health Department
Thursa Slone	Floyd County Health Dept.	Public Health Director
Russell Briggs	Johnson County Health Dept.	Director
Connie Little	Sandy Valley Abuse Shelter	Director
Toby Music	Highlands Regional Medical Center	Director of Social Work
Ancil Lewis	Big Sandy Health Care	CEO
Judy Salyer	Saint Joseph Martin Hospital	Director of Social Work
Debbie Trusty	Operation Unite	Education Director
Megan Mainous	Salyersville Nursing and Rehab	Regional Director of Sales & Marketing
Tonya Ward	Community Member	Magoffin County Circuit Clerk
Sharon Green	Magoffin County Health Department	Region 9 HDC coordinator
Linda Spurlock	MCCC	Volunteer coordinator/advocate
Vickie Boyd	Floyd County Senior Center	Director
Donna Gray	Community Volunteer	

IV. ASSESSMENT PROCESS

The assessment process included collecting secondary data related to the health of the community including economic health. In addition, CEDIK compiled hospital utilization data to better understand who and why individuals were using the facility. Finally, through the assistance of the

Community Steering Committee, input from the community was collected both through focus group discussions and through surveys.

Table 2 provides an overview of the basic social and economic factors in the four counties that comprise the HRMC service area. Of the 89,069 individuals living in Floyd, Johnson, Martin, and Magoffin counties, 97.7% of them are white. Roughly 67.4% of those over the age of 24 have graduated from high school compared to a state average of 81% and a national average of 92%. Thirty-seven percent (37%) of the population rates themselves as having fair or poor health and 32.4% of children are members of a single-parent household. These statistics are consistent with many of Kentucky's Appalachia counties.

The poverty rate (30.7%) is significantly higher than the national rate of 11% and the median household income ($29,477) is also lower than the national average ($50,221). The unemployment rate is 12.6% in Floyd County, 11.8% in Martin County, 11.6% in Johnson County, and 19.7% in Magoffin County. The Kentucky average is 10.7% and the national benchmark is 11%. In total, there are currently 31,029 jobs in the 4-county service area.

Table 3 provides an overview of the health of the community. There are certain needs that arise from the data. These needs appear to be largely related to smoking and obesity/lack of physical activity. Floyd, Johnson, Martin, and Magoffin counties have higher rates for "births to mothers who smoked," "adult smoking," "early childhood obesity," "adult prevalence of overweight and obesity," "lack of physical activity," and "lung cancer rates." Again this data is very similar across Appalachia but these are very costly issues both to the community and the hospitals. Because many individuals who have health issues are often uninsured or underinsured the cost of treatment falls on the hospital. If the hospital, along with other community partners, can encourage healthier behavior, it can potentially also improve its own financial conditions.

[Table 2 on the following page]

Table 2 Highlands Regional Medical Center Economic Profile

	Indicators	Floyd	Martin	Johnson	Magoffin	Kentucky	National Benchmark	Data Source	Year
Social Factors	Population	39,451	12,929	23,356	13,333	4,314,113	-	U.S. Census	2010
	Race White	98.7%	90.1%	99.3%	99.2%	89.9%	-	U.S. Census	2010
	African American	0.8%	6.9%	0.2%	0.1%	7.5%	-	U.S. Census	2010
	Hispanic	0.6%	3.0%	0.5%	0.7%	2.6%	-	U.S. Census	2010
	High school graduation rates	68.9%	64.7%	67.8%	64.6%	81.0%	92%	Kentucky Health Facts	2006-2010
	% of population with limited English proficiency (LEP)	0.2%	0.2%	0.2%	0.5%	2.1%	-	ACS 5-Year Estimates	2009
	Self rated health status (Percent of adults who report fair or poor health)	38.0%	36.0%	30.6%	44.4%	21.7%	10%	BRFSS	2004-2010
	Children in single parent households	36.9%	30.5%	29.8%	25.6%	32.4%	20%	ACS	2006-2010
Economic Factors	% of people living below poverty level	30.3%	45.0%	22.9%	31.7%	18.4%	11%	SAIPE	2009
	Median household income	$29,725	$25,825	$32,603	$26,815	$40,061	$50,221	SAIPE	2009
	Unemployment rate	12.6%	11.8%	11.6%	19.7%	10.7%	9%	Bureau of Labor Statistics	2010
	% of workers who travel 30 minutes or more one way to work	28.7%	40.4%	30.5%	36.3%	28.2%	35%	ACS	2005-2009
	Total number of jobs	16,255	3,619	7,993	3,162			EMSI	2010

[Table 3 on the following page]

Table 3 Community Health Profile

	Indicators	Floyd	Martin	Johnson	Magoffin	Kentucky	National Benchmark	Data Source	Year
Maternal &	Teen birth rate per 1000	68	69	52	75	52	22	Vital Statistics, NCHS (County Health Rankings	2002-2008
Child Health	Adequate prenatal care	87%	91%	86%	87%	85%	-	Kentucky Health Facts	2007
	Number of reported child abuse cases (2010)	206	117	200	164	15338	-	KIDS COUNT DATA CENTER	2010
	Low birthweight	10.5%	12.2%	10.6%	11.5%	9.0%	6.00%	Vital Statistics, NCHS (County Health Rankings	2002-2008
	Births to mothers who smoked during pregnancy	35.0%	37.0%	29.0%	43.0%	24.0%	-	KIDS COUNT DATA CENTER	2009
	Early childhood obesity (age 2-4 yrs)	17.7%	21.0%	22.3%	16.2%	15.6%		KIDS COUNT DATA CENTER	2010
Behavioral Factors	Adult smoking	29.2%	29.0%	26.4%	35.8%	26.9%	15%	BRFSS	2004-2010
	Prevalence of youth smoking	27.1%	31.1%	24.2%	21.2%	25.0%	-	Kentucky Health Facts	2007
	Adult prevalence of overweight & obesity	36.9%	39.0%	38.3%	32.3%	32.9%	-	National Center for Chronic Disease Prevention and Health Promotion, calculated from BRFSS	2009
	Chlamydia rate (per 100,000)	171	69	87.3	30.4	311.4	83	CDC, National Center for Hepatitis, HIV, STD, and TB Prevention	2009
	Excessive drinking (among adults)	7.9%	8.7%	4.1%	8.3%	11.0%	8%	Behavioral Risk Factor Surveillance System (BRFSS)	2004-2010
	Lack of physical activity (% of adults reporting no PA in past month)	40.7%	38.1%	35.4%	41.9%	31.5%	-	National Center for Chronic Disease Prevention and Health Promotion, calculated from BRFSS	2009
	Consume 5 or more fruits & vegetables/day	14.6%	16.2%	16.9%	12.7%	-	-	Kentucky Health Facts	2005-2009
	Percent of adults who received flu vaccine in past year	38.2%	39.3%	36.1%	30.3%	-	-	Kentucky Health Facts	2008-2010
	Tooth loss (percent of adults missing 6 or more teeth)	37.7%	37.5%	31.5%	43.6%	-	-	Kentucky Health Facts	Avg 2006-2010
Diabetes Indicators	Diabetes screenings (Medicare enrollees that receive screening)	76.8%	67.0%	74.3%	78.9%	82.4%	89%	Medicare claims/Dartmouth Atlas	2009
	% of population with diabetes	16.3%	22.0%	12.7%	21.8%	-	-	Kentucky Health Facts	2008-2010
Physical Factors	# of recreational facilities (per 100,000)	0	1	1	0	337	17	Census County Business Patterns	2009
	Air pollution - particulate matter days	0	0	0	0	2	0	***CDC-Environmental Protection Agency (EPA) Collaboration***	2007
Access to Care	Primary care physicians (per 100,000)	1.3	0.6	0.8	0.7	1.0	-	Kentucky Health Facts	2009
	Immunization coverage (ages 19-35mo)	81.8%	85.5%	80.8%	81.8%	80.0%	-	Kentucky Health Facts	2007
	% of uninsured adults	24.5%	28.4%	23.2%	24.3%	-	13%	Kentucky Health Facts	2009
	% of uninsured children	8.0%	7.0%	7.7%	6.8%	-	-	Kentucky Health Facts	2009
	Poor mental health days (average/month)	5.9	5.9	6.3	5.7	4.3	2.3	BRFSS	2004-2010
Cancers	Cancer deaths (per 100,000)	264.61	254.26	261.48	217.07	211.55	-	Kentucky Health Facts	2004-2008
	Lung cancer deaths (rate per 100,000)	108.33	117.58	93.53	89.79	75.06	-	Kentucky Health Facts	2004-2009
	Colorectal cancer deaths (rate per 100,000	21.43	missing	17.57	missing	19.93	-	Kentucky Health Facts	2004-2010
	Breast cancer deaths (rate per 100,000)	35	32.13	30.4	missing	23.41	-	Kentucky Health Facts	2004-2011
	Prostate cancer deaths (rate per 100,000)	22.53	missing	42.62	missing	25.21	-	Kentucky Health Facts	2004-2012
Repiratory Illness	Percent of adults with asthma	21.0%	23.7%	21.4%	26.3%	-	-	Kentucky Health Facts	2008-2010
	Number of asthma hospitalizations (3 yr Average)	134	14	262	31	6837	-	KIDS COUNT DATA CENTER	2009-2011

Secondary Data Analysis: Hospital Utilization Data

Tables 4 through 9 provide a description of Highlands Regional Medical Center's patients, in particular, where they come from, how they pay, and why they visited. Table 4 details the patient origin of all of HRMC's patients (inpatient visits only) during the July 1, 2010 through June 30, 2011 (HRMC fiscal year). Roughly 44% of the patients reside in Floyd County, 22.2% originate from Johnson County, 12.1% from Magoffin, and 9.6% from Martin. The length of stay (LOS) ranges between 2 to 10 days. The average charge per inpatient was $12,217 and the average stay was 4.2 days. In total, there were 24,761 patient days, which would represent an average capacity of 67.9 beds per day, at approximately 37% capacity (AHD.com).

Table 4 Inpatient Origin Report, 7/11 – 6/12

County	Discharges	Patient Days	Average LOS	Total Charges	Average Charges
Floyd	2,934	12,490	4.26	$ 36,982,225	$ 12,605
Johnson	1,487	6,141	4.13	$ 17,932,967	$ 12,060
Magoffin	809	3,087	3.82	$ 9,107,011	$ 11,257
Martin	640	2,609	4.08	$ 7,946,921	$ 12,417
Pike	388	1,964	5.06	$ 4,592,869	$ 11,837
Knott	198	728	3.68	$ 2,342,561	$ 11,831
Lawrence	90	326	3.62	$ 971,089	$ 10,790
Morgan	28	128	4.57	$ 348,397	$ 12,443
Letcher	25	177	7.08	$ 301,711	$ 12,068
Perry	25	115	4.60	$ 205,802	$ 8,232
Breathitt	24	104	4.33	$ 300,064	$ 12,503
Mingo, WV	17	167	9.82	$ 401,104	$ 23,594
Wolfe	9	85	9.44	$ 88,864	$ 9,874
Newton, GA	4	9	2.25	$ 57,537	$ 14,384
Madison, KY	4	32	8.00	$ 40,936	$ 10,234
Wayne WV	4	14	3.50	$ 60,171	$ 15,043

The inpatient market share is provided in Table 5. The data suggest that 34.1% of Floyd County residents utilize HRMC. The remaining 63.9% of Floyd County residents (who utilized inpatient care) used Pikeville Medical Center (22.9%), Saint Joseph Martin (8.1%) and McDowell ARH (8.9%) and other less utilized hospitals. The following percentage used inpatient services at HRMC from Johnson (27%), Magoffin (28.4%), and Martin (27.6%).

Table 5 Inpatient Market Share, 7/11 – 6/12

Originating County	Highlands	Pikeville	McDowell ARH	Saint Joseph Martin	Hazard ARH	Kings Daughter	Univ Kentucky	Central Baptist	Paul B Hall	Three Rivers	Saint Joseph East	Saint Joseph Hospital	Other
Floyd	34.1%	22.9%	8.9%	8.1%	6.0%	5.8%	3.5%	1.8%	1.6%	1.4%	1.3%	1.1%	3.5%
Johnson	27.0%	4.2%	0.1%	0.2%	2.1%	13.1%	2.5%	1.1%	40.8%	3.9%	1.7%	0.6%	2.8%
Magoffin	28.4%	4.0%	0.0%	0.4%	2.2%	7.7%	3.4%	3.4%	37.7%	1.3%	2.9%	1.0%	7.7%
Martin	27.6%	2.4%	0.0%	0.1%	1.6%	21.9%	2.2%	0.7%	7.3%	27.6%	0.7%	0.1%	7.7%

Table 6 suggests that approximately 40% of the total inpatient visits were paid for by Medicare, 34.6% by Medicaid, and 17.1% were paid by commercial insurance. The average charges were highest for Medicare, Medicaid Managed Care, and other federal programs and the lowest charges for Commercial HMO, Medicaid, and Champus patients.

Table 6 Inpatient Payer Mix, 7/11 – 6/12

Payer	Discharges	Average LOS	Total Charges	Average Charges
Medicare	2698	5.7	$ 42,862,171	$ 15,887
Medicaid	2326	3.1	$ 19,987,663	$ 8,593
Commercial – Mix	1147	3.3	$ 12,587,553	$ 10,974
Self-Pay	396	3.3	$ 4,676,054	$ 11,808
Other Federal Programs	74	5.4	$ 973,390	$ 13,154
Medicare Managed Care	45	4.7	$ 660,361	$ 14,675
Workers Compensation	16	3.9	$ 162,393	$ 10,150
Champus	9	2.6	$ 60,499	$ 6,722
Commercial – Indemnity	6	2.7	$ 54,554	$ 9,092
Commercial – HMO	3	2	$ 20,836	$ 6,945
Other	1	2	$ 22,851	$ 22,851

Table 7 describes the age and gender breakdown of inpatient visits. Overall 60.7% of the inpatient visits were made by females for adults between age 18 and 44; 79% of the discharges were females. Individuals age 65 and older represented 32% of discharges. Average charges rose with age as did the average length of stay.

Table 7 Inpatient Discharges by Gender and Age, 7/11 – 6/12

Age group	Total Discharges	Females	Males	Average Charges	Average LOS
0 – 5	1,208	549	659	$ 3,076	2.2
6 to 17	280	158	122	$ 6,484	2.3
18 to 44	1,457	1,151	306	$ 11,264	3
45-64	1,581	902	679	$ 15,850	4.8
65-74	963	534	429	$ 15,971	5.5
75 to 84	813	496	317	$ 6,171	6.1
Older than 85	419	290	129	$ 15,606	6.2

Table 8 provides an overview of the diagnosis-related group for the inpatient visits. Twenty-three percent (23%) and nearly $18.5 million of total charges for inpatient stays were pulmonary (lung) related. Nearly 10% of the visits were related to cardiovascular disease. Over 400 of the discharges were for general surgery (average charge: $29,282). The largest average charge was for orthopedic inpatients (82 discharges and an average charge of $31,465).

Table 8 Inpatient DRG and discharges by county, 7/11 – 6/12

DRG	Discharges	Average LOS	Average Charge	Floyd	Johnson	Magoffin	Martin
Surgery – Cardiovascular & Thoracic	72	6	$ 25,083	33	18	8	7
Surgery – Orthopedics	82	5.4	$ 31,465	32	24	12	8
Surgery – Oncology	8	2.4	$ 15,229	4	2	0	0
Surgery – Nephrology/urology	14	6.2	$ 2,722	9	3	1	1
Surgery – Otolaryngology	8	2.4	$ 29,147	4	1	0	1
Surgery – Gynecology	116	2.3	$ 15,155	51	15	11	6
Surgery – General	435	5.9	$ 29,282	174	102	60	36
Medicine – Cardiovascular Disease	625	3.8	$ 11,997	304	160	52	62
Medicine – Orthopedics	53	4.7	$ 11,518	23	16	7	4
Medicine – Neuro Sciences	214	7.3	$ 12,900	96	42	24	14
Medicine – Oncology	99	5.3	$ 15,067	39	29	14	6
Medicine – Nephrology	310	4.2	$ 11,538	143	66	44	33
Medicine – Otolaryngology	121	2.3	$ 5,693	58	27	17	8
Medicine – Ophthalmology	9	3	$ 7,182	2	5	1	0
Medicine – Pulmonary	1550	4.6	$ 11,884	678	354	204	174
Medicine – General	1563	3.7	$ 12,022	694	359	186	176
Obstetrics Del	606	2.4	$ 7,264	248	113	82	41
Obstetrics ND	51	2.4	$ 6,336	26	10	4	7
Neonatology	153	2.1	$ 1,944	63	37	18	9
Normal Newborns	418	2	$ 1,512	170	69	53	35
Psychiatry	193	12.6	$ 14,023	65	33	11	12
Chemical Dependency	21	5	$ 8,749	18	2	0	0

Tables 9 through 11 provide an overview of who uses the hospital for outpatient purposes. Roughly 40% of patients who used HRMC's outpatient services resided in Floyd County, 26% lived in Johnson County, 13.5% lived in Magoffin County and 8% lived in Martin County. The vast majority of the visits were paid through Medicaid, Medicare or commercial insurance. Table 11 provides a summary of the most common outpatient procedures at HRMC. The two most common procedures are colonoscopies and endoscopies.

[Table 9 and 10 on the following page]

Table 9 Outpatient Origin Report by County, 7/11 - 6/12

County	Discharges	Average Charges
Floyd	2385	$ 6,474
Johnson	1528	$ 6,817
Magoffin	799	$ 6,359
Martin	481	$ 6,812
Pike	296	$ 7,471
Knott	188	$ 7,436
Lawrence	107	$ 7,010
Morgan	29	$ 8,704
Breathitt	27	$ 5,924
Perry	23	$ 7,451
Mingo, WV	19	$ 6,167
Letcher	12	$ 5,572
Wayne	8	$ 6,113
Boyd	6	$ 3,981
Harlan	4	$ 13,741
Leslie	4	$ 4,154
Rowan	4	$ 5,162
Wolfe	4	$ 3,938

Table 10 Outpatient Payer Mix

Payer	Discharges	Average Charges
Medicaid	1624	$ 6,713
Commercial - Mix	2091	$ 7,095
Self Pay	415	$ 6,171
Medicare	1716	$ 6,216
Workers Compensation	36	$ 6,066
Medicare Managed Care	56	$ 7,052
Champus	14	$ 5,244
Other Federal Programs	15	$ 5,269
Other	3	$ 8,128

[Table 11 on the following page]

Table 11 Outpatient Procedures Summary, 7/11 – 6/12

Description	Discharges	Average Charges
Digestive – Rectum, Anus	1412	$ 5,875
Digestive – Esophagus, Stomach	676	$ 6,317
Skin, Subcut, and Accessory	360	$ 4,284
Female Genital	339	$ 8,324
Digestive – Biliary Tract	330	$ 16,833
Emergency Department	314	$ 1,382
Eye – Anterior Segment	312	$ 4,803
Digestive – Pharynx, Adenoids, Tonsils	215	$ 7,029
Digestive, Abd, Periton, Omentum	164	$ 9,575
Integumentary – Repair, Closure	151	$ 4,054
Musculoskeletal – General	149	$ 5,169
Integumentary – Breast	132	$ 4,168
Auditory System – Middle Ear	114	$ 6,214
Respiratory – Trachea and Bronchi	104	$ 6,186
CT	87	$ 6,646
Cardiovascular – Arteries and Veins	84	$ 6,037
Urinary – Bladder	78	$ 8,735
Musculoskeletal – Foot and Toes	73	$ 6,177
Musculoskeletal – Forearm and Wrist	64	$ 5,350
Maternity Care and Delivery	60	$ 6,636
Muskuloskeletal – Hand and Fingers	52	$ 3,509
Nervous System – Spine, Spinal Cord	49	$ 5,825
Nervous System – E, P & A System	47	$ 11,783
Digestive – Dentoalveolar	45	$ 6,130
Musculoskeletal – Endo/Artho	45	$ 6,119
Respiratory – Nose	43	$ 7,909
Eye – Ocular Andexa	39	$ 4,645
Cardiac Catheterization – Diagnostic	35	$ 12,712
Other Misc Codes	35	$ 5,137
Digestive – Appendix	34	$ 19,097
Respiratory – Accessory Sinus	30	$ 10,903

Primary Data Analysis: Community Engagement and Input

Focus Groups: The communities that serve Saint Joseph Martin (SJM) and Highlands Regional Medical Center (HRMC) conducted four focus groups in the late summer and early fall of 2012 (August 28th, September 12th, September 14th and October 9th). The focus groups included a senior support group, HANDS (Health Access Nurturing Development Services) participants, and community members. A total of 67 participants were involved in the SJM/HRMC focus groups. Participants were introduced to the

CHNA process and asked to complete the Community Health Needs Assessment (CHNA) Survey before discussion began. CEDIK provided three questions that were the foundation for each focus group meeting:

A. What is your vision for a healthy community?
B. What is your perception of the hospital?
C. What can the hospital do to meet the needs of the community?

Documentation from Focus Groups (information from all groups have been compiled below):

*indicates mentioned more than once

Vision for a Healthy Community

- Better Drinking Water *
- Assisted living facilities *
- Recreation Centers and more activities for youth *
- More shopping options
- Stronger economy – more jobs *
- No drug problem – prescription and non-prescription *
- Urgent treatment facilities that provide afterhours care and also have after hours pharmacy and dental emergency care *
- Affordable housing

Perception of Hospitals

- SJM and HRMC – everyone is flown out for "everything" – they can't treat them locally *
- HRMC needs to communicate better with patients and patient family *
- HRMC does not have enough employees to deal with patients *
- HRMC staff is not always courteous and does not take time with patients (especially in ER)*
- HRMC ER wait time is too long *
- HRMC billing is antiquated, they won't take your co-pay (instead they say they will bill you later, but they turn it into collections before they contact you) *
- Doctors at HRMC are overbooked – can drive to Lexington and back before seen at HRMC

What HRMC Can Do To Meet Community Needs

- Sleep disorder clinic
- More preventative services *
- Prescription cost assistance or help with finding programs
- Ambulance service for other counties *

- Assistance to other communities with obtaining Urgent Treatment Facilities or have hospital staff assist at these facilities *
- Diabetes education *
- Walking programs
- Help support financially and with staff – school programs – DARE, PSI, Tattoo *
- More variety of specialists *

Surveys: The hospital steering committee from both hospitals, along with input from several members of the Community Steering Committee, adapted CEDIK's CHNA survey template. A copy of the survey is provided in the appendix. Surveys were distributed to the members of the Community Steering Committee to distribute to the community. In addition, surveys were also provided to patients as they were discharged from both Saint Joseph Martin and Highlands Regional Medical Center.

In total, 480 surveys were returned for both hospitals. Of those 480 surveys, 183 of the respondents visited Highlands Regional Medical Center (and not Saint Joseph Martin) in the last two years. The survey results for those who used both Highlands and Saint Joseph Martin are provided in the next section. Fifty-five (55) respondents also visited hospitals in Lexington, Pikeville, Ashland, Paintsville, ARH/McDowell, and Huntington, West Virginia.

There were a total of 99 of the respondents who said they visited the Highlands Regional Medical Center emergency department. Approximately 29% of those visits were self-reported as life threatening issues; 39% of the respondents utilized outpatient services, and 33% utilized inpatient services.

Of those who used a hospital other than Highlands, 29% did so because the services they needed were not available, 4.8% just prefer larger hospitals. There were 56% of those that bypassed Highlands did so for "other" reasons including: personal preference for a Lexington hospital, established a relationship with a doctor that uses a different hospital and referral was made elsewhere.

Respondents also provided their perception of quality of care at Highlands Regional Medical Center. In total nine respondents were dissatisfied, 32 were neutral about their experience, and 134 were satisfied.

Because both hospitals were interested in the type of specialty services that were in demand, the survey specifically asked about the specialty services patients used anywhere, and specifically at Highlands. The results are provided in Table 12. Smaller percentages in the last column suggest that a larger share of patients did not use the specialty services at HRMC and went elsewhere. For example, 28.3% of the respondents used cardiology services, of those, 71% used cardiology at HRMC. The rows that are highlighted indicated the services where more than a quarter of the respondents went somewhere besides HRMC for care.

[Table 12 on the following page]

Table 12 Specialty Services Utilized

Services	% of respondents using the service anywhere	% of respondents using HRMC's services (of those who said they use the service)
Cardiology	28.3%	71.1%
OBGYN	18.5%	94.1%
Radiology	37.0%	88.2%
Neurology	8.2%	66.7%
Psychiatry	1.6%	33.3%
Oncology	2.2%	75.0%
Urology	8.7%	75.0%
Orthopedics	5.4%	70.0%
Pulmonary	11.9%	86.4%
Pediatrics	11.4%	100%
Dialysis	2.2%	100%
Family Practice	22.2%	80.4%
Outpatient Services	26.6%	93.9%

Table 13 provides some detail about the respondents' health risks. To ensure that there was broad community input, HRMC wanted to ensure that they were engaging the medically needy population. The results in Table 13 suggest that 32% of the respondents or a member of the respondent's family has diabetes, 50% have high blood pressure, and 7% of the respondents or a member of their family have cancer.

Table 13 Prevalence of Disease Among Survey Respondents

Do you or anyone in your family have…?	Percentage of respondents who indicated yes
Diabetes	32%
High Blood Pressure	50%
Cancer	7%
Heart Disease	26%
Mental Illness	11%

In addition, Table 14 provides evidence that the survey reached a lower-income population. Of the respondents, 45% stated that they had delayed health care due to a lack of money or insurance. Approximately 32% of the households that responded did not have health insurance while 24% and 40% were enrolled in Medicaid and Medicare, respectively. Twenty-seven percent (27%) of the households received SNAP ("Supplemental Nutrition Assistance Program") assistance. As a result of the characteristics of the survey sample, the needs that have been suggested throughout the surveys reflect the needs of those who have high health risks and don't necessarily have affordable access to health care.

Table 14 Respondents' Financial Situation

Have you or someone in your household delayed health care due to lack of money and/or insurance?	45% yes
Are you or members of your household currently eligible for	
Medicare	40%
Medicaid	24%
Public Housing Assistance	8%
SNAP	27%
Are you or anyone in your household without health insurance currently?	32%

Both hospital steering committees had a genuine interest in understanding how residents perceived the path to a healthier community. The survey specifically asked, "What do you think are the THREE most important factors for a healthy community and improving the quality of life in your community?" There were eighteen (18) choices provided to the respondent to choose from. The most often selected choice was "access to health care," "good jobs and healthy economy," "religious or spiritual values," and "low crime and safe neighborhoods".

1. Access to Health Care
2. Good jobs and healthy economy
3. Religious or spiritual values
4. Low crime and safe neighborhoods

Other options to choose were:

- Good place to raise children
- Healthy behaviors and lifestyles
- Good schools
- Clean Environment
- Strong family life
- Affordable housing
- Supportive services for seniors
- Low level of child abuse
- Emergency preparedness
- Low adult death and disease rates
- Parks and recreation
- Arts and cultural events
- Low infant deaths
- Excellent race and ethnic relations

The survey ended with an open ended question: "What could the Hospital do to better meet you and your household's health needs (educational programs, after-hours access, outpatient services)?" The responses are loosely categorized as "access to after hour care," "education program requests," "quality of care," and "services" below.

Access to After Hours Care

Education Program requests

- Drug/tobacco
- Domestic violence program
- Healthy cooking and living

Quality of Care Responses

- Better care
- Physicians and nurses to have better bedside service and to give more time to the patient
- More Doctors
- Shorter wait times in the ER/ faster service

Services

- Additional outpatient services
- Specific services often requested: Blood Work/X-ray/Labs, Sonogram, Mammogram
    - Orthopedics
    - Cancer
    - Cardiology
    - Colonoscopy
    - Asthma Care

Supplemental Data: There were also additional respondents who used both Saint Joseph Martin & Highlands Regional Medical Center in the last two years. These responses were included separately. However, the responses are useful for planning purposes and should be included in the analysis.

Twenty-two (22) of the respondents used both Highlands and Saint Joseph Martin in the last two years. Eleven respondents also visited a Lexington, Ashland, or Pikeville hospital. There were 25 total visits to the emergency department among the respondents (some used the ED for both life threatening and non-life threatening purposes). Approximately 27.3% of those visits for were for self-reported life threatening issues, 72.7% of the respondents utilized outpatient services, and 22.7% utilized inpatient services.

Of those who used a hospital other than Saint Joseph Martin or Highlands, 13% did so because the services they needed were not available. The remainder of the reasons included choice of surgeons and what hospital the EMT service took them.

Respondents also provided their perception of quality of care at either Saint Joseph Martin or Highlands. In total, no one was dissatisfied, five were neutral about their experience, and 14 were satisfied.

Table 15 Respondents' Specialty Service Utilization (Supplemental Surveys)

Services	Number of respondents using the service anywhere	Number of respondents using Highlands	Number of respondents using Saint Joseph Martin
Cardiology	4	2	3
OBGYN	6	3	2
Radiology	12	12	9
Neurology	4	2	1
Psychiatry	0	0	0
Oncology	1	1	0
Urology	2	2	0
Orthopedics	1	0	0
Pulmonary	2	1	0
Pediatrics	3	3	0
Dialysis	0	0	2
Family Practice	7	4	4
Outpatient Services	12	6	5

Again, both hospitals were interested in the type of specialty services that were in demand. The survey specifically asked about the specialty services patients used "anywhere," "at Saint Joseph Martin," and "at Highlands Regional Medical Center." The results are provided in Table 13. Again, Saint Joseph Martin appears to be outsourcing OBGYN as well as urology and pediatrics.

Table 16 provides some detail about the respondents' health risks. The results in Table 16 suggest that 27.3% of the respondents or a member of the respondent's family has diabetes, 63.6% have high blood pressure, and nearly 4.5% of the respondents or a member of their family have cancer.

Table 16 Respondents' Health Risks (Supplemental Surveys)

Do you or anyone in your family have…?	Percentage of respondents who indicated yes
Diabetes	27.3%
High Blood Pressure	63.6%
Cancer	4.5%
Heart Disease	13.6%
Mental Illness	4.5%

Table 17 shows 45% have delayed health care due to a lack of money and/or insurance. Approximately 32% of the households that responded did not have health insurance while 22.7% and 27.3% were enrolled in Medicaid and Medicare, respectively. Thirteen percent of the households received SNAP (Supplemental Nutrition Assistance program) assistance.

Table 17 Respondents' Financial Condition (Supplemental Surveys)

Have you or someone in your household delayed health care due to lack of money and/or insurance?	45% yes
Are you or members of your household currently eligible for	
Medicare	27.3%
Medicaid	22.7%
Public Housing Assistance	9%
SNAP	13.6%
Are you or anyone in your household without health insurance currently?	31.8%

V. PRIORITIZATION OF IDENTIFIED HEALTH NEEDS

After review of the survey results and focus groups that included local civic leaders, patients, patient advocates, and health professionals at the state and local levels, the priorities were identified as community concerns. Identifying the needs of the community provides Highlands the opportunity and the knowledge to better align existing programs and to design future efforts to best meet the needs of our community.

Through the community health needs assessment process, it was evident that many involved in the process recognized access to services, education issues, quality of care, and the downturn in the economy. To establish the main concerns of identified health needs, a ranking and prioritization process was used as follows:

1. The ability of Highlands 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
5. How closely does the need align with Highlands strategies
6. Does Highlands have existing programs which respond to the identified need

The following were taken into account the degree to which Highlands can influence long term change and impact the identified health needs on the overall health of the community we serve. Highlands will continue to work with the community to execute the implementation plan and realize the goals that have been positioned to build healthier Floyd, Johnson, Martin, and Magoffin counties.

Existing Education Programs

The annual operating budget of Highlands includes designated operating expenditures for several departments dedicated to community benefit including CPR/First Aid, Diabetes Education, Women's Health, Pre-natal and Post-natal Education, Health Fairs and Screenings, Heart Disease Education, Mental Health/Depression Education, Nutrition/Weight Management Education, Senior Care, Tobacco/Smoking Cessation, Sports Physicals, and HealthTeacher Curriculum for Kindergarten-12.

Highlands continues to support area non-profit organizations who educate/support the individuals that are underinsured and underserved in our community service area by attending and being active in local planning meetings that concentrate on the overall wellness of our region. By becoming active in these meetings, Highlands gains access to the population that is affected by lack of health education due to geographical location and or socio-economic factors.

A. GOAL 1. Access to Services, Education, Outreach, After Hours Care, Quality of Care

Access issues can also be attributed to lack of education or understanding of healthcare systems, and the language used to communicate diagnosis, treatment, medications and overall care. Many patients and families faced with healthcare issues struggle with comprehension of communication given by the physician or hospital in terms of availability of care, treatments, medications, and resources. Geographic isolation, socio-economic status, health risk behaviors and limited job opportunities contribute to health disparities in our rural area.

Findings

- ✓ After hours health care; large emphasis on zip code 41465 and moderate emphasis on 41601 and 41653
- ✓ Assistance to other communities with obtaining urgent treatment facilities or have hospital staff assist at these facilities
- ✓ More specialists (variety of specialists listed)
- ✓ More preventative services
- ✓ Ambulance service for other counties
- ✓ Many requested additional outpatient services
- ✓ Specific services often requested: Blood work/X-ray/Labs, Sonogram, Mammogram
    - Orthopedics
    - Cancer

- Cardiology
- Colonoscopy
- Asthma Care

Disparities in access/education to health information, services, and technology can result in:

- Lower participation in preventive health issues
- Lower usage rates in preventive services
- Less knowledge of chronic disease management
- Higher rates of hospitalization
- Poorer reported health status
- Poor compliance with care plans
- Increased health costs

Key Objectives:

1. Provide community education on how to access health care and improve decision making skills among members of the community; improve health care communication/understanding among health care providers, patients, and caregivers.
2. Educate high-risk populations about the impact of health behaviors on their overall health and well-being.
3. Continue to establish after-hours clinics in Highlands' service area counties where access to after-hours care is not offered and where patients' option is a visit to the emergency department.

Implementation Strategies related to Key Objectives:

1. **Provide community education on how to access health care and improve decision making skills among members of the community; improve health care communication/understanding among health care providers, patients, and caregivers**
    a. Ensure adequate resources for outreach to patients for screening and intervention programs; provide health fairs and screening programs broadly throughout the community.
    b. Develop a Speakers Bureau to make available presentations and provide programs to local businesses, school systems, clubs or organizations free of charge to include topics of general wellness, health care updates, smoking cessation, cardiovascular disease, nutrition, diabetes, high blood pressure, men's and women's health, sports medicine, physical therapy, senior health, home health/skilled nursing, and cancer.
    c. Assist in the development of a healthy lifestyles on-line program and more thorough calendar of events that provide information regarding free health screenings, community education, and events promoting a healthy lifestyle.
2. **Educate high-risk populations about the impact of health behaviors on their overall health and well-being.**
    a. Focus on preventing early childhood obesity by providing nutritional programs based on a curriculum geared to children ages 3-4 in the local systems' Head Start classrooms and private pre-school programs. Kentucky has a high incidence of childhood obesity at 15.6%. Education of the primary parent or guardian along with the children will be key factor in developing the program.

b. Through educational programming offered to all school systems in our four county service area, Highlands will work with the students at a young age to determine their Body Mass Index (BMI) to determine their appropriate weight/ height and encourage better life long choices in regards to diet/ nutrition and exercise.
c. Identify "at risk" children aged 10-14 who have early onset, undiagnosed chronic diseases. Develop and implement appropriate programs to help manage/prevent disease progression.

3. **Continue to establish after-hours clinics in Highlands' service area counties where access to after-hours care is not offered and patients' option is a visit to the emergency department.**
    a. Provide after-hours clinics in the areas of Floyd and Magoffin counties where health care providers are not available for patients in the evening hours and weekends. Zip Code 41465 in Salyersville (Magoffin) and zip code 41601 in the Allen/Betsy Layne/Harold (Floyd) communities were identified.

B. GOAL 2. Financial Assistance

The ability to let our patient know that financial assistance is available can be difficult. Clear communication about financial assistance is a challenge internally as well as with patients. Intervening early and increasing awareness of payment plans can help avoid financial challenges down the road. We have made some billing errors in which patients got collection notices before they received bills. This is not acceptable and we propose the following strategy to address to the community. The community we serve is a valuable partner of Highlands and we want to know if our patients face barriers to receiving services.

Access to quality health care, particularly primary health care, is critical for early diagnosis and treatment of medical conditions. Determining whether an individual will have access to quality health care include: health insurance, household income level, source of primary care, and use of emergency rooms. There are significant barriers to accessing quality medical care. For instance, needing medical care but could not afford, need prescriptions but could not afford, skipped doses and/or took smaller amount of prescription due to the cost.

Key Objectives:

1. Serve patients more efficiently and improve aid to those in need of financial assistance. Financial assistance policies and practices will be promoted to ensure clear and consistent communication between staff and patients. Internal staff should be educated and trained to offer financial counseling to all new patients.
2. Financial assistance telephone helpline. Establish Helpline for patients previously seeking financial assistance who may have missed the opportunity when they were at Highlands for services.

Implementation Strategies related to Financial Assistance

1. **Serve patients more efficiently and improve aid to those in need of financial assistance. Financial assistance policies and practices will be promoted to ensure clear and consistent communication between staff and patients. Internal staff should be educated and trained to offer financial counseling to all new patients.**

a. Ensure that education is provided to all employees who may be in contact with patients in need of financial assistance and that the information is provided for those patients who qualify or the patient is provided the contact information to determine eligibility. This is including but not limited to those un-insured and those that have insurance with high deductible that may need assistance to meet their financial obligation for care.
b. Develop a program of education on opportunities for patients to receive prescription assistance. Training for clinical professionals and registration personnel to recognize the need for the patient with the utmost confidentiality and understanding.
c. Provide education materials to physician offices to increase opportunities for patients understand health care costs and opportunities for financial assistance.

2. Financial assistance telephone helpline and website link.

a. Establish Helpline and website link for patients previously seeking financial assistance prior to a medical visit or who may have missed the opportunity when they were at Highlands for services. This would also allow privacy for those who are uncomfortable or self-conscious in the hospital setting to discuss.

VI. COMMUNITY ASSETS

There have been some positive strides to addressing the issues mentioned by the key participants in the Community Health Needs Assessment. There has been an increase in the amount of health related information and education provided to our community. The community appears to be more in sync with their health care needs and is seen by the increased community involvement through health fairs. Highlands has increased the number of facilities to provide services and we use case management to connect people to the appropriate services and programs. There has also been an increase in free testing and screenings made available.

Highlands continues to provide an online health curriculum to all school educators and health departments in our 4 county service area to assist in meeting the needs of education for school ages K-12. In addition, health career fairs to middle and high schools in the 4 county service area provide education and leadership opportunities by involving students in opportunities in health care.

In the Highlands community, the best way to provide information is through marketing events such as health fairs, leverage existing partnerships with community based resources such as churches, school systems, local businesses, to make connections with the community.

Exclusions

While every area in which we had findings is of concern, the call to show focused, measureable results as a long term outcome of this plan, means not every identified disparity/need will be part of this plan. Some likely will be addressed by other providers in the area. Areas of exclusion in this plan include:

- Domestic Violence/Child Abuse – This is outside the scope of our Mission, however, consultation and referrals are made by the Highlands social worker upon an identified need to programs available in the community with mandated reporting per hospital policy.
- Good Jobs and Healthy Economy – Outside the scope of our Mission.
- Low Crime and Safe Neighborhoods – Outside the scope of our Mission.

- Good Schools – Outside the scope of our Mission.
- Clean Environment – While Highlands is a good steward of maintaining a clean environment, this is outside the scope of our Mission.
- Religious/Spiritual Values – While Highlands does have a Chaplin on call for patients and families to answer spiritual requests during their stay at the hospital, overall improving the religious and spiritual values of the community is outside the scope of our Mission.
- Arts, Cultural Events, Parks, and Recreation – Highlands' Mission does provide for sponsoring community events, however, the call to show measurable results as part of the outcome of this plan would be difficult.

VII. IMPLEMENTATION PLAN ADOPTION AND APPROVAL

All the data, interviews and community input were complied and reviewed by Highlands Senior Leadership Team. Upon recommendation of Senior Leadership, the Highlands Regional Medical Center Board of Trustees has approved adoption of the Community Health Needs Assessment and Implementation Plan. We understand our responsibility to reinvest in our facility and programs to serve the community and to provide community benefit.

This plan has been adopted into practice to help guide our efforts in community involvement based on the findings from the community focus groups and surveys. Our implementation process/strategies will help drive our community benefits under the two (2) key goals. We feel this will make our communities stronger and better.

APPROVED BY THE HIGHLANDS REGIONAL MEDICAL CENTER BOARD OF TRUSTEES ON 22

DAY OF APRIL, 2013.

_____

Edward R. Nairn, Chairman of the Board

_____

Harold C. Warman, Jr., President/CEO