

Norton Healthcare



KOSAIR CHILDREN'S HOSPITAL

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Mission Vision & Values

Mission

Norton Healthcare's purpose is to provide quality health care to all those we serve, in a manner that responds to the needs of our communities and honors our faith heritage.

Vision

We will be the region's most comprehensive, strongest and preferred health care organization, setting the standard for quality and caring.

Values

At Norton Healthcare, we will:

- Respect every person
- Set the standard for quality and caring
- Continually improve care and service
- Demonstrate stewardship of resources
- Accept accountability for results
- Succeed with integrity

Our Faith History

Norton Healthcare's faith history includes founding organizations and other faith communities: Episcopal Church, United Methodist Church, United Church of Christ, Presbyterian Church and Roman Catholic Church.

Summary Statement

Requirements

The Community Health Needs Assessment is a requirement for tax-exempt, non-government hospitals. As outlined in 26 USCA § 501(r)(3) Notice 2011-52 and Schedule H of IRS Form 990 the following criteria was met:

- ✓ A definition of the community served by the hospital
- ✓ Demographics of the community
- ✓ Existing health care facilities and resources within the community that are available to respond to the health needs of the community
- ✓ How data was obtained
- ✓ The health needs of the community
- ✓ Primary and chronic disease needs and other health issues of uninsured persons, low-income persons and minority groups
- ✓ The process for identifying and prioritizing community health needs and services to meet the community health needs
- ✓ The process for consulting with persons representing the community's interests
- ✓ Information gaps that limit the hospital facility's ability to assess the community's health needs
- ✓ The process was declared by the organization as being centralized with each hospital publishing a separate report
- ✓ Each hospital's assessment will be published on the website and will be available in any reasonable manner requested

Findings

Identifying the health care needs of a population over a million people in seven counties is a large undertaking. Norton Hospital's Inc. has developed a framework and processes to manage the required components for this initial assessment and future assessments.

The 2013 Community Health Needs Assessment identified the following areas of health needs in the community:

- Heart Disease / Hypertension
- Cancer Incidence & Mortality
- Obstetrical care areas of prenatal care and teen births
- Infant care with a focus on lower birth weight, infant mortality, as well as drug addicted newborns
- Diabetes
- Obesity
- Mental Health
- Tobacco Use / COPD
- Health Literacy
- Inclusion

These health needs were then prioritized taking into account the perceived degree of influence that each hospital carried and its ability to impact the needs as well as the health needs impact on overall health.

Norton Healthcare plans to engage in further conversations with internal and external leaders related to cultural awareness, language barriers, health literacy, education and poverty concerns. However, as much as each hospital provider would like to respond to each and every health care need identified in the community health needs assessment it is impossible, as each provider has a finite limit on fiscal and human resources and in some cases expertise.

Next Steps

- Evaluate opportunities to participate in the development and execution of a community-wide community benefit plan with Louisville Metro Public Health & Wellness and other Louisville hospitals

Purpose Statement

IRC Section 501(r) requires health care organizations to assess the health needs of their communities and adopt implementation strategies to address 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 present 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.

The community health needs assessment report for each hospital within Norton Hospitals, Inc., describes both a process and a document and is intended to satisfy compliance with IRC Section 501 (r). Health needs of the community have been identified and prioritized so that each hospital may adopt an implementation strategy to address the specific needs of its respective community.

The *process* involved:

- Collection and analysis of a large range of data, including demographics, socioeconomic characteristics, health statistics, and health care resources.
- Forums with community members 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 the community health needs assessment 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 the planning to meet those needs.

Summary of Community Health Needs Assessment

This community health needs assessment was funded by Norton Healthcare, Inc. The purpose of the community health needs assessment is to document compliance with new federal laws previously outlined. The community health needs assessment was conducted from February 2012 to December 2012.

Based on current literature and other guidance, the following steps were conducted as part of the community healthcare needs assessment:

- The community's served for each hospital was defined by patient origin demographics for inpatients stays. This process is further described in the section, Communities Served by Norton Healthcare.
- Population demographics and socioeconomic characteristics of the community were gathered and reported utilizing various third parties. 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 five community forums and a community health survey was widely distributed by the Louisville Metro Department of Public Health and Wellness. The Community Health Survey was completed by 45 individuals that attended the public forums along with 1,826 online survey respondents; in addition to another forum where 40 business leaders and physicians attended. Findings are described in the Community Health Survey section of this report.
- Health needs were then prioritized taking into account the perceived degree of influence that each hospital carried and its ability to impact the needs as well as the health needs impact on overall health.
- Recommendations based on this assessment have been communicated to the Norton Healthcare Board of Trustees as well as the leadership of Norton Healthcare and hospital Presidents.

General Description of Norton Healthcare

The corporation is a Kentucky non-stock, non-profit corporation, exempt from federal income taxation as an organization described in Section 501 (c)(3) of the Internal Revenue Code. The corporation is the parent company of an integrated healthcare delivery system headquartered in Louisville, Kentucky. The organization includes the following legal entities:

- Norton Hospitals, Inc.
- Community Medical Associates, Inc.
- Norton Properties, Inc.
- The Children’s Hospital Foundation, Inc.
- Norton Healthcare Foundation, Inc.
- Norton Enterprises, Inc.
- Clinical Associates, Inc.
- Norton Louisville Primary Care Center, Inc.

The Affiliates, other than Norton Enterprises, Inc., Clinical Associates, Inc. and Norton Louisville Primary Care Center, Inc., are Kentucky non-stock, non-profit corporation, exempt from federal income taxation as an organization described in Section 501 (c)(3) of the Internal Revenue Code.

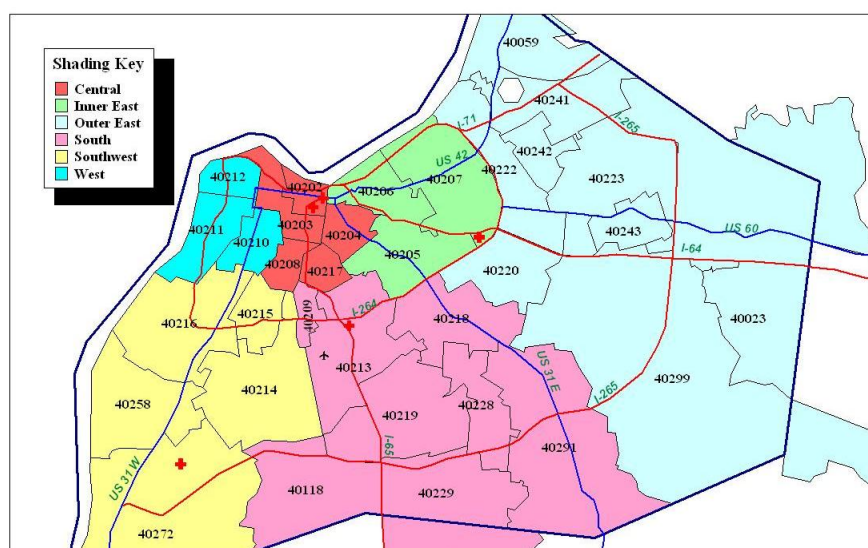
Norton Hospitals, Inc. owns and operates five hospitals located in Louisville and Jefferson County, Kentucky, with 1,837 licensed beds and 1,350 staffed beds (as of October 5, 2012). Note that Kosair Children’s Hospital and Norton Hospital operate individually pursuant to one combined hospital license.

- Norton Hospital/Kosair Children’s Hospital has 905 licensed beds and 620 staffed beds.
- Norton Audubon Hospital has 432 licensed beds and 268 staffed beds.
- Norton Suburban Hospital, future home of Norton Women’s and Kosair Children’s Hospital has 373 licensed beds and 359 staffed beds.
- Norton Brownsboro Hospital has 127 licensed beds and 103 staffed beds.

For more than a century, the residents of Kentucky and Southern Indiana have trusted the Norton name for dedicated and compassionate care. In 2011, Norton Healthcare had 2.0 million visits, 61,828 admissions and 47.2% market share based on Louisville hospital state data. With a network of five hospitals in Louisville, Norton Healthcare is the largest health care system in the region, providing a full range of medical services and is the third largest employer with over 11,000 employees and 2,300 plus medical staff operating in more than 140 medical sites.

Jefferson County Segments

Norton further segments Jefferson County when evaluating community needs, as shown below.



Defined Community

CHNA requirements outline that each hospital must prepare a separate written report and identify any collaborating partners. Each of the five Norton hospitals officially declare collaborating from an integrated healthcare system perspective, primarily to identify community need and allocate (especially scarce) resources most effectively. Norton's intent is to wholly comply with each CHNA requirement thus each hospital will prepare a separate written report while collaborating as an integrated healthcare system.

Based on the previously shown reference maps it's clear that Norton patients, collectively, come from a large geographic area. CHNA requirements also state that each hospital must identify its specific community and demonstrate how that community was determined. Overall, as an integrated healthcare system, the organization continuously monitors healthcare activities in the primary and secondary service areas.

To meet the CHNA criteria, a community is being defined as the geographic area from which a significant number of the patients utilizing hospital services reside. To provide focused impact, the following criterion was established to define the community for each respective hospital is as follows:

- A county must represent 5 percent or more of the hospital's total inpatient discharges.
- For Jefferson County, the county segment must represent at least 5 percent of the hospital's total inpatient discharges.
- The hospital's market share for the area must be greater than or equal to 5 percent.
- The area is contiguous to the geographical area encompassing the hospital.

Based on the 2011 patient origin of acute care inpatient discharges, management has identified the community for each specific hospital to include the geographic areas identified in the table below. As you can see a significant portion of the PSA is being included in the CHNA analysis. To provide a complete viewpoint, the PSA will be depicted when possible.

Geographic Area Priorities / CHNA Defined

	Norton Hospital	Norton Audubon Hospital	Norton Suburban Hospital	Norton Brownsboro Hospital	Kosair Children's Hospital	System Impact
<i>Jefferson County Segments</i>						
Central	X	X			X	X
Inner East			X			X
Outer East	X	X	X	X	X	X
South	X	X	X	X	X	X
Southwest	X	X	X		X	X
West	X				X	X
Jefferson, KY	X	X	X	X	X	X
<i>Primary Service Area Counties</i>						
Oldham, KY				X		X
Bullitt, KY			X			X
Clark, IN	X				X	X
Floyd, IN						
Harrison, IN						
Scott, IN						

A significant portion of our primary service area population is represented in the CHNA definition with the exception of the following Indiana counties, Floyd, Harrison and Scott. These counties were excluded because market share was lower than criteria and/or the county wasn't contiguous to the respective hospital.

Patient Origin by Geographic Area

The majority of patients reside in Jefferson County, Kentucky. The highlighted patient origin percentage represents the inclusion criteria (of 5%) for the hospital.

Patient Origin	Norton Hospital	Norton Audubon Hospital	Norton Suburban Hospital	Norton Brownsboro Hospital	Kosair Children's Hospital	Norton Hospitals
<i>Jefferson County Segments</i>						
Central	9.6%	8.7%	3.0%	1.4%	5.3%	6.3%
Inner East	2.9%	3.3%	7.1%	4.4%	2.7%	4.1%
Outer East	6.0%	5.2%	24.4%	39.7%	8.8%	13.8%
South	9.1%	33.5%	22.3%	8.3%	12.1%	18.4%
Southwest	14.4%	21.1%	12.2%	4.6%	13.5%	14.4%
West	14.1%	3.5%	2.5%	1.2%	7.5%	6.6%
Other *	0.4%	0.6%	0.6%	0.4%	0.1%	0.4%
Jefferson, KY	56.5%	75.9%	72.2%	60.0%	49.9%	64.1%
Oldham, KY	1.2%	0.5%	2.5%	10.7%	2.6%	2.4%
Bullitt, KY	2.5%	10.8%	6.5%	2.7%	3.4%	5.6%
Clark, IN	5.3%	0.8%	1.9%	2.1%	5.0%	3.1%
Floyd, IN	2.6%	0.5%	1.1%	1.0%	2.7%	1.6%
Harrison, IN	1.9%	0.3%	0.4%	0.5%	1.4%	0.9%
Scott, IN	1.4%	0.1%	0.1%	0.4%	0.8%	0.6%
Other Areas **	28.8%	11.0%	15.2%	22.6%	34.1%	21.6%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Highlighted Areas	58.5%	79.4%	72.6%	58.7%	52.1%	65.1%

* patients with a post office zip code

** patients residing outside of the primary service area

As illustrated in the table above, Norton facilities serve all segments of Jefferson County as well as Oldham and Bullitt counties in Kentucky and Clark County, Indiana, all of which are adjacent to Jefferson County, Kentucky.

Market Share by Geographic Area

Based on the declared methodology, the county (or county segment) must have at least 5% of its inpatients from the geography, have a market share greater than 5% and be contiguous to the hospital. The table below highlights the counties with greater than 5% market share.

Market Share	Norton Hospital	Norton Audubon Hospital	Norton Suburban Hospital	Norton Brownsboro Hospital	Kosair Children's Hospital	Other Hospital Providers
<i>Jefferson County Segments</i>						
Central	15%	11%	4%	1%	5%	64%
Inner East	5%	5%	12%	3%	3%	71%
Outer East	4%	3%	16%	9%	4%	64%
South	6%	19%	14%	2%	5%	55%
Southwest	9%	11%	7%	1%	5%	67%
West	22%	5%	4%	1%	7%	62%
Jefferson, KY	9%	10%	11%	3%	5%	63%
Oldham, KY	4%	1%	8%	11%	5%	72%
Bullitt, KY	5%	20%	13%	2%	4%	55%
Clark, IN	23%	3%	8%	3%	13%	50%
Floyd, IN	21%	4%	8%	3%	13%	51%
Harrison, IN	27%	4%	5%	2%	13%	49%
Scott, IN	29%	3%	3%	3%	10%	53%

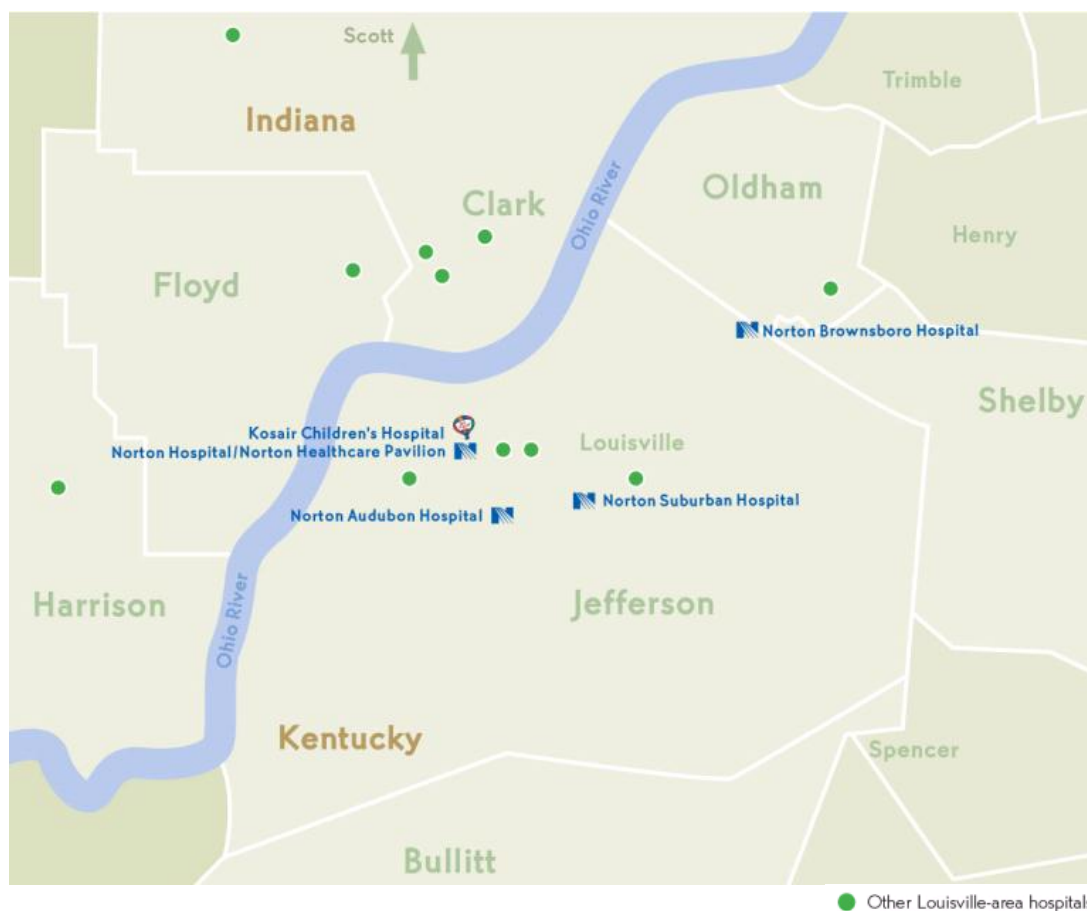
The patient origin chart shows the geography of where each inpatient within the Norton system resides. The market share chart depicts the same view but showing Norton’s share compared to the other Louisville hospitals. By including market share methodology within the CHNA definition, the inner east segment of Jefferson County was added for Norton Hospital and Norton Audubon Hospital; Oldham County was picked up by Kosair Children’s Hospital and Bullitt County, Kentucky was picked up by Norton Hospital. In other words, using the market share methodology increased the patient origin geography inclusion percentage to:

Norton Hospital	Norton Audubon Hospital	Norton Suburban Hospital	Norton Brownsboro Hospital	Kosair Children's Hospital
63.8%	82.7%	72.6%	58.7%	54.7%

Community Details

Identification and Description of Geographic Community

The following map geographically illustrates the Norton Hospitals as well as other community hospitals in the geographic community.



Norton Hospital is located in downtown Louisville, Kentucky at 200 East Chestnut Street. The hospital is well known for its specialty care in cardiac care, neuroscience, orthopedics, bariatric care, oncology and women's health. The hospital has 642 licensed beds and 357 staffed beds and with an average occupancy rate of 76% based on staffed beds for 2011.

Norton Audubon Hospital is located at 1 Audubon Plaza Drive within 3 miles from Norton Hospital. The hospital offers comprehensive cardiac services, oncology services, pain management in addition to full service medical and surgical acute care services. The hospital is licensed for 432 beds and 268 were staffed with an occupancy rate of 77% for 2011.

Norton Suburban Hospital, the future home of Norton Women's and Kosair Children's Hospital, will be our showcase hospital uniquely designed to specialize in women and children's services as well as continuing to serve the men of our community. The facility includes a 40 bed neonatal intensive care

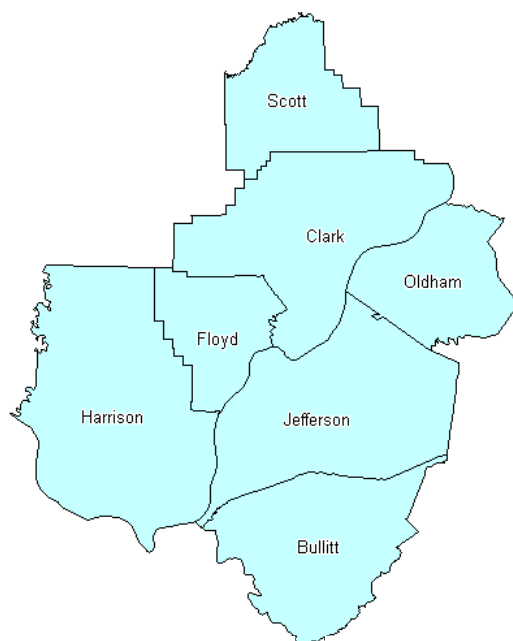
unit, comprehensive obstetrics, maternal fetal medicine, oncology services as well as strong primary care. The hospital is licensed for 373 beds and 359 beds are currently staffed. The 2011 occupancy rate based on staffed beds was fifty-nine percent.

Norton Brownsboro Hospital is our newest hospital located at 4960 Norton Healthcare Boulevard in northeast Jefferson County. Highlighted services include oncology, orthopedic and spine, neuroscience, and pulmonary care services. The hospital is licensed for 127 beds and 103 are currently staffed. The 2011 occupancy rate based on staffed beds was forty-one percent.

Kosair Children's Hospital is located adjacent to Norton Hospital and is the only freestanding children's hospital in the state and region. Services include comprehensive pediatric acute care services, a burn unit, and trauma care. Additionally, Kosair Children's Hospital utilizes specialty pediatric trained surgeons, anesthesiologists and technical clinical staff to support our clinical program offerings. Kosair Children's Hospital operates pursuant to a joint license with Norton Hospital and staffed 263 beds in 2011 with an average occupancy rate of sixty-nine percent.

Community Population and Demographics

The following map geographically illustrates the organization's primary service area which includes seven counties; Jefferson, Oldham and Bullitt in Kentucky and Harrison, Floyd, Clark and Scott in Indiana. The 2012 estimated total population is 1,139,778 and is projected to increase 3.8% to 1,183,553; according to Thomson Reuters.



Note that we are including these areas as part of the community health needs analysis even though they fall below the definitions for patient origin and market share outlined in the previous section.

County Level Population by Age Cohort

As previously stated, the primary service area by county for 2012 is estimated to be 1.13 million and is projected to increase 3.8% by 2017, according to Thomson Reuters. You can see that Jefferson County makes up the largest portion of the population (66%) followed by Clark County in Indiana at a distant second (10%). However, Bullitt and Jefferson counties are expecting the most growth, 6,266 and 22,058, respectively, albeit Bullitt County's growth is significantly less than that expected in Jefferson County. Review of the age cohorts clearly illustrates our aging marketplace; almost 500K population is greater than 45 years of age, with the greatest growth in the 65+ age group.

Estimated 2012 Population

County	00-17	18-34	35-44	45-64	65+	Total	Male	Female
Bullitt, KY	17,781	16,784	12,103	21,925	8,004	76,597	37,970	38,627
Clark, IN	26,194	25,990	15,545	30,221	14,362	112,312	54,977	57,335
Floyd, IN	17,887	16,048	10,108	21,246	10,011	75,300	36,410	38,890
Harrison, IN	9,372	8,270	5,314	11,756	5,289	40,001	19,860	20,141
Jefferson, KY	176,350	175,139	97,566	199,534	100,352	748,941	360,436	388,505
Oldham, KY	16,761	10,311	10,970	18,520	5,747	62,309	33,042	29,267
Scott, IN	5,866	5,239	3,474	6,542	3,197	24,318	12,037	12,281
	270,211	257,781	155,080	309,744	146,962	1,139,778	554,732	585,046
% of Total	23.7%	22.6%	13.6%	27.2%	12.9%	100.0%		

Projected 2017 Population

County	00-17	18-34	35-44	45-64	65+	Total	Male	Female
Bullitt, KY	17,397	17,917	11,950	24,302	11,297	82,863	40,921	41,942
Clark, IN	27,713	24,903	16,671	31,533	17,253	118,073	57,868	60,205
Floyd, IN	17,488	16,745	9,296	22,056	11,728	77,313	37,363	39,950
Harrison, IN	9,529	8,520	5,171	12,099	6,483	41,802	20,707	21,095
Jefferson, KY	184,266	168,047	101,603	204,296	112,787	770,999	372,057	398,942
Oldham, KY	16,564	12,932	9,318	20,875	8,096	67,785	35,756	32,029
Scott, IN	5,794	5,159	3,287	6,736	3,742	24,718	12,217	12,501
	278,751	254,223	157,296	321,897	171,386	1,183,553	576,889	606,664
% of Total	23.6%	21.5%	13.3%	27.2%	14.5%	100.0%		

Change 2012 - 2017

County	00-17	18-34	35-44	45-64	65+	Total	Male	Female
Bullitt, KY	(384)	1,133	(153)	2,377	3,293	6,266	2,951	3,315
Clark, IN	1,519	(1,087)	1,126	1,312	2,891	5,761	2,891	2,870
Floyd, IN	(399)	697	(812)	810	1,717	2,013	953	1,060
Harrison, IN	157	250	(143)	343	1,194	1,801	847	954
Jefferson, KY	7,916	(7,092)	4,037	4,762	12,435	22,058	11,621	10,437
Oldham, KY	(197)	2,621	(1,652)	2,355	2,349	5,476	2,714	2,762
Scott, IN	(72)	(80)	(187)	194	545	400	180	220
	8,540	(3,558)	2,216	12,153	24,424	43,775	22,157	21,618

Source: Thomson Reuters – Demographic Expert

The impact of the baby boomers in our market is apparent in the table above, with the largest growth in the 65+ population (24,424), followed by population aged 45-64 years old (12,153). It's also noteworthy the group aged 18-34 is expected to decline by 3,558; which represents women of child-bearing age.

Population by Age Cohort for Jefferson County's Segments

Jefferson County, as the largest portion of the market's population, warrants further segmentation as provided below. The segments are grouped by zip codes, which can overlap between counties, causing a variance to the Jefferson County population noted elsewhere in this assessment. The outer east and south segments of Jefferson County are expected to grow 6.7% and 4.7%, respectively, by 2017 while the central and west segments are projecting a lower population. Additionally, the largest populations of 45+ are living in the outer east and south segments.

Estimated 2012 Population

Segment	00-17	18-34	35-44	45-64	65+	Total	Male	Female
Central	13,710	17,682	9,867	16,096	8,643	65,998	32,688	33,310
Inner East	13,424	16,396	9,897	20,856	12,164	72,737	34,145	38,592
Outer East	53,645	46,775	26,433	65,018	28,744	220,615	106,549	114,066
South	66,856	62,855	38,160	71,687	33,482	273,040	132,397	140,643
Southwest	41,454	40,649	23,033	43,887	23,758	172,781	83,099	89,682
West	15,092	14,458	6,079	12,293	6,416	54,338	25,543	28,795
	204,181	198,815	113,469	229,837	113,207	859,509	414,421	445,088

Projected 2017 Population

Segment	00-17	18-34	35-44	45-64	65+	Total	Male	Female
Central	13,501	15,712	10,132	16,548	9,401	65,294	32,472	32,822
Inner East	13,706	15,159	9,809	21,044	13,198	72,916	34,312	38,604
Outer East	57,866	48,879	26,737	67,461	34,440	235,383	113,864	121,519
South	70,758	61,079	39,496	75,516	39,096	285,945	138,834	147,111
Southwest	42,941	37,605	24,488	44,388	25,717	175,139	84,419	90,720
West	14,731	13,486	6,690	11,510	6,569	52,986	25,097	27,889
	213,503	191,920	117,352	236,467	128,421	887,663	428,998	458,665

Change 2012 - 2017

Segment	00-17	18-34	35-44	45-64	65+	Total	Male	Female
Central	(209)	(1,970)	265	452	758	(704)	(216)	(488)
Inner East	282	(1,237)	(88)	188	1,034	179	167	12
Outer East	4,221	2,104	304	2,443	5,696	14,768	7,315	7,453
South	3,902	(1,776)	1,336	3,829	5,614	12,905	6,437	6,468
Southwest	1,487	(3,044)	1,455	501	1,959	2,358	1,320	1,038
West	(361)	(972)	611	(783)	153	(1,352)	(446)	(906)
	9,322	(6,895)	3,883	6,630	15,214	28,154	14,577	13,577

Source: Thomson Reuters – Demographic Expert

Note that the age cohort 18-34 is the only group that is expected to decline (6,895) over the next five years; while the child and adolescent population is expected to increase 9,322 during the same time period. As expected, the largest population growth by age cohort is the 65+ population, over 15,000 people.

Overall, the segmented population for Jefferson County is expected to increase 28,154 with the most impacted segments being the outer east and the south.

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 tables are a compilation of information that includes ethnicity and race distribution, language, household income, educational attainment, types of industry, unemployment rates, and include health outcomes and factors for the communities served by Norton Hospitals, Inc.

Diversity

While the relative age of our population can impact community health needs, so can the ethnicity and race of a population. Mounting evidence indicates that racial/ethnic differences in morbidity and mortality are tied to socioeconomic resources. People who are poorer and who have less education are more likely to suffer from diseases, to experience loss of functioning, to be cognitively and physically impaired, and to experience higher mortality rates¹. The following table shows the population by ethnicity and race illustrating the Hispanic versus non-Hispanic residents.

County	2012 Population	White		Black		Asian		Hispanic		All Others	
		Population	%Across	Population	%Across	Population	%Across	Population	%Across	Population	%Across
Bullitt, KY	76,597	73,349	95.8%	519	0.7%	409	0.5%	1,169	1.5%	1,151	1.5%
Clark, IN	112,312	94,880	84.5%	7,732	6.9%	910	0.8%	6,008	5.3%	2,782	2.5%
Floyd, IN	75,300	66,709	88.6%	3,952	5.2%	760	1.0%	2,185	2.9%	1,694	2.2%
Harrison, IN	40,001	38,521	96.3%	174	0.4%	168	0.4%	624	1.6%	514	1.3%
Jefferson, KY	748,941	520,735	69.5%	156,340	20.9%	17,343	2.3%	36,134	4.8%	18,389	2.5%
Oldham, KY	62,309	55,184	88.6%	2,664	4.3%	901	1.4%	2,435	3.9%	1,125	1.8%
Scott, IN	24,318	23,560	96.9%	59	0.2%	115	0.5%	375	1.5%	209	0.9%
	1,139,778	872,938	76.6%	171,440	15.0%	20,606	1.8%	48,930	4.3%	25,864	2.3%

Source: Thomson Reuters – Demographic Expert

The black non-Hispanic population makes up 15% of the population, with Asian non-Hispanic accounting for 1.8%, Hispanic 4.3% and all others at 2.3%. Significant research exists concerning healthcare disparities among populations with compromised socioeconomic factors. The Urban Institute studies US immigration from many aspects and a brief published in 2010 indicates that growth in immigration flows in the past three decades has almost tripled the size of the foreign-born population in the United States: from 14 million in 1980 to 38 million in 2007. Immigrants are still heavily concentrated in the six traditional immigrant destination states (California, New York, Texas, Florida, Illinois, and New Jersey), but immigrant numbers grew rapidly in many western, midwestern, and southeastern states. Not surprisingly, many metropolitan areas outside the traditional destination states saw high immigration growth.

The brief also examined immigration and poverty trends between 1980 and 2007 across 100 metropolitan areas with the largest immigrant populations². Although Louisville was not listed in the 100 metropolitan areas studied, our community should be preparing for continued immigration growth by creating a supportive infrastructure, since immigrants may be unable or reluctant to advocate for themselves. It is important for Louisville's community leaders to devise policies that both address the

needs of immigrants and their families and maximize immigrants’ contributions to the Louisville economy and civic society, including reducing any barriers to access of medical care.

According to the Urban League published report titled, “A Profile of the Foreign-Born in the Louisville Metropolitan Area”, Louisville’s immigrants are more diverse in their origins than immigrants nationally; they include large numbers of Latin American immigrants as well as refugees from all over the world.

The table below shows the current and projected population distributed across race/ethnic groups according to Thomson Reuters. Note data does not indicate that the population is foreign born.

Race/Ethnicity	2012 Population		2017 Population		Change 2012-2017	
	Count	% of Pop	Count	% of Pop	Count	%
Population	1,139,778	100.0%	1,183,553	100.0%	43,775	3.8%
White	896,736	78.7%	912,435	77.1%	15,699	1.8%
White Non-Hispanic	872,938	76.6%	881,795	74.5%	8,857	1.0%
White Hispanic	23,798	2.1%	30,640	2.6%	6,842	28.8%
Black	173,710	15.2%	186,663	15.8%	12,953	7.5%
Black Non-Hispanic	171,440	15.0%	183,746	15.5%	12,306	7.2%
Black Hispanic	2,270	0.2%	2,917	0.2%	647	28.5%
American Indian & Alaska Native	2,882	0.3%	3,113	0.3%	231	8.0%
American Indian & Alaska Native Non-Hispanic	2,421	0.2%	2,518	0.2%	97	4.0%
American Indian & Alaska Native Hispanic	461	0.0%	595	0.1%	134	29.1%
Asian/Pacific Islander	21,506	1.9%	25,892	2.2%	4,386	20.4%
Asian/Pacific Islander Non-Hispanic	21,173	1.9%	25,464	2.2%	4,291	20.3%
Asian/Pacific Islander Hispanic	333	0.0%	428	0.0%	95	28.5%
2+ Races	24,895	2.2%	29,944	2.5%	5,049	20.3%
2+ Races Non-Hispanic	21,125	1.9%	25,087	2.1%	3,962	18.8%
2+ Races Hispanic	3,770	0.3%	4,857	0.4%	1,087	28.8%
Other	20,049	1.8%	25,506	2.2%	5,457	27.2%
Other Non-Hispanic	1,751	0.2%	1,910	0.2%	159	9.1%
Other Hispanic	18,298	1.6%	23,596	2.0%	5,298	29.0%
Hispanic Ancestry	48,930	4.3%	63,033	5.3%	14,103	28.8%
Non-Hispanic Ancestry	1,090,848	95.7%	1,120,520	94.7%	29,672	2.7%

According to the Federation American Immigration Reform; Kentucky’s immigrants are almost twice as likely to be in poverty as their native-born counterparts. In 2007, 19.3 percent of foreign-born households were below the poverty line, compared to 11.6 percent of native households. An additional 10.5 percent of the foreign-born and 10.3 percent of native households were not in poverty but had incomes less than 1.5 times the poverty level. The Louisville Metro Office works to enhance multiculturalism by connecting immigrants and refugees to governmental and non-governmental resources such as the Kentucky Refugee Ministries, Catholic Charities of Louisville, Inc. and the Americana Community Center. What if more community leaders, faith-based organizations, businesses and health care entities intentionally promoted advocacy and support for newcomers? Would immigrant integration occur faster, with a greater sense of belonging and commitment to be a self-sustaining resident of the community?

While our community remains mostly a white non-Hispanic demographic, it’s noteworthy that we expect diversity to continue as predicted above, which indicates a greater proportion of our community to be in the black, Asian, and Hispanic ancestry categories.

Language

The Louisville Metro Health Status Reports show that the percentage of residents of Louisville Metro (primarily Jefferson County area) who do not speak English well or at all was estimated to be 1.6% in 2009, an increase from 1.2% reported in 2000. However, 7.4% of all residents speak a language other than English at home with the most common language being Spanish. In addition to Spanish, the next top five languages spoken by the Louisville Metro immigrant community included French (or Creole), German, Slavic languages (e.g. Russian or Polish), Korean and Vietnamese. Indo-European languages can include languages of India including Hindi, as well as Baltic, Greek and Iranian languages. The number of Louisville Metro residents that speak Indo-European languages combined is 12,976 and Asian/Pacific Islander languages combined is 8,235³.

Number of Louisville Metro Residents Speaking Languages Other Than English, 2009

	Estimate	% Down
Speak Only English	620,811	92.6%
Spanish or Spanish Creole	23,087	3.4%
Slavic Languages	4,184	0.6%
Other Indo-European Languages	3,888	0.6%
French (including Patois, Creole, Cajun)	2,710	0.4%
Other Asian and Pacific Island Languages	2,239	0.3%
German or other West Germanic Languages	2,194	0.3%
Vietnamese	2,123	0.3%
Korean	1,899	0.3%
Chinese	1,354	0.2%
Tagalog	620	0.1%
Other and Unspecified Languages	5,485	0.8%
	670,594	100.0%

Non-English-speaking patients may be reluctant to deal with providers who cannot communicate with them, seeking care only when their conditions become acute and more costly. An article in the Hospitals & Health Networks publication (November 2006) described the challenges for hospitals and health systems that are encountering increasing numbers of patients with limited English proficiency. For these patients, language and communication barriers pose a serious threat to receiving safe, high-quality health care. Numerous studies have shown that language barriers impede access to health care, compromise quality of care and increase the risk of adverse health outcomes.

Norton Healthcare contracts with a telephonic interpreter vendor that is highly skilled in medical translation. During the first nine months of 2012, there were 8,420 calls lasting almost 93K minutes caring for patients speaking 70 different languages. Fifty-six percent of the calls were for Spanish, 8% for Arabic and Somali, all other languages accounted for less than 3% each of the total. In an effort to meet this growing need and embrace inclusion as an organization, Norton University offers Spanish classes for healthcare workers and is piloting an American Sign Language program.

In conclusion, our community is becoming more and more diverse and overcoming language barriers to health care is critical to people's well-being. Increasing diversity is further demonstrated by the Jefferson County Public School system serving children who speak over 100 different languages. The school district also has an ESL (English as a second language) Newcomer Academy which focuses primarily on the following languages of French, Burmese, Arabic, Karen, Spanish, Nepali, Swahili and

Somali. The bottom line is, the more we as a community embrace and serve our newest community members the faster they will become integrated, have a sense of belonging, be able to contribute at a higher level and thrive.

2011 Household Statistics

The concentration of average household incomes was in the \$25-50K range for the PSA, as highlighted below, with the exception of Oldham County, in which the majority of the population falls into the \$100K+ income bracket. When you further breakdown Jefferson County by segment, however, you see a large disparity. For example, in Jefferson County, 26.9% of the households bring home less than \$25K a year. The segment table for Jefferson County shows central and west segments with an average household income of less than \$15K while the inner east, south and southwest have an average household income between \$25K and \$50K a year. Further, the outer east segment of Jefferson County has the highest percentage of households with an average household income over \$100K, consistent with Oldham County.

Several people in our community can be considered the working poor and, sadly, one major illness could put them at significant risk of financial distress. The focus on securing basic necessities of living life often results in health care prevention and wellness as a lower priority. This was demonstrated by the low turnout at the health forums that will be discussed later in this document.

County	<\$15K	\$15-25K	\$25-50K	\$50-75K	\$75-100K	Over \$100K	Average Household Income	Medium Household Income	Median Household Wealth	Median Home Value
Bullitt, KY	11.6%	9.8%	29.8%	25.3%	12.3%	11.2%	\$ 56,309	\$48,894	\$75,627	\$142,678
Clark, IN	11.9%	11.8%	31.6%	21.2%	11.7%	11.7%	\$ 56,257	\$45,812	\$59,360	\$120,677
Floyd, IN	11.7%	10.0%	27.9%	21.2%	12.8%	16.5%	\$ 63,982	\$51,600	\$79,650	\$141,484
Harrison, IN	9.8%	11.7%	30.4%	24.5%	11.9%	11.7%	\$ 58,103	\$48,623	\$87,917	\$120,095
Jefferson, KY	14.9%	12.0%	28.3%	18.9%	10.7%	15.2%	\$ 61,629	\$47,915	\$64,718	\$158,389
Oldham, KY	6.2%	6.2%	20.4%	20.0%	17.1%	30.0%	\$ 87,509	\$71,396	\$130,755	\$206,904
Scott, IN	15.5%	14.5%	35.0%	19.4%	8.3%	7.3%	\$ 47,101	\$38,713	\$53,875	\$99,977
PSA	13.8%	11.5%	28.6%	19.8%	11.2%	15.0%	\$ 61,532	\$46,590	\$68,544	\$142,573

Segment	<\$15K	\$15-25K	\$25-50K	\$50-75K	\$75-100K	Over \$100K	Average Household Income	Medium Household Income	Median Household Wealth	Median Home Value
Central	33.5%	16.0%	27.3%	11.9%	5.2%	6.1%	\$ 37,077	\$26,204	\$26,950	\$111,601
Inner East	10.2%	10.7%	28.0%	18.3%	11.2%	21.7%	\$ 77,079	\$52,336	\$71,486	\$198,119
Outer East	6.6%	7.5%	22.6%	19.7%	14.7%	28.9%	\$ 88,280	\$68,700	\$108,717	\$217,652
South	12.4%	11.9%	30.5%	21.7%	11.7%	11.8%	\$ 56,070	\$46,556	\$57,285	\$135,392
Southwest	16.3%	15.0%	33.4%	19.7%	8.9%	6.7%	\$ 46,289	\$38,241	\$42,650	\$113,819
West	34.9%	17.3%	27.5%	12.4%	3.9%	4.0%	\$ 33,268	\$23,623	\$24,999	\$71,514
Jefferson, KY	14.9%	12.0%	28.3%	18.9%	10.7%	15.2%	\$ 61,629	\$47,915	\$64,718	\$158,389

Source: Thomson Reuters – Demographic Expert

According to a report published in The American Journal of Medicine, medical bills are a major factor in more than 60 percent of the personal bankruptcies in the United States. Of those bankruptcies that were caused by medical bills, approximately 75 percent of them involved individuals that actually did have health insurance. To assist those families in lower income categories and ensure health care services are received, Norton has a generous charity care policy, which is based on the federal guidelines, Norton Healthcare’s policy and our heritage and mission as a not-for-profit organization.

Educational Attainment

Linkages exist between education, economy and quality of life. The table below represents the level of education for each county and segment in the service area. Education often plays a key role in career success and economic self-sufficiency. Yet nearly 45% of the adults in the PSA do not have a college education or, from a professional perspective, only 26% successfully attained post-secondary degrees at a bachelor level or higher. Clearly, this impacts the household income levels of our community and our insured population and levels of coverage. As previously presented, the bulk of our population resides in Jefferson County. Upon closer review of this population almost 12% don't have a high school degree and of the remaining 88% of the population, they are evenly distributed amongst high school graduates, some college education and a post secondary degree. Further you can see the eastern sectors capture the more highly educated populations with the South, Southwest and West sectors dominated by a high school education or less. More than 12.9% have less than a high school degree which correlates to 25% of the households in the PSA have an average household income less than \$25,000.

County	Less than High School	Some High School	High School Degree	Some College/Assoc. Degree	Bachelor's Degree or Greater
Bullitt, KY	5.1%	11.4%	41.6%	30.1%	11.8%
Clark, IN	4.4%	11.3%	36.5%	31.1%	16.7%
Floyd, IN	3.8%	9.1%	35.5%	30.6%	21.0%
Harrison, IN	3.9%	8.8%	44.6%	29.5%	13.2%
Jefferson, KY	3.9%	8.0%	29.2%	29.6%	29.2%
Oldham, KY	3.7%	6.6%	26.3%	30.1%	33.2%
Scott, IN	10.4%	15.1%	43.4%	21.0%	10.1%
PSA	4.2%	8.7%	31.7%	29.7%	25.9%

Segment	Less than High School	Some High School	High School Degree	Some College/Assoc. Degree	Bachelor's Degree or Greater
Central	5.8%	11.8%	27.9%	28.1%	26.3%
Inner East	2.2%	3.2%	15.3%	25.4%	54.0%
Outer East	1.9%	3.0%	18.2%	29.4%	47.5%
South	4.2%	8.6%	34.9%	31.1%	21.2%
Southwest	6.0%	12.1%	39.8%	30.5%	11.7%
West	5.7%	16.2%	38.8%	31.5%	7.8%
Jefferson, KY	3.9%	8.0%	29.2%	29.6%	29.2%

Source: Thomson Reuters – Demographic Expert

In 2010, the Greater Louisville Educational Commitment endorsed an endeavor that represents the culmination of community leader's efforts to help shape a comprehensive strategy to increase the region's college degree attainment rates. The goals include boosting the number of Louisville area residents with a bachelor's degree to at least 40 percent and those with an associate's degree to at least 10 percent. The plan calls for achieving this milestone by 2020⁴. More recent, in October 2012, the Kentucky Community and Technical College System announced it received a \$1 million Bill & Melinda Gates Foundation grant from the Next Generation Learning Challenges; an initiative dedicated to improving college readiness and completion rates.

At Norton Healthcare our mission is to provide quality healthcare to those we serve, in a manner that responds to the needs of our communities and honors our faith heritage. We cannot accomplish our

mission without a culture of continual learning and academic progression. Our strategy for developing a comprehensive program of academic support stems from our desire to employ the most qualified staff providing the highest quality care. Encouraging academic progression is more than an initiative; it is a defining characteristic of who we are as a forward-thinking integrated healthcare organization.

Norton Healthcare is generous in providing resources for academic progression of staff and supporting formal workforce development initiatives such as the Norton Scholars Program, the Career Assistance Program, and the Graduate Assistance Program. The Workforce Development Department oversees and manages programs to support staff in their pursuit of education, including recruitment of optimal employees, career counseling and financial assistance programs. Norton Healthcare's commitment to academic progression is further demonstrated by the scholarship benefits available to employees and their dependents.

To support nursing initiatives, the Norton Healthcare's Institute for Nursing is a uniquely comprehensive program promoting the academic progression of nurses and is structured and operates around four nursing centers:

1. The Center for Professional Development
2. The Center for Nursing Research
3. The Center for Nursing Practice
4. The Center for Nursing Outreach

Another significant educational investment is Norton University (NU) and its purpose is to provide learning opportunities to enhance professional, educational and personal development. NU guides and equips our workforce so they are positioned for success, supporting and promoting Norton Healthcare, a premier regional healthcare provider. NU offers many professional and personal development services including staff development, career development, leadership development, diversity and inclusion training, E-Learning services, physician continuing medical education, professional skills training, media services, etc. In addition to the employed professional staff, NU contracts with many educational experts for specialty programs.

Just as we support our own learning culture, we also recognize an obligation to be a strong voice for academic progression within the communities we serve. As such, we seek out opportunities to partner with other organizations and academic institutions to drive academic achievement and support the educational goals of the greater Louisville area. We currently have over 100 academic partnerships and 48 clinical affiliation agreements with educational institutions. We also collaborate with area businesses and local government to promote the academic progression of working adults as a partnering member of Greater Louisville, Inc.'s *Degrees at Work* program. As one of the very first partnering organizations, we share in the goal of helping 3,500 working adults (including 500 minorities) in Greater Louisville complete Bachelor's Degrees by 2014. *Degrees at Work* is part of a larger community commitment, as previously discussed, to increase the number of adults with post-secondary degrees.

To conclude, education often plays a key role in career success and economic self-sufficiency. Community leaders, like Norton Healthcare are committed to providing educational support to increase

the percentage of adults in our community with a college degree. This is in addition to Norton ensuring a highly competent workforce that provides the highest quality of care.

Establishments by Major Industry

The majority of businesses in the service area are located in Jefferson County, Kentucky. Retail, healthcare and professional services make up a significant portion of the overall establishments.

Our community also offers several blue collar type jobs. Blue-collar work may involve skilled or unskilled, manufacturing, mining, construction, mechanical, maintenance, technical installation and many other types of physical work. A blue-collar worker is a member of the working class who performs manual labor and is often paid on an hourly basis as compared to white collar workers who are often in more professional office related positions and are generally salaried.

	Jefferson, KY	Oldham, KY	Bullitt, KY	Clark, IN	Floyd, IN	Harrison, IN	Scott, IN
Total Establishments	19,628	1,231	1,065	2,393	1,753	670	670
Retail trade	2,684	120	153	424	211	116	116
Health care and social assistance	2,320	137	108	231	237	69	69
Professional, scientific, and technical services	2,228	184	78	174	190	39	39
Other services (except public administration)	1,854	124	111	248	192	73	73
Accommodation and food services	1,621	66	91	215	123	54	54
Finance and insurance	1,532	74	66	155	131	40	40
Construction	1,480	170	187	248	205	99	99
Wholesale trade	1,224	69	38	102	84	25	25
Adm and support and waste mgmt and remediation svcs	1,152	82	58	121	85	30	30
Real estate and rental and leasing	913	54	32	87	76	17	17
Manufacturing	731	44	43	157	112	45	45
Transportation and warehousing	537	13	51	120	37	28	28
Information	353	17	9	25	18	5	5
Arts, entertainment, and recreation	287	34	18	34	19	9	9
Management of companies and enterprises	245	4	3	12	9	1	1
Educational services	240	13	4	13	16	3	3
Industries not classified	186	12	8	4	1	3	3
Utilities	26	2	3	15	5	5	5
Mining, quarrying, and oil and gas extraction	9	1	2	6	2	5	5
Agriculture, forestry, fishing and hunting	6	11	2	2	-	4	4

Source: US Census Bureau

Communities benefit from having thriving industries to support its economic livelihood. The more educated our workforce is, the easier it is to attract companies with higher paying jobs, thus more financially stable families. A more educated workforce is generally a healthier community.

According to the 2011 Business First Major Employer Ranking, the top three companies based on number of local employees were:

1. **United Parcel Service Inc.** (20,288 local employees) is a company that specializes in logistics and distribution, financial services, air, ocean rail and road freight chain services, and international trade management
2. **Humana Inc.** (10,017 local employees) provides insurance products and health and wellness services
3. **Norton Healthcare, Inc.** (9,421 local employees) is a healthcare provider, including hospitals, diagnostic centers, immediate care centers and physician offices

Yes, these three businesses employ a lot of people in our community; and they are also strong advocates for promoting prevention and wellness in the workplace. An unhealthy workforce is associated with increased disability and workers' compensation costs, absenteeism, turnover, decreased productivity and disengagement due to stress or mental illness. We understand that our employees, although not actually on a balance sheet, are our most valuable asset. And, these three businesses, among others in our community, are significantly investing into a healthier workforce. Norton Healthcare is especially committed to a healthier workplace because we have an entrusted responsibility of caring for people that need clinical care while with us.

A healthy workforce compliments a self-sustaining community, which needs industries that are succeeding to create employment opportunities – which we need an educated workforce for industries to keep creating these higher paying positions. Each party has a responsibility to be healthy, be educated, be productive and produce results.

Unemployment Rates

The Bureau of Labor Statistics definition of unemployment may under estimate the actual number of people without a job, and although it's a lagging economic indicator, it still measures joblessness which has an effect on our local economy because it limits purchasing power.

The unemployment rate was relatively stable until 2009 when the community sustained tremendous unemployment, however it has since improved. The Kentucky unemployment rate as of June 2012 was 8.5 and higher for Jefferson County, Kentucky (8.8) and Scott County, Indiana (9.8). Nationally, only a 0.50% annual decline in unemployment rates is expected over the next three years. It is assumed that the same reduction in unemployment will carry over to our area as well.

County	2007	2008	2009	2010	2011	2012 June
Bullitt, KY	5.6	6.6	10.3	10.2	9.5	8.5
Clark, IN	4.4	5.3	8.8	9.4	8.7	7.0
Floyd, IN	4.2	5.1	8.6	8.8	8.0	6.9
Harrison, IN	4.5	5.8	9.3	9.1	8.3	6.6
Jefferson, KY	5.5	6.5	10.1	10.4	10.0	8.8
Oldham, KY	5.0	5.8	8.3	8.2	7.6	6.7
Scott, IN	5.3	6.4	13.0	12.4	11.2	9.8
Kentucky	5.6	6.6	10.3	10.2	9.5	8.5

Source: U.S. Bureau of Labor Statistics

Unemployment limits more than purchasing power; it has a definite impact on health status. Dr. Elise Gould, director of health policy research at the Economic Policy Institute, said in a forum on health and unemployment that losing one's job can have a "powerful and negative impact" on the health of the jobless, leading to feelings of failure, depression, anxiety, notably increasing the risks of strokes, heart attacks and catastrophic illnesses, and potentially leading to premature mortality.

According to a research study conducted by William T. Gallo, professor of health policy and management at the City University of New York, the six- and ten-year risk of heart attack or stroke in people between 51 and 61 years old who have lost their jobs is more than double that of the employed. Gallo also noticed some stress-related changes in the health behavior of older jobless people: there was

less physical activity and an increase in daily cigarette consumption among long-term unemployed smokers, an increased risk of a smoking relapse, and some increased drinking and weight gain, which increases the risk of diabetes and heart disease.

Health Outcomes and Factors

By analyzing various health factors a community can improve its health outcomes and be 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 various sources and particularly 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 MATCH group focuses on assessing population health and working with communities to help them identify opportunities for improving community health and find and implement evidence-based programs and policies to address these issues.

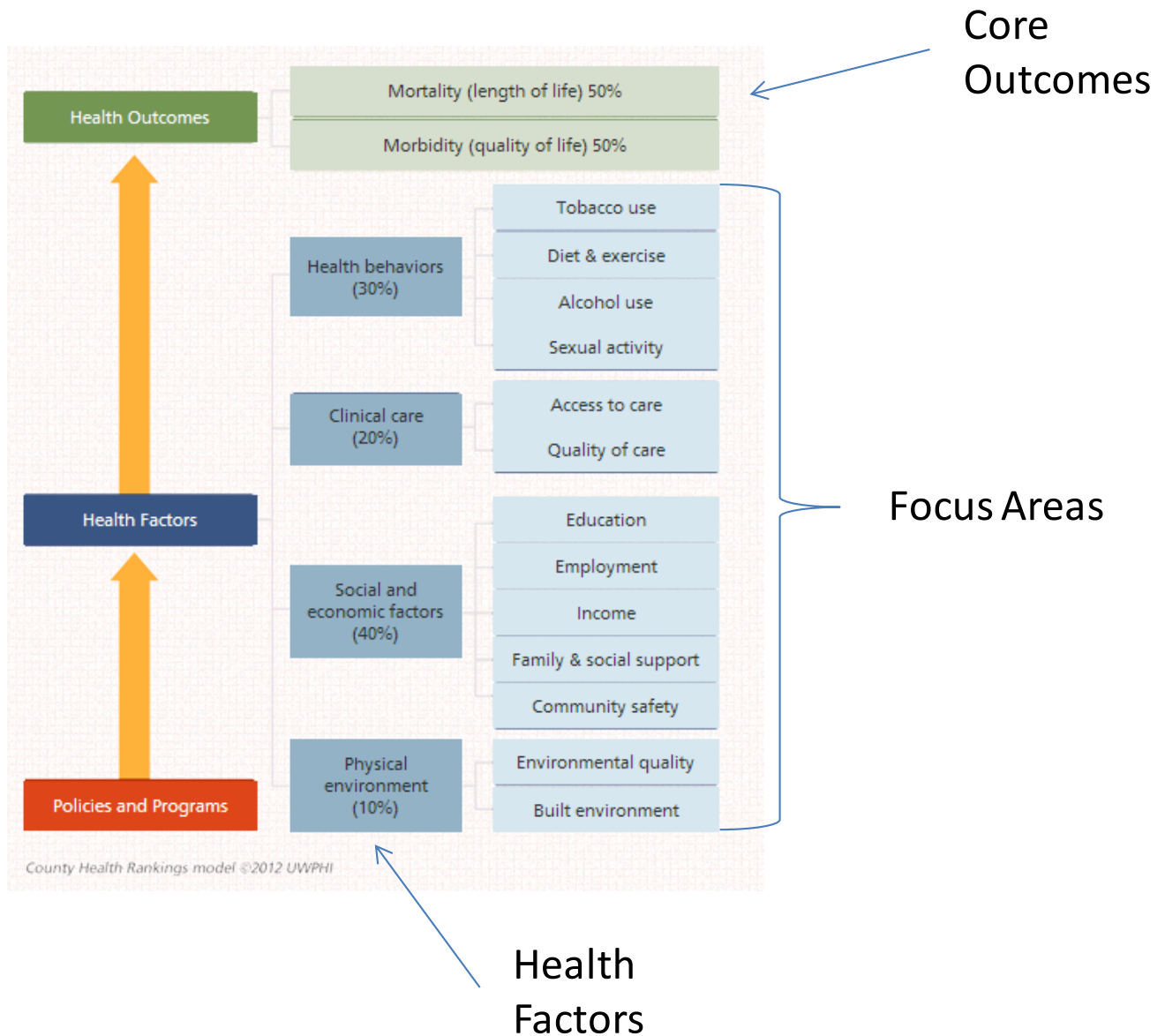
The County Health Rankings model is grounded in the belief that programs and policies implemented at the local, state and federal levels have an impact on the variety of factors that, in turn, determine the health outcomes for communities across the nation. The model provides a ranking method that ranks all 50 states and 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). Note that this initiative is using length of life as a mortality measure and quality of life as mortality measure, as opposed to the traditional definitions of incidence of illness and death rates. 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, i.e. 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 (4 measures)
- Clinical care (2 measures)
- Social and economic (5 measures)
- Physical environment (2 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.countyhealthranking.org). However, definitions for mortality and morbidity are:

Mortality examines death data to find out how long people live and specifically measures premature deaths (deaths before age 75).

Morbidity is the term that refers to how healthy people feel while alive. It measures health-related quality of life (overall health, physical health, mental health).

Health factors in the *County Health Rankings* represent what influences the health of a county. It measures four types of health factors: health behaviors, clinical care, social and economic factors, and

physical environment factors. In turn, each of these factors is based on several measures. A fifth set of factors that influence health (genetics and biology) is not included in the *Rankings*.

The following table from County Health Rankings summarizes the 2012 health outcomes for the seven counties that comprise the majority of the community for Norton Hospitals, Inc. The highlighted cells in gray identify opportunities for improvement by health factor.

Summary	Kentucky (120 Counties)			Indiana (92 counties)			
Core Outcomes	Jefferson, KY	Oldham, KY	Bullitt, KY	Clark, IN	Floyd, IN	Harrison, IN	Scott, IN
Mortality (50%)	33	1	4	51	45	24	92
Morbidity (50%)	36	5	54	61	69	15	92
Health Behaviors (30%)	28	2	47	75	63	11	38
Clinical Care (20%)	2	3	33	51	15	21	84
Social & Economic Factors (40%)	83	1	16	28	26	15	92
Physical Environment (10%)	119	120	102	91	88	90	35

The table below provides additional detail as to the highest need opportunity by focus area. Clark, Floyd and Scott counties in Indiana show the greatest need for improvement in mortality and morbidity. Bullitt, Clark and Floyd appear to have the biggest opportunity to improve healthy behaviors. Scott County scored poor in social and economic factors as well as clinical care. Most of the counties scored poor in physical environment however this health factor is weighted the lowest at ten percent.

Detail	Kentucky (120 Counties)			Indiana (92 counties)			
Core Outcomes	Jefferson, KY	Oldham, KY	Bullitt, KY	Clark, IN	Floyd, IN	Harrison, IN	Scott, IN
Mortality (50%)	33	1	4	51	45	24	92
Morbidity (50%)	36	5	54	61	69	15	92
Health Behaviors (30%)	28	2	47	75	63	11	38
Tobacco Use	15	6	81	80	81	3	36
Diet and Exercise	38	5	73	53	28	27	25
Alcohol Use	45	69	7	37	14	81	7
Sexual Activity	112	1	8	75	70	32	91
Clinical Care (20%)	2	3	33	51	15	21	84
Access to Care	4	6	40	35	10	31	42
Quality of Care	7	6	24	68	29	21	89
Social & Economic Factors (40%)	83	1	16	28	26	15	92
Education	35	1	31	24	21	25	91
Employment	45	3	49	25	15	22	82
Income	31	1	4	37	38	23	87
Family and Social Support	98	1	60	69	80	36	71
Physical Environment (10%)	119	120	102	91	88	90	35
Environmental Quality	120	119	101	91	90	82	1
Built Environment	29	80	93	51	67	85	72

The County Health Rankings is a great resource for identifying areas of opportunity by health factor and focus area. Additional health statistics were also collected from a range of local, county, state and national sources to further aid in the assessment.

Conclusions

Our community’s socioeconomic characteristics influences the way we access health care services. And, to better understand the dynamics of these characteristics we analyzed several community metrics, such as ethnicity and race distribution, languages spoken, family incomes, education levels, industry, and unemployment challenges.

Our community has modest levels of immigration and research shows that racial/ethnic differences in morbidity and mortality are tied to socioeconomic resources. Louisville Metro and other non-governmental resources are prepared to welcome newcomers but what else can our community do to support immigrant integration? Norton Healthcare does have the responsibility as a provider in the community to create a supportive infrastructure and act as an advocate, especially related to health care access.

It's documented that language barriers impede access to healthcare and overcoming these barriers are critical to people's well-being. How many people really know that our community speaks over 100 languages? So far this year, Norton Healthcare has provided interpreter services to patients speaking over 70 languages.

Language barriers also impact the ability to develop thriving economic households as it impacts employment. Education, also, clearly impacts employment and income levels. Our community leaders have an aggressive agenda to increase the number of college degrees, however right now, we have 12.9% of adults without a high school degree and 29.7% with some college or an associate degree. Lower education levels clearly impact employability; while a more educated workforce attracts companies with higher paying jobs providing more financial stability for the community. As for health status, a more educated workforce leads to a healthier community.

We have households in our community that are fiscally self-sufficient, managing well and fiscally strapped. Within our PSA, 26.9% of our households earn less than \$25K a year. The challenge with living paycheck-to-paycheck often results in health care prevention and wellness being placed as a lower priority compared to securing the basic living essentials. Delayed routine and preventative care is problematic when people only seek care when their conditions become acute which often leads to more costly care. In 2011, we admitted almost 1,200 patients with self-pay status which accounted for over 5,100 days of inpatient care; with an average length of stay of 4.33 days. In the same year, Norton Healthcare provided \$18.5M in charity care to help alleviate the financial burden on families that needed healthcare services. Overall, Norton Healthcare's community benefit was \$122.5M and \$62.7M of the total was for unpaid cost of Medicaid services.

Unemployment rates have somewhat stabilized however it remain higher than the 2008 rates. Being jobless can be stressful and adversely impact health and there is a higher probability of not having medical insurance. It is estimated 148K people in our community are without medical insurance and the majority of uninsured people reside in Jefferson County, Kentucky.

A better understanding of the factors that affect the health of our community will help us identify priorities related to habits, culture and environment. Improving mortality and morbidity is a significant opportunity for the majority of our service area and health behaviors such as tobacco use, diet and exercise, alcohol use and sexual activity also pose opportunities for improvement.

Health Status of the Community

This section of the assessment reviews the health status of the service area residents. This in-depth assessment of the mortality and morbidity data, health outcomes, health factors and mental health indicators of the residents that make up the community will enable Norton Hospitals to identify priority health issues related to the health status of its residents.

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

Numerous factors have a significant impact on an individual's health status: lifestyle and behavior, human biology, environmental and socioeconomic conditions, as well as access to adequate and appropriate health care and medical services. Studies by the American Society of Internal Medicine conclude that up to 70 percent of an individual's health status is directly attributable to personal lifestyle decisions and attitudes. Persons who do not smoke, who drink in moderation (if at all), use automobile seat belts (car seats for infants and small children), maintain a nutritious low-fat, high-fiber diet, reduce excess stress in daily living and exercise regularly have a significantly greater potential of avoiding debilitating diseases, infirmities and premature death.

The interrelationship among lifestyle/behavior, personal health attitude and poor health status is gaining recognition and acceptance by both the general public and health care providers. Some examples of lifestyle/behavior characteristics and their impact on an individual's health status are listed in the following table.

Lifestyle	Primary Disease Factor
Smoking	Lung cancer Cardiovascular disease Emphysema Chronic bronchitis
Substance 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
Overstressed	Mental illness Alcohol/drug abuse Cardiovascular disease

Clearly, lifestyle choices have an impact on an individual's health and may contribute to the development of, or progression of, long-term costly chronic diseases. While treatment for these conditions can be quite costly, the worst outcome is potential death.

In that vein, it's important to look at health problems in terms of morbidity and 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. Thus, we must rely on hospital data analysis and incidence and death rates to gain an understanding of the impact on our community. Due to limited morbidity data, this health status report relies heavily on death and death rate statistics for leading causes of death in the service area 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 Cause of Death

According to the 2012 Louisville Metro Health Status Report, in 2009 the total number of deaths from all causes in Louisville was 8,117. The age adjusted death rate for Louisville from all causes was 1136.7 per 100,000 population. This rate was higher than both the state (878.6) and national rates (741.0). For Louisville blacks, the age adjusted death rate (1349.8) was 17% higher than for Louisville whites (1110.0). The age adjusted death rate was significantly higher for Louisville males (1463) than for Louisville females (929). This disparity, however, is in line with state and national ratios of male to female age adjusted death rates (1043 to 749 and 906 to 643 respectively)⁵.

Age-adjusted mortality rate by disease category are listed for each county within the primary service area. The outcome is highlighted in yellow if the outcome was above the state metric. Note that the Kentucky and Indiana tables are displayed separately due to variations in publication year and data collection variations. Heart disease and cancer are the leading causes of death in Kentucky and Indiana with chronic lower respiratory disease and unintentional injuries ranked a distant third and fourth.

Consistent with state trends, cardiac conditions and cancer remain the leading causes for death for the population in our service area as well. Interestingly, it appears Oldham County residents exceed the mortality rates for those with heart disease as compared to Kentucky overall, while Jefferson County has equal opportunity for improvement in mortality rates for heart disease as well as cancer.

Comparatively, the age adjusted mortality rate for heart disease patients in Indiana is higher as compared to Kentucky and has significantly higher rates in Clark and Harrison Counties in Indiana. Likewise, there appears to be an equal opportunity for improvement in cancer mortality rates with the biggest need in Scott County, Indiana.

Leading Cause of Death:	Kentucky			
	Age Adjusted Rates			
	Bullitt	Jefferson	Oldham	Kentucky
Diseases of Heart	204.90	216.70	288.50	246.40
Malignant Neoplasms	153.30	216.40	209.70	214.50
Chronic Lower Respiratory Diseases	76.70	59.50	74.10	59.50
Unintentional Injuries	40.50	39.80	36.50	53.70
Cerebrovascular Diseases	45.90	48.10	92.90	49.80
Diabetes Mellitus	25.50	32.90	25.50	27.00
Alzheimer's Diseases	29.40	23.30	30.70	26.90
Influenza and Pneumonia	24.20	17.80	21.90	23.50
Nephritis, Nephrotic Syndrome & Nephrosis	12.90	20.00	11.60	20.80
Septicemia	12.00	16.40	10.50	13.50
Intentional Self-harm (Suicide)	15.10	11.80	13.70	12.90
Chronic Liver Disease and Cirrhosis	6.90	8.20	5.20	8.40
Essential (Primary) Hypertension & Renal Disease	8.90	12.50	3.70	8.10
Pneumonitis Due to Solids & Liquids	17.00	6.20	1.40	7.30
Parkinson's Disease	7.30	7.80	5.10	6.30
Assault (Homicide)	1.30	9.70	0.00	5.10
Aortic Aneurysm and Dissection	14.80	4.30	1.50	4.60
In situ Neoplasms, Benign Neoplasms, etc.	4.80	3.40	4.00	4.50
Certain Conditions Orig In Perinatal Period	5.20	4.40	2.30	4.00
Atherosclerosis	3.20	0.60	2.70	3.60
All Other Causes	115.30	121.50	124.40	120.20

Source: Kentucky Vital Statistics, 2005

Leading Cause of Death:	Indiana				
	Age Adjusted Rates				
	Clark	Floyd	Harrison	Scott	Indiana
Major Cardiovascular Diseases	299.78	259.54	302.13	228.06	267.26
Malignant Neoplasms (cancer)	201.77	180.19	195.49	257.08	192.77
Chronic Lower Respiratory Diseases	57.98	72.35	74.84	81.92	49.12
All Other and Unspecified Accidents and Adverse Effects	18.04	25.41	41.66	76.44	25.12
Alzheimer's Disease	28.97	32.60	28.24	76.59	24.16
Diabetes Mellitus	21.78	28.14	22.04	19.68	23.42
Nephritis, Nephrotic syndrome and Nephrosis (kidney disease)	20.02	16.94	25.58	33.80	19.38
Influenza and Pneumonia	24.90	18.32	37.69	47.08	16.04
Motor Vehicle Accidents	10.63	16.47	11.17	22.10	14.34
Intentional Self-harm (suicide)	11.84	20.18	7.32	15.15	12.32
Symptoms, Signs and Abnormal Clinical and Laboratory Findings	9.38	16.45	2.88	10.06	7.68
Chronic Liver Disease and Cirrhosis	6.21	7.48	6.19	3.38	7.3
Assault (homicide)	3.77	2.96	2.72	3.92	5.87
Certain Conditions Originating in the Perinatal Period	5.83	0.00	3.05	0.00	5.37
All Other External Causes	0.88	1.37	0.00	8.43	3.38
Congenital Malformations, Deformations and Chromosomal Abnormalities	3.97	1.53	0.00	3.92	3.2
Peptic Ulcer	0.00	1.58	0.00	0.00	0.63
Sudden Infant Death Syndrome (SIDS)	1.94	0.00	0.00	0.00	0.63
Pregnancy, Childbirth and the Puerperium	0.00	0.00	0.00	0.00	0.03
All Other Diseases	124.52	164.92	124.21	150.92	128.44

Note: Highlighted cells represent those that have a higher age-adjusted mortality rate compared with the overall state average.

Healthcare Needs

Cardiac Care

Heart disease is the most costliest chronic condition among men and women adults⁶ and the leading cause of death. In 2010, heart failure alone afflicted 5.8 million Americans, including 670,000 new diagnoses; and cost a staggering \$39.2 billion in health care services, medication and lost productivity⁷. The 2012 Louisville Metro Health Status Report showed that in 2009, the age-adjusted death rate for heart disease in the Louisville Metro area was 237 per 100,000 population. This was higher than both the state rate of 201 and the national rate of 180. Some of this may be attributable to an aging population in our service area. Nonetheless, continued efforts for early detection and intervention are critical to impacting community health.

The age adjusted death rate was higher among Louisville Metro blacks (309) than it was for Louisville Metro whites (227) in 2009. When compared to statistics from 2008, the death rate for blacks increased from 283 and the death rate for whites decreased from 243. The death rate in 2009 was also significantly higher for Louisville males (327) than for Louisville females (176).

Long term trends in heart disease mortality show that the total death rate in Louisville dropped continually from 1999 (315) until 2006 (216). Since 2006 however, the death rate has risen to 237 in 2009. The chart below shows the heart disease death rate for the service area.



Geographic Area	Heart Disease Death Rate per 100,000 pop. ⁸
Bullitt, KY	189.6
Clark, IN	312.3
Floyd, IN	279.2
Harrison, IN	296.1
Jefferson, KY	206.9
Oldham, KY	223.6
Scott, IN	219.6

Norton Healthcare is national recognized for its quality transparency and shows its patient satisfaction scores and performance on almost 600 nationally recognized quality indicators and practices. More information about the quality report can be found online at <http://www.nortonhealthcare.com/QualityReport>. While we don't have a comparative death rate statistic for hospitals we do have other quality metrics indicative of service and clinical excellence. The quality report covers three areas related to cardiac care: heart failure, heart attacks and heart procedures.




Heart failure, sometimes called congestive heart failure, is a chronic (long-term) condition caused by the inability of the heart to pump as much blood as the body needs. Heart failure becomes more common with age and causes symptoms such as shortness of breath and a build-up of fluid in the feet and legs. Heart failure is one of the most common reasons for hospitalization. A healthy lifestyle and proper medications can reduce the effects of heart failure and the need for future hospitalization. These indicators examine how well we manage the care of patients hospitalized for heart failure. Norton Healthcare performance represents the performance of all the hospitals combined.

KEY

Better than U.S. average
Near U.S. average
Worse than U.S. average

#	= too few eligible cases to calculate a reliable statistic
<i>italics</i>	= no comparative data
blank	= does not apply
0  or 100 	= best score possible

Desired performance
Norton Audubon Hospital
Norton Brownsboro Hospital
Norton Hospital
Norton Suburban Hospital
Kosair Children's Hospital
Norton Healthcare
Kentucky
U.S.

Heart failure treatment - percent of heart failure patients									
% of HF measure opportunities met (composite)	high	95	97	89	95	#	93	92	96
with LVF assessment	high	100	100 	99	100 	#	100	97	98
given complete discharge instructions	high	86	94	74	87	#	84	87	92
prescribed ACEI/ARB at discharge (accountability measure)	high	100	95	93	100 	#	97	92	96
Heart failure mortality - percent of heart failure patients									
who die (AHRQ risk-adjusted)	low	1.3	2.2	1.7	1.0		1.4		2.8
who die of any cause w/in 30 days	low	10.6	10.6	10.6	10.6		10.6		11.6
Heart failure readmission - percent of heart failure patients									
who are readmitted for any cause w/in 30 days (adj)	low	24.1	24.1	24.1	24.1		24.1		24.7

Norton demonstrates excellence in the treatment of heart failure patients but continues to have an opportunity to improve performance of delivery of discharge instructions.

Heart attack, also called acute myocardial infarction (AMI or MI), is a life-threatening event caused by insufficient oxygen reaching the heart. When a heart attack occurs, quick use of aspirin and other treatments can reduce damage to the heart and reduce the chance of death. The indicators in this section examine the initial care of heart attack patients and whether patients leave the hospital with medications known to be helpful after a heart attack. Norton Healthcare performance represents the performance of all the hospitals combined.

KEY

Better than U.S. average
Near U.S. average
Worse than U.S. average

#	=	too few eligible cases to calculate a reliable statistic
<i>italics</i>	=	no comparative data
blank	=	does not apply
0 or *100*	=	best score possible

Desired performance
Norton Audubon Hospital
Norton Brownsboro Hospital
Norton Hospital
Norton Suburban Hospital
Kosair Children's Hospital
Norton Healthcare
Kentucky
U.S.

Heart attack (AMI) treatment - percent of AMI inpatients									
AMI accountability measures' composite	high	99	*100*	99	*100*		99	90	100
given aspirin at arrival	high	99	*100*	98	*100*		99	99	99
given fibrinolytics w/in 30 min	high	#	#	#	#		#	50	58
with PCI procedure treated w/in 90 minutes	high	93		#			93	91	93
with LVSD given ACEI or ARB	high	*100*	#	98	#		99	96	97
given aspirin at discharge	high	100	#	100	*100*		100	99	99
given beta blocker at discharge	high	100	#	98	*100*		99	98	99
given statin at discharge	high	99	#	98	96		98	97	97
Heart attack (AMI) mortality - percent of AMI patients									
who die (AHRQ risk-adjusted)	low	4.5	3.5	6.5	5.2		5.0		6.3
who are not transferred who die (AHRQ risk-adj)	low	5.1	3.8	7.5	5.7		5.6		6.8
who die of any cause w/in 30 days	low	15.2	15.2	15.2	15.2		15.2		15.5
Heart attack (AMI) readmission - percent of AMI patients									
who are readmitted for any cause w/in 30 days (adj)	low	20.3	20.3	20.3	20.3		20.3		19.7
Emergency Department care - AMI/chest pain transfers									
% patients receiving aspirin at arrival	high	#	#	#	*100*		*100*	96	96
median time to fibrinolysis (minutes)	low	#	#	#	#		#		
% fibrinolytic therapy received w/in 30 min arrival	high	#	#	#	#		#	65	59
median time transfer to another facility (minutes)	low	#	#	#	#		#	62	60
median time to ECG (minutes)	low	#	#	#	#		#	7	8

As you can see, each hospital score meets or exceeds quality metrics for the state and nationally.

Cardiovascular procedures include heart and circulatory system procedures. Many indicators in the surgery and infection control sections also apply to cardiovascular procedures. These indicators include various complication rates and death rates, and summarize how well certain recommended approaches to these procedures are followed. At Norton Healthcare, only Norton Audubon Hospital and Norton Hospital perform open heart and interventional cardiology procedures on adults. Kosair Children’s Hospital performs open heart procedures on patients with congenital heart defects. Norton Healthcare performance represents the performance of all the hospitals combined.

KEY											
Better than U.S. average	# = too few eligible cases to calculate a reliable statistic										
Near U.S. average	italics = no comparative data										
Worse than U.S. average	blank = does not apply										
	0 or 100 = best score possible										
		Desired performance	Norton Audubon Hospital	Norton Brownsboro Hospital	Norton Hospital	Norton Suburban Hospital	Kosair Children's Hospital	Norton Healthcare	Kentucky	U.S.	
PCIs (angioplasties) -											
median facility to facility transfer time for heart attack patients	low	77		115				82			
median initial ED arrive to PCI time for transferred heart attack patients	low	107		161				114			
median time to immediate PCI for heart attack patients	low	68		64				68			
% heart attack / PCI patients treated w/in 90 minutes	high	91.8		#				91.3			
% patients with positive stress or imaging study prior to elective PCI	high	#		#				#			
median fluoro time	low	8		12				9			
% patients with PCI access site injury requiring treatment or major bleeding	low	1.2		0.7				1.0			
% patients who undergo emergency heart bypass graft surgery	low	0.4		0.4				0.4			
% patients with post-procedure heart attack	low	1.5		#				1.3			
% patients with acute kidney injury	low	2.8		2.8				2.8			
% patients with post-procedure stroke	low	0.5		0.2				0.4			
% patients with emergency heart bypass graft surgery, stroke or repeat PCI	low	2.0		2.4				2.1			
% patients given aspirin at discharge	high	99.0		98.9				98.9			
% stented patients given anti-platelets at discharge	high	99.5		99.3				99.4			
% patients with high cholesterol given anti-lipid medication at discharge	high	93.7		91.2				92.9			
% patients who die (ACC risk-adjusted)	low	1.6		1.6							
% patients who die (AHRQ risk-adjusted)	low	0.82		1.08				0.90			1.23
% heart attack / PCI patients who die (ACC risk-adjusted)	low	3.6		8.2							
% non heart attack / PCI patients who die (ACC risk-adjusted)	low	1.2		0.3							
Cardiovascular surgery mortality - percent of patients who die											
during aortic valve replacement (STS adj)	low	0.0		#				0.0			
during mitral valve replacement (STS adj)	low	#		#				0.0			
during mitral valve repair (STS adj)	low	#		#				#			
during heart bypass + aortic valve replacement (STS adj)	low	3.2		#				4.2			
during heart bypass + mitral valve replacement (STS adj)	low	#		#				14			
during heart bypass + mitral valve repair (STS adj)	low	#		#				4.5			
during or after carotid endarterectomy (AHRQ risk-adj)	low	0.0	0.0	0.0	2.51			0.41			0.32
during or after AAA repair (AHRQ risk-adj)	low	3.5	#	7.6	#			4.0			4.3
Miscellaneous											
is the hospital in a national cardiac surgery database?	high	yes		yes				yes	yes		

The chart above is just a snapshot of the metric scores available for cardiovascular procedures. While we don’t have access to comparable state and national statistics, we will continue to monitor and track outcomes as we strive for excellence. Please visit <http://www.nortonhealthcare.com/HeartProcedures> for a complete report.

There are three key behavioral elements that lead to increased risk of heart disease and infractions – smoking, exercise and stress. Recognizing these variables, Norton utilizes our Prevention and Wellness leadership to develop, implement and promote programs to improve these variables for our employees.

Norton Healthcare offerings promote better health and specifically opportunities to improve cardiovascular health by smoking cessation support, ways to increase physical activity and better manage stress. Below are highlights used to encourage employees to choose a healthier lifestyle.

Smoking

According to Centers for Disease Control and Prevention, more than 43 million adults smoke; this is approximately 1 in 5. In 2007, 20% of high school students in the United States were current cigarette smokers.

Based on the 2012 Louisville Metro Health Status Report, in 2009, 23.9% of Louisville Metro residents reported that they currently smoke tobacco. This percentage is down from 25.5% in 2004. The percentage of adult smokers in Louisville is lower than in the state (25.6%) but higher than in the nation (17.9%).

Geographic Area	Percent of Adults Smokers
Bullitt, KY	31%
Clark, IN	29%
Floyd, IN	30%
Harrison, IN	17%
Jefferson, KY	24%
Oldham, KY	20%
Scott, IN	23%

Former Louisville Mayor Jerry Abramson signed the smoking ban ordinance in January 2008 which now prevents the smoking in public venues. Norton Healthcare fully transitioned to a smoke-free environment on all campuses effective in June 2007 and includes all owned and leased facilities (includes all exterior areas, including parking garages, parking lots and other areas on the campuses). As Louisville’s leading health care organization, we have an obligation to promote and protect the health of our employees, patients, family members, caregivers and guests. A recent 670-page report from the U.S. Surgeon General states, “There is no risk-free level of secondhand smoke exposure. Only smoke-free environments effectively protect nonsmokers from secondhand smoke exposure.”

Norton Healthcare offerings for employee and dependent tobacco users include online workshops on our N Good Health website, and also sponsor and refer our employees to take part in the Cooper Clayton Method to Stop Smoking program for free on-site, in the community and online. Our Employee Health Department, located on all 5 hospital campuses, offers free nicotine replacement products (patch, gum & lozenge) to all of our employees and their spouses.

Exercise

CDC reported in 2012, that more than one-third of all adults do not meet recommendations for aerobic physical activity based on the 2008 Physical Activity guidelines for Americans, and 23% report no leisure-time physical activity at all in the preceding month.

Norton uses our N Good Health to website assist our employees in tracking their physical activity, providing an online pedometer log. The online cardio and strength training logs also convert physical activity into steps, automatically updating the pedometer log. N Good Health provides pedometers to employees as prizes at special events. Other activities promoted by Norton include:

- Norton Healthcare has American Heart Association (AHA) approved outdoor walking paths on 5 campuses and indoor paths on 4. All paths have AHA mileage markers with encouraging quotes. Detailed printable maps are available to view/print on the N Good Health website.
- Promoting National START! Walking day in collaboration with the American Heart Association
- Since 2009, our organization sponsored a bike ride to benefit our cancer institute and promoted participation through creation of teams and incentives to participate. Several hundred riders participated in the bike ride.
- Collaborating with the Metro Department of Public Health and Wellness on the “Mayor’s Hike, Bike and Paddle”
- Partnering with surrounding fitness centers to offer discounted rates to our employees and volunteers
- Activity and weight loss challenges through programs such as Kentuckiana Metro on the Move (KMOM) and the N Good Health website
- Online workshops through the N Good Health website

Stress

For many, stress is a way of life and long term stress can negatively affect your overall wellness. Below is a chart that summarizes warning signs and symptoms⁹.

Stress Warning Signs and Symptoms	
Cognitive Symptoms	Emotional Symptoms
<ul style="list-style-type: none"> ▪ Memory problems ▪ Inability to concentrate ▪ Poor judgment ▪ Seeing only the negative ▪ Anxious or racing thoughts ▪ Constant worrying 	<ul style="list-style-type: none"> ▪ Moodiness ▪ Irritability or short temper ▪ Agitation, inability to relax ▪ Feeling overwhelmed ▪ Sense of loneliness and isolation ▪ Depression or general unhappiness
Physical Symptoms	Behavioral Symptoms
<ul style="list-style-type: none"> ▪ Aches and pains ▪ Diarrhea or constipation ▪ Nausea, dizziness ▪ Chest pain, rapid heartbeat ▪ Loss of sex drive ▪ Frequent colds 	<ul style="list-style-type: none"> ▪ Eating more or less ▪ Sleeping too much or too little ▪ Isolating yourself from others ▪ Procrastinating or neglecting responsibilities ▪ Using alcohol, cigarettes, or drugs to relax ▪ Nervous habits (e.g. nail biting, pacing)

Counseling is offered through our employee assistance program, which offers free counseling to employees and family members on matters related to:

- Marital Conflict
- Emotional Difficulties (stress, depression, anxiety)
- Balancing Work and Home
- Family Issues
- Life Changes
- Addiction
- Grief
- Parent-Child-Family Conflict
- Legal and Financial Issues

Over time, the reactions to stress can take a toll on our cardiovascular system. Stress is detrimental enough to warrant as much attention as our blood pressure and cholesterol levels.

Conclusion Statements – Cardiac Care

Community Need - YES

As a community, we need to develop a more accountable culture by choosing to reduce our cardiac risks; by committing to a smoke free lifestyle, exercising on a regular basis, eating a heart-healthy diet, maintaining a healthy weight, and knowing our blood pressure and cholesterol level numbers. Additionally, comparing mortality rates, Louisville also has an opportunity to improve outcomes for diagnosed patients.

Norton’s Response

A significant contributing factor to high mortality rates is lack of detection and early intervention. Norton's cardiovascular program has specific initiatives to expand advanced imaging to improve diagnosis rates. Further, our clinical programs are focused around quality initiatives and continuous enhancement of best practices and protocols. We continue to strive for excellence through attainment of advanced accreditation levels with national authorities and will continue enhancement of our workforce and programs to meet community needs.

<i>Norton Hospital</i>	<i>Norton Audubon Hospital</i>	<i>Norton Suburban Hospital</i>	<i>Norton Brownsboro Hospital</i>	<i>Kosair Children’s Hospital</i>
✓	✓	✓	✓	

Screenings:

Early detection is key to improving outcomes and the quality of life for patients. While Norton provides these services in our hospitals as well as in physician office locations (45 cardiology specialists in 9 locations), we also have a desire to broaden the reach of these services within and around our primary service area. One mechanism by which we intend to achieve this objective is through our recent partnership with Life Line Screenings, who provides basic wellness screenings as well as non-invasive testing for stroke, heart and vascular disease. Over the next 14 months approximately 72 cardiovascular screening events will occur within the PSA and SSA. This outreach initiative will help provide screenings and care for those that might not normally receive preventative care services.

Risk Factors:

Smoking:

Tobacco use remains the leading cause of premature and preventable death in our nation, responsible for 443,000 deaths each year. The US Department of Health and Human Services (HHS) is committed to reducing the burden tobacco has on our nation and has made preventing and reducing tobacco use a priority. The Strategic Action Plan charts a framework designed to achieve four central tobacco-related objectives of *Healthy People 2020*:

- Reduce tobacco use by adults and adolescents
- Reduce the initiation of tobacco use among children, adolescents, and young adults
- Increase smoking cessation success by adult smokers
- Reduce the proportion of nonsmokers exposed to secondhand smoke

Norton is committed to supporting this initiative by:

1. Continuing to be smoke free on all Norton Healthcare campuses
2. Using our primary care workforce to encourage and promote smoking cessation for their patients

Exercise:

It's alarming, that more than one-third of all adults are not meeting recommendations for aerobic physical and 23% reporting no leisure-time physical activity at all in the preceding month. Norton is committed to supporting this initiative by:

1. Continuing to coach and educate our employees on the value of exercise and the impact on their health
2. Utilizing *My Chart*, our electronic medical record system through EPIC, as a source for coaching efforts for our patients

Stress:

Regardless of whether stress is enough to cause heart disease on its own or it impacts other factors that lead to heart trouble, it's known that chronic stress negatively affects your health. Norton is committed to supporting this initiative by:

1. Continuing service, and promotion thereof, for our employee assistance program
2. Using our primary care physician workforce to encourage work/life integration for our patients and families

Cancer Care

The 2012 Louisville Metro Health Status Report showed in 2009, the age-adjusted rate of death from all cancer types in Louisville was 256 per 100,000. This is higher than Kentucky's rate of 201 and the national rate of 174. There are more than 100 different types of known cancers, and cancer of the lung/bronchus, prostate and breast are the most common.

In Louisville, the rate for Males (326) was higher than for females (213) and the rate for Blacks (327) was higher than for Whites (250)¹⁰.

The cancer case incidence rate for new diagnoses and death rates are outlined below by county and measured against the rates for Kentucky, Indiana and the United States. Unfortunately, our community needs significant cancer resources and Norton Healthcare has invested heavily to support cancer care initiatives for prevention, diagnosis and treatment.

Geographic Area	New Cancer Case Incidence Rate	Death Rate
Bullitt, KY	502.9	180.0
Clark, IN	535.3	200.0
Floyd, IN	420.7	196.6
Harrison, IN	410.7	187.4
Jefferson, KY	533.4	208.3
Oldham, KY	541.0	181.7
Scott, IN	401.2	267.2
Kentucky	515.2	211.3
Indiana	462.1	195.4
Nation	465.0	178.7

A cancer diagnosis can have overwhelming emotional, physical and psychological effects on both patients and their families. That's why at Norton Cancer Institute, cancer treatment isn't just about eliminating the disease itself. We focus on treating the *whole person* through an approach that involves a team of specialists dedicated to your long-term health and overall well-being.

Norton Cancer Institute provides compassionate and supportive care for patients and their families at several convenient locations in the Greater Louisville area. Specializing in cancer prevention, treatment, ongoing care and survivorship, Norton Cancer Institute is the leading provider of comprehensive cancer care in Kentucky and Southern Indiana. Our multidisciplinary specialty centers and clinics provide patients with convenient access to expert teams specially trained in diagnosing and treating all types of cancer.

Our patients and their families have convenient access to a wide range of cancer specialists involved in their care, including medical/hematologic oncologists, radiation oncologists, a neurosurgical oncologist, orthopedic surgeons, an orthopedic oncologist and many others. Additionally, we are proud to say that we now have 145 oncology certified nurses in the organization to support patients and families during their treatment process. Our team of specialists is dedicated to offering patient's confidence and hope through a multidisciplinary approach to advanced cancer prevention, detection, diagnosis, treatment and survivorship. Community collaborations have also been formed with Gilda's Club, Leukemia and Lymphoma Society, Lung Cancer Alliance, Louisville Metro Health Department and the American Cancer Society.

The Norton Cancer Institute Mobile Prevention Center provides community residents with convenient access to Norton Cancer Institute's preventive health screenings and education. The first of its kind in the region, the Mobile Prevention Center travels throughout Metro Louisville offering on-the-road testing, evaluation and cancer prevention education. The Mobile Prevention Center is staffed with highly trained, certified mammography technicians, nurse practitioners and medical assistants or physicians, and offers breast, cervical, prostate and colorectal cancer screenings; digital mammograms; individual comprehensive cancer risk assessments; and risk reduction education. The mobile unit was established to meet the needs of the underserved areas. In 2011, 5,398 cancer screenings were completed for 3,117 individuals and through September 2012, the numbers of cancer screens were 3,639 helping 1,967 individuals. Since 2008, 51 people with pre-invasive or invasive cancer have been diagnosed aboard the Mobile Prevention Center.

Eighty-five percent of cancer patients are diagnosed and receive initial treatment in a community hospital. In 2007, the National Cancer Institute Community Cancer Centers Program (NCCCP) was formed through the National Institutes of Health to create a network of community-based cancer centers that support research, enhance access to care and increase quality for more Americans.

Norton Cancer Institute is one of 14 sites in the nation – and the only site in Kentucky – selected to join the NCCCP network. This program will enhance and expand cancer services in the Louisville area and will further an important national effort to expand cancer research and offer the latest, most advanced cancer care to more Americans in their home communities.

Norton also participates in the Kentucky Cancer Registry which tracks cancer incidence and mortality rates for each of the 120 counties in Kentucky. Unfortunately, there is a lag in the timing of this information but it is still extremely valuable to track patient trends. The remainder of this section contains further details regarding incidence and survival rates by selected disease states, which allow us to identify specific community needs.

Lung and Bronchus

Lung and Bronchus cancer isn't as prevalent in our community as compared to eastern Kentucky; however our rate is significantly higher than the US rate of 50.6 per 100,000 men and women and the median age at death was 72 years of age. The rates for the three Kentucky counties in our primary service area are:

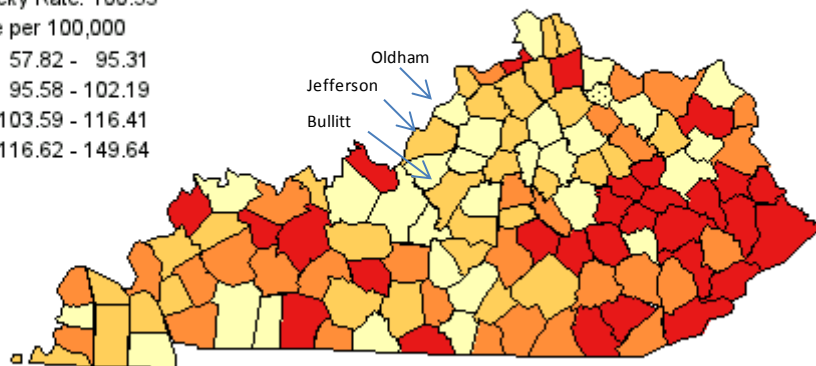
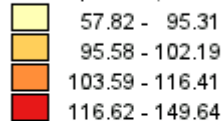
- Jefferson County = 95.58
- Oldham County = 93.92
- Bullitt County = 92.11

Age-Adjusted Cancer Incidence Rates in Kentucky Lung and Bronchus, 2005-2009 By County

Age-Adjusted to the 2000 U.S. Standard Million Population

Kentucky Rate: 100.53

Rate per 100,000



Data accessed October 1, 2012.
Based on data released February 16, 2012.
Copyright (C) 2012 Kentucky Cancer Registry

Although our rates are lower than other parts of the state, Jefferson County rates continue to exceed national averages. Lung cancer kills more men and women in the United States than any other type of cancer. Lung cancer often causes no symptoms early on, meaning the cancer has time to grow before it is detected. Cigarette smoking is one of the main factors behind lung cancer, so if you smoke, stop. If you've never smoked, don't start. Our Mobile Prevention Center conducted 11,901 cardiovascular disease screening for 6,720 individuals in 2011. During 2011, the Louisville hospitals treated 1,934 patients with a diagnosis of lung cancer, 35% of these patients were served at a Norton hospital.

The Surveillance Epidemiology and End Results (SEER) estimates that 226,160 adults will be diagnosed with and 160,340 will die from lung cancer in 2012. Unfortunately, Kentucky is at the top of the list when it comes to lung cancer deaths, with 100.53 deaths per 100,000. Specialists at Norton Cancer Institute have a tool in the fight against lung cancer called Brachytherapy. Below are our survival statistics for non-small cell lung cancer, which is the most common type of lung cancer.

Lung cancer (non-small cell)

Desired Performance	Desired performance for a survival rate is a high number.
Norton 2003-2007	Norton Healthcare 5-year cancer survival rates for patients originally diagnosed in 1998 to 2002.
Norton 2008-2009	Norton Healthcare 5-year cancer survival rates for patients originally diagnosed in 2003 to 2004.
KY 2003-2005	Kentucky 5-year cancer survival rates for patients originally diagnosed in 1998 to 2000.
U.S. 2003-2007	National 5-year cancer survival rates for patients originally diagnosed in 1998 to 2002.

KEY

Better than U.S. average	# = too few eligible cases to calculate a reliable statistic
Near U.S. average	na/nc = no comparative data
Worse than U.S. average	blank = does not apply
	0 or 100 = best score possible

5 year survival rate of lung cancer (non-small cell)					
	high	#	#		
stage0	high	#	#	.	23.1
stage1	high	64.5	65.9	63.2	46.4
stage2	high	42.3	59.1	42.6	26.4
stage3	high	17.3	24.1	17.7	10.2
stage4	high	4.4	6.5	4.3	2.8

Desired performance
Norton 2003-2007
Norton 2008-2009
KY
U.S.

You can see that in 2008-2009 we exceeded the national and state survival rates and continue to improve. Based on the 2011 cases, in the chart below, the majority of cases (44%) were stage 4, due to difficulty in detection discussed previously.

Stage	Cases	
	2010	2011
0	1	2
I	81	79
II	23	28
III	99	96
IV	181	171
Unk	15	12
TOTAL	400	388

In 2011, Norton Healthcare cared for 40% of the 1,691 lung cancer inpatients at a Louisville hospital.

Conclusion Statements – Lung Cancer

Community Need - YES

Opportunities exist for education and awareness, symptoms and diagnosis, as well as treatment to improve quality of life and survival rates.

Norton’s Response

Norton Cancer Institute (NCI), a part of the Norton Healthcare system with locations on all hospital campuses, recognizes the high incidence rates in our region. NCI also recognizes the need to expand its facility and physician model with multiple service offerings, to increase access to more of the population with a full scope of quality cancer services.

Patients with lung nodules that require further diagnostic testing or monitoring are excellent candidates for the Multidisciplinary Lung Clinic. Treatment of lung masses involves many different specialties; the center brings together expertise from multiple fields to provide a comprehensive treatment plan. After initial diagnosis, a multidisciplinary team of physicians and specialists collaborate to provide care tailored to each patient's needs. The team includes a dedicated thoracic surgeon, multiple medical oncologists, radiation oncologists, pulmonary specialists and a patient navigator who provide care in one convenient, comfortable location. Instead of scheduling individual appointments with each specialist, the clinic brings all these specialists together to provide a more thorough and timely evaluation, treatment and follow-up for each patient.

A specific initiative in the NCI plan is focused on expanding educational offerings and cancer screenings to facilitate earlier detection of cancer and improve outcomes. Early detection is critical for decreasing mortality rates. Norton Cancer Institute uses high-speed, multi-slice CT scanning technology that can find the tiniest of nodules. This painless screening can identify suspicious lesions when the tumors are small and often can be surgically removed. Norton Cancer Institute offers lung CT screening to individuals at high risk for developing lung cancer based on criteria consistent with the National Comprehensive Cancer Network (NCCN) Lung Cancer Screening guidelines. People between the ages of 55 and 74 who have smoked one pack of cigarettes a day for the past 30 years or quit smoking less than 15 years ago may be eligible to participate. If a lung nodule is detected from the screening scan, the person can be referred to the Multidisciplinary Lung Clinic. The Lung CT Screening Risk Assessment can be found at <http://www.nortonhealthcare.com/lungctscreening>.

Every patient who has a suspicious thoracic finding or is newly diagnosed with lung cancer has the unique opportunity to benefit from the Norton Healthcare/Norton Cancer Institute Thoracic Services Patient Navigation Program. Services are offered at no cost to the patient. The Thoracic Services Patient Navigator Program was developed to assist patients and their families with the many challenges that come with a lung cancer diagnosis. Our thoracic patient navigator is an oncology-certified registered nurse who can be a primary resource for lung cancer patients and the people who care for them.

NCI employs and is aligned with a vast array of clinical subspecialists in the area of oncology and continuously evaluates workforce needs to ensure we can adequately meet community health needs.

<i>Norton Hospital</i>	<i>Norton Audubon Hospital</i>	<i>Norton Suburban Hospital</i>	<i>Norton Brownsboro Hospital</i>	<i>Kosair Children’s Hospital</i>
✓		✓		

Breast Cancer

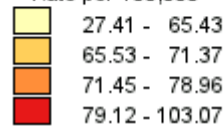
Nationally, 124 cases of breast cancer are diagnosed per 100,000 females (age-adjusted incidence rate for period 2005-2009). Comparatively, the incidence rate for Kentucky is 78.88; however the rates for Jefferson, Oldham and Bullitt Counties were 93.9, 82.71 and 80.88, respectively. Jefferson County, the largest county in the state, ranked 3rd in Kentucky for having the highest age-adjusted incidence rate for breast cancer.

Age-Adjusted Cancer Incidence Rates in Kentucky Breast, 2005-2009 By County

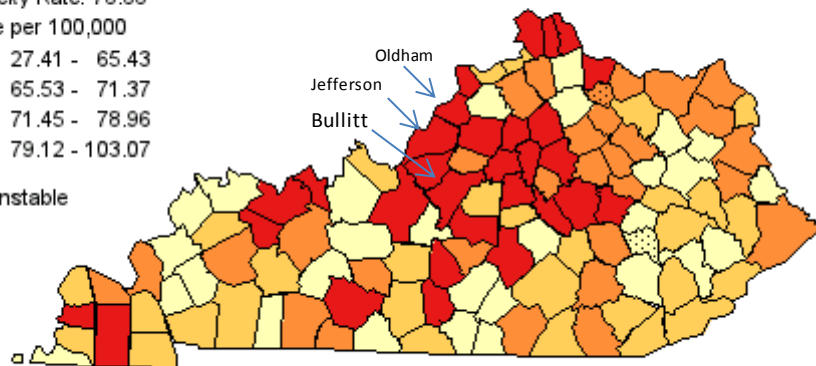
Age-Adjusted to the 2000 U.S. Standard Million Population

Kentucky Rate: 78.88

Rate per 100,000



 Unstable



Data accessed October 1, 2012.
Based on data released February 16, 2012.
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From prevention and early detection to the latest in breast cancer treatment, the Norton Cancer Institute Breast Health Program is uniquely designed to care for the specific needs of women with breast cancer and related conditions. Combining the latest cancer-fighting technology with our renowned patient navigation and support services, our team of experts heals not just the body but the mind and spirit.

Norton Healthcare has been granted a three-year full accreditation designation by the National Accreditation Program for Breast Centers (NAPBC), a program administered by the American College of Surgeons. Norton Healthcare is the only health care network in Kentucky to achieve this accreditation for all its adult-service facilities. The NAPBC grants accreditation only to those centers that demonstrate the highest level of quality breast care during a careful evaluation process.

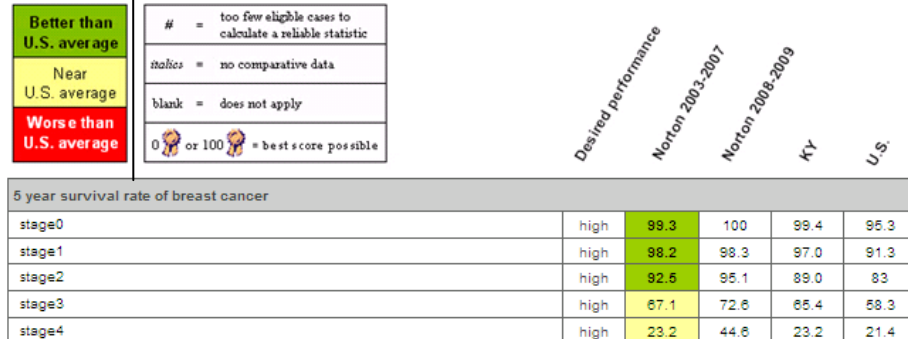
According to Susan G. Komen for the Cure, close to 230,000 new cases of invasive breast cancer will be diagnosed in the United States in 2012. In addition, hundreds of thousands of women will deal with benign breast diseases that require medical evaluation to determine treatment options. Norton Healthcare's accreditation from the NAPBC assures this substantial population access to the highest quality of patient care which is further demonstrated by our survival rates in the chart below.

Breast cancer

Desired Performance	Desired performance for a survival rate is a high number.
Norton 2003-2007	Norton Healthcare 5-year cancer survival rates for patients originally diagnosed in 1998 to 2002.
Norton 2008-2009	Norton Healthcare 5-year cancer survival rates for patients originally diagnosed in 2003 to 2004.
KY 2003-2005	Kentucky 5-year cancer survival rates for patients originally diagnosed in 1998 to 2000.
U.S. 2003-2007	National 5-year cancer survival rates for patients originally diagnosed in 1998 to 2002.

KEY

Better than U.S. average	# = too few eligible cases to calculate a reliable statistic
Near U.S. average	statics = no comparative data
Worse than U.S. average	blank = does not apply
	0 or 100 = best score possible



As you can see from our quality metrics above, we continue to exceed survival rates as compared to both state and national statistics. Norton remains committed to improving early detection and survival rates for breast cancer patients, utilizing our breast center, mobile unit and physician services to promote and provide mammography services and treating those patients in the Norton Cancer Institute as needed. Norton performs over 20K mammograms a year and treated 311 (45% market share) breast cancer inpatients; 590 total patients with the majority at stage 1 during 2011. Our Mobile Prevention Center conducted 1,983 mammography's in 2011 and identified 24 at risk. Based on the 2011 cases, in the chart below, the majority of cases were in stages 1 and 2, demonstrating improved early detection.

Stage	# Cases
0	95
I	242
II	170
III	52
IV	23
Unk	8
TOTAL	590

Conclusion Statements – Breast Cancer

Community Need - YES

An opportunity exists to improve detection and treatment. We believe that we are achieving excellence in outcomes for diagnosed patients and will continue to enhance best practices within the Norton Cancer Institute programs.

Norton’s Response

Breast cancer is the second leading cause of death among women and the rate in Louisville exceeds national rates by almost 300%. Norton is committed to providing comprehensive services to women as well as in the area of oncology. We have multiple access points for mammography screenings and other prevention and wellness activities. Additionally, we are developing a comprehensive Breast Center for women which not only will streamline screening activities but would also provide a single access point to evaluate care and treatment options. Norton's survival rates are near or exceed both state and national survival rates at every stage of diagnosis.

<i>Norton Hospital</i>	<i>Norton Audubon Hospital</i>	<i>Norton Suburban Hospital</i>	<i>Norton Brownsboro Hospital</i>	<i>Kosair Children’s Hospital</i>
✓	✓	✓	✓	

Colon Cancer

Colorectal cancer is the second-leading cancer killer, but it's also the most preventable cancer - when it's caught early. In almost all cases, early diagnosis can lead to a complete cure. Norton Cancer Institute provides free screening kits at community screening sites as a first response to preventing and finding colon cancer.

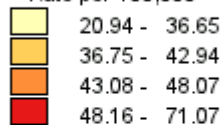
Jefferson County's age-adjusted incidence rate for colon cancer is 43.08 compared to 47.43 for Oldham County and 43.18 for Bullitt County. The national rate is 46.30 per 100,000.

Age-Adjusted Cancer Incidence Rates in Kentucky Colon excluding Rectum, 2005-2009 By County

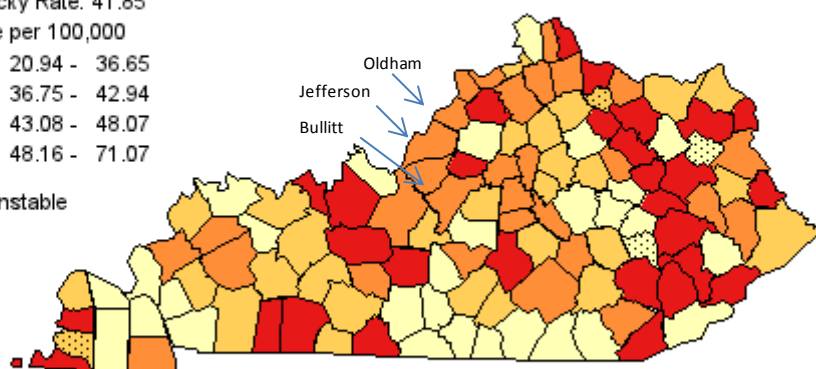
Age-Adjusted to the 2000 U.S. Standard Million Population

Kentucky Rate: 41.85

Rate per 100,000



 Unstable



Data accessed October 1, 2012.
Based on data released February 16, 2012.
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A colonoscopy is a safe, effective method of examining the full lining of the colon and rectum. It can be used to diagnose colon and rectum problems and to perform biopsies and remove colon polyps. Most colonoscopies are done on an outpatient basis with minimal inconvenience and discomfort.

The procedure is routinely recommended to adults 50 years of age or older as part of a colorectal cancer screening program. Patients with a family history of colon or rectal cancer may have their colonoscopy at age 40. A colonoscopy may be necessary to:

- Check unexplained abdominal symptoms
- Check inflammatory bowel disease (colitis)
- Verify findings of polyps or tumors located with a barium enema exam
- Examine patients who test positive for blood in the stool
- Monitor patients with a personal or family history of colon polyps or cancer.

Colon cancer

Desired Performance	Desired performance for a survival rate is a high number.
Norton 2003-2007	Norton Healthcare 5-year cancer survival rates for patients originally diagnosed in 1998 to 2002.
Norton 2008-2009	Norton Healthcare 5-year cancer survival rates for patients originally diagnosed in 2003 to 2004.
KY 2003-2005	Kentucky 5-year cancer survival rates for patients originally diagnosed in 1998 to 2000.
U.S. 2003-2007	National 5-year cancer survival rates for patients originally diagnosed in 1998 to 2002.

KEY

Better than U.S. average	# = too few eligible cases to calculate a reliable statistic
Near U.S. average	stats = no comparative data
Worse than U.S. average	blank = does not apply
0 or 100	= best score possible

5 year survival rate of colon cancer						
		Desired performance	Norton 2003-2007	Norton 2008-2009	KY	U.S.
stage0	high	96.9	100	95.2	80.7	
stage1	high	94.9	98.3	94.9	77.4	
stage2	high	82.9	89.3	84.7	67.3	
stage3	high	60.4	77.6	66.0	52.7	
stage4	high	18.4	31.2	11.5	8.2	

Our survival rates greatly exceed state and national rates. In 2011, 128 colon screens in the Mobile Prevention Center and 4,855 colonoscopies were performed at the hospitals. During the same time period, of the inpatients admitted to a Louisville hospital with a diagnosis of colon cancer, a Norton hospital served 39% of those patients.

At Norton Healthcare, there were 161 new colon cancer patients diagnosed during 2011 and the staging was distributed fairly evenly.

Stage	# Cases
0	5
I	32
II	31
III	39
IV	47
Unk	7
TOTAL	161

Conclusion Statements – Colon Cancer

Community Need - NO

Based on a review of incidence rates of colon cancer for our primary service area, we feel adequate screening and prevention as well as treatment services are in the community and the need is being met.

Norton's Response

Norton will continue to provide diagnostic screening and treatment services in the geographic area and will continue its efforts for high quality outcomes.

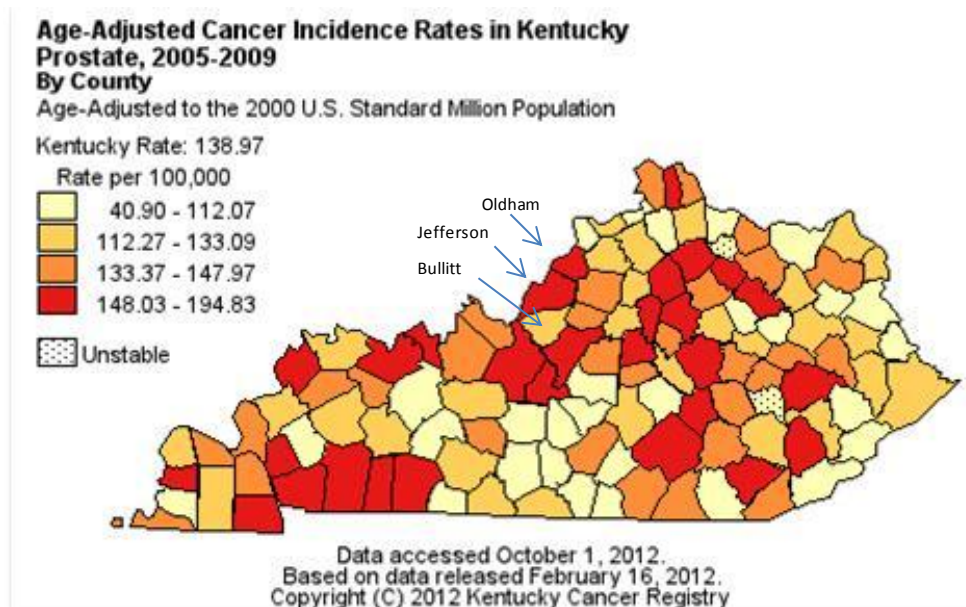
Prostate Cancer

Prostate cancer is cancer that grows in prostate gland. The prostate is a small, walnut-sized structure that makes up part of a man's reproductive system. It wraps around the urethra, the tube that carries urine out of the body.

The cause of prostate cancer is unknown, although some studies have shown a relationship between high dietary fat intake and increased testosterone levels.

Prostate cancer is the third most common cause of death from cancer in men of all ages and is the most common cause of death from cancer in men over 75 years old. Prostate cancer is rarely found in men younger than 40. The 40+ male population in our PSA is 249K and expected to grow 7.1% in the next five years. The PSA current has 25,451 men aged 75 years and older; and is expect to increase 6.9% during the same period of time. This increase in older male population may lead to additional cases of prostate cancer in our community.

The age-adjusted incidence rate for prostate cancer is 155.16 for Jefferson County, 170.23 for Oldham County and 117.61 for Bullitt County; compared to a national rate of 154.8.



The Prostate Center at Norton Cancer Institute is committed to exploring advanced treatment options and counseling for patients with prostate difficulties and cancer. Prostate cancer is generally slow growing, and the innovative treatment options available through Norton Cancer Institute are highly effective. Most prostate cancers are diagnosed while still confined to the prostate, when a patient has more options available. Below are the 5 year survival rate statistics at Norton Healthcare.

Desired Performance	Desired performance for a survival rate is a high number.
Norton 2003-2007	Norton Healthcare 5-year cancer survival rates for patients originally diagnosed in 1998 to 2002.
Norton 2008-2009	Norton Healthcare 5-year cancer survival rates for patients originally diagnosed in 2003 to 2004.
KY 2003-2005	Kentucky 5-year cancer survival rates for patients originally diagnosed in 1998 to 2000.
U.S. 2003-2007	National 5-year cancer survival rates for patients originally diagnosed in 1998 to 2002.

KEY

Better than U.S. average	# = too few eligible cases to calculate a reliable statistic
Near U.S. average	italics = no comparative data
Worse than U.S. average	blank = does not apply
	0 or 100 = best score possible

5 year survival rate of prostate cancer						
		Desired performance	Norton 2003-2007	Norton 2008-2009	KY	U.S.
stage0	high	#	#	.		78
stage1	high	94.5	#	92.6	80.7	
stage2	high	97.2	97.9	95.9	89.1	
stage3	high	94.3	100	93.5	89.8	
stage4	high	57.7	62.4	44.7	40.9	

As you can see, our outcomes for prostate cancer care are above national rates.

In 2011 we had 235 newly diagnosed cases with the majority of cases at stage 2.

Stage	# Cases
0	0
I	0
II	189
III	27
IV	14
Unk	5
TOTAL	235

Conclusion Statements – Prostate Cancer

Community Need - YES

Incidence rates for prostate cancer exceed national levels and clearly present an opportunity for improvement in our area. Further, prostate cancer is the second leading cause of death among men. The Louisville Metro area has an age adjusted death rate of 31, almost 350% higher than the national average of 9. An opportunity exists to improve detection and treatment.

Norton’s Response

Although a large portion of prostate screenings are performed by independent urologists in the area, we believe we have an opportunity to offer services more broadly to enable early detection. Norton hospital’s have an opportunity to utilize Norton Cancer Institute, a part of our integrated delivery system operating with all of our hospitals to provide prostate screenings through various venues, including a mobile health unit in underserved areas as well as other routine health fairs where screenings are

offered. We provide comprehensive services, being the first in the community to provide radical prostatectomies with the DaVinci robot, preserving tissue and improving recovery time. We will continue to provide screening alternatives to the underserved population and other venues, while ensuring adequate workforce in the community to meet patient needs. Additionally, while Norton's survival rates are near or exceed both state and national rates at every stage of diagnosis, we will continue to develop and implement best practices to improve these rates.

<i>Norton Hospital</i>	<i>Norton Audubon Hospital</i>	<i>Norton Suburban Hospital</i>	<i>Norton Brownsboro Hospital</i>	<i>Kosair Children's Hospital</i>
✓	✓	✓		

Obstetrical Care Areas of Prenatal Care and Teen Births

Prenatal Care & Birthing Services

Prenatal care is important as babies are born healthier and less likely to have serious problems during delivery. Womenshealth.gov defines prenatal care as health care and other services available to women during pregnancy. Adequate prenatal care is usually defined as starting care in the first trimester of pregnancy with at least nine visits for women giving birth to full term infants. Having a baby without having had prenatal care is a risky venture. Every year nearly one million American women deliver babies without receiving adequate medical attention and babies born to mothers who received no prenatal care are three times more likely to be born at low birth weight, and five times more likely to die, than those whose mothers received prenatal care.

24.5% of Louisville Metro and 27.5% of Kentucky women who gave birth did not receive prenatal care during their first trimester in 2009. A higher percentage of Louisville blacks (38%) did not receive prenatal care in their first trimester compared to Hispanics (31.4%) and whites (17.8%). Women aged 19 or younger were the least likely to receive prenatal care during their first trimester (38.5% not receiving such care) when compared to women aged 20-34 (23.1%) and women aged 35-54 (19.6%).

Whether this is a first baby or adding to the family it's an exciting and important journey for the expectant parents. Norton Women's Care supports the family every step of the way. With our expertise and personalized care, more parents choose to deliver their babies at Norton Women's Care at Norton Hospital and Norton Suburban Hospital than any other birthing facility in the region. Families are supported with many resources such as, free prenatal classes, all private labor and delivery rooms and mother/baby rooms, and extensive online resources including *Baby 101* and *You and Your Body*. Each hospital has obstetric anesthesiologists available every minute of the day, specialized care for high-risk pregnancies, and Level III Neonatal Intensive Care Units. Our NICU babies were primarily Passport or Medicaid patients, which is consistent with Kentucky as most

Kosair Children's Maternal-Fetal Medicine Specialists offices are referral centers that provide high-risk pregnancy care in the Louisville area, Southern Indiana and other areas in Kentucky. The offices are staffed by board-certified physicians trained in the subspecialty of maternal-fetal medicine. These specialists provide high-risk pregnancy care for women experiencing multiple gestation, premature labor, maternal hypertension, diabetes and other pregnancy-related conditions. Specialists also provide diagnosis and counseling for fetal abnormalities and inherited conditions.

According to the Louisville Metro Health Status Report, in 2009 there were 9,815 live births to parents living in Louisville Metro. 62.1% of these births were to white women, followed by 27.1% to black women and 7.1% to Hispanic women. The birth rate (number of births per 1,000 people) was 14.2. The highest birth rate was among Asian and Pacific Islander women (30.8), followed by black women (20.3) and white women (11.4). Over three quarters of the live births (76.8%) were to women aged 20 to 34. Teenaged women, aged 15 to 19, accounted for 11.3% of the live births.

In 2011 the Louisville hospitals delivered over 13,000 births of which Norton hospitals delivered 63% of those babies.

Louisville Hospitals	Births	% of Total
Baptist Hospital East	3,051	23%
Norton Hospital / Kosair Children's Hospital	2,943	22%
Norton Suburban Hospital	5,387	41%
University of Louisville Hospital	1,753	13%
	13,134	100%

Teen Births

Babies born to teenage mothers face a higher risk for premature birth, low birth weight, developmental problems and death. In 2009, the teen birth rate in Louisville was 50.6. This teen population for Jefferson County was 22,965 in 2012. This is lower than the state rate (55.1) but higher than the national rate (42.5).

Geographic Area	Teen birth rate per 1,000 female population between 15-19 years old
Bullitt, KY	35
Clark, IN	50
Floyd, IN	40
Harrison, IN	36
Jefferson, KY	51
Oldham, KY	17
Scott, IN	68

In 2011, the Louisville hospitals delivered 1,160 babies to teen mothers, which accounted for 8.8% of total births at these hospitals. Norton Hospital and Norton Suburban Hospital delivered 65% of the teen mother births, occurring at a Louisville hospital.

Louisville Hospitals	Teen Births	% of Total
Baptist Hospital East	168	14%
Norton Hospital / Kosair Children's Hospital	405	35%
Norton Suburban Hospital	353	30%
University of Louisville Hospital	234	20%
	1,160	100%

As the leading provider for birthing services in the community and the premier provider of pediatric services, continuing to promote health awareness as it relates to pregnancy prevention alternatives is an area of responsibility for our organization. At Norton Women's Care, we know women's health care needs are unique. To address those needs, the Marshall Women's Health & Education Center at Norton

Suburban Hospital was created to empower women to take charge of their health and offers a wealth of on-site support, information and classes related specifically to high-risk pregnancies.

Addicted Babies

Addicted babies are the tiniest victims of Kentucky's prescription pill epidemic and the use and abuse of illegal drugs; and their numbers are soaring. USA Today published an article in August 2012 titled, Kentucky sees surge in addicted infants. Kentucky has seen its hospitalizations for addicted newborns climb from 29 in 2000, 470 in 2009, to 730 in 2011. In 2011, 13,673 babies were delivered at a Kentucky hospital, so 730 addicted babies' accounts for 5.34% of the deliveries.

"It's a silent epidemic that's going on out there," said Audrey Tayse Haynes, secretary of the Kentucky Cabinet for Health and Family Services. "You need to say: 'Stop the madness. This is too much.' "

The skyrocketing numbers reflect the enormity of Kentucky's prescription drug abuse problem, which is among the nation's worst. It kills about 1,000 Kentuckians a year and wrecks thousands more lives in a state plagued by doctor shortages, high levels of chronic pain and illness, and too little drug abuse treatment.

Findings show, the patient origin of these 730 Kentucky babies were primarily from Jefferson (114, 15.6%), Fayette (42, 5.8%), Pike (30, 4.1%), and Pulaski (30, 4.1%) counties and 78% of these babies were either a Passport, Medicaid, charity or self-pay patient.

Low Birth Weight and Infant Mortality

In 2009, 9.1% (894) of the 9,815 live births in Louisville were classified as low birth weight and of these, 207, or 21%, were very low birth weight. According to March of Dimes, low birth weight (LBW) is when a baby is born weighing less than 2,500 grams or 5 pounds, 8 ounces. The definition for very low birth weight (VLBW) is when a baby is born weighing less than 1,500 grams. About 1 in every 12 babies in the United States is born with low birth weight. The percentage of low birth weight infants in Louisville was higher than the state (8.8%) and national rate (8.2%). Black mother had the highest percentage of low birth weight infants with 13%, and the percentage for white mothers was 7.6%.

The infant mortality rate for Louisville was 6.7 deaths per 100,000 live births. This rate was higher than the state (6.45) and national rates (6.42). Infant mortality among whites was lower than the rate for blacks (6.7 per 1,000 live births compared to 7.5).

Geographic Area	Percent of Births Classified as LBW	Infant Mortality Rate
Bullitt, KY	8.4%	7.3
Clark, IN	8.1%	5.7
Floyd, IN	8.3%	4.8
Harrison, IN	7.5%	3.6
Jefferson, KY	9.4%	6.1
Oldham, KY	8.2%	3.3
Scott, IN	9.3%	6.4
Kentucky	9.0%	7.0
Indiana	8.1%	7.8
Nation	8.2%	6.9

CDC classifies LBW as less than 2500 grams, as well. However, the infant mortality rate by county (table above) is based on mortality within the first year of life as compared to our rate of when the baby is actually in the hospital. Norton's percent of births classified as LBW in 2009 was 13.9%, infant mortality was 2.8% overall and 14.3% for VLBW babies.

At Norton Healthcare, our mortality rate for all NICU admissions was 2.8 in 2009, 3.62% better than the national rate. In the same year, we had a total of 1,182 babies that weighed less than 1500 grams. Note that the American Academy of Pediatrics (AAP) classifies all babies <1500 and < 32 weeks as a neonate, requiring a higher level of care.

Mortality Rate for All NICU Admissions			
Year	KCH	Suburban	NHC
2009	3.0	2.5	2.8
2010	3.3	2.3	3.0
2011	4.7	2.3	3.9

When babies need advanced care, Norton Healthcare's neonatal intensive care units (NICUs) have specialized staff and technology to support the newborn's needs. Kosair Children's Hospital, serving Norton Hospital patients and patients from across Kentucky and Southern Indiana, and Norton Suburban

Hospital offer Level III NICUs – the highest level available – with proven experience in caring for premature babies and infants with special medical conditions. In 2009, 31% of the VLBW babies were born at another hospital and transferred to Kosair Children’s Hospital, 34% in 2010 and 35% in 2011.

Percentage of Admissions with Birth Weight of 1500 Grams or Less									
Year	KCH			Suburban			NHC		
	VLBW	All	%	VLBW	All	%	VLBW	All	%
2009	169	1,182	14.3	78	628	12.4	247	1,810	13.6
2010	206	1,143	18.0	93	647	14.4	299	1,790	16.7
2011	210	1,192	17.6	75	610	12.3	285	1,802	15.8

**all information from Vermont Oxford Network

Conclusion Statements – Obstetrical Care Areas of Prenatal Care and Teen Births

Community Need – YES

There is a need to continuing promoting awareness for prenatal care because babies who received no prenatal care are three times more likely to be born at low birth weight, and five times more likely to die.

Norton’s Response

As discussed, prenatal care is an important variable when it comes to managing the health of an unborn child. It not only impacts the survivability of the infant but also impacts the health condition of the infant when born. As the largest birthing and neonatal provider in the state and region, we feel a responsibility to enhance and expand outreach services for the area to ensure appropriate care is delivered to enable the highest quality of life for both Mom and baby. Norton’s OB workforce now numbers 60, including 39 OB/GYN’s and 7 maternal fetal medicine physicians as well as 14 neonatologists. While this workforce is based in the Louisville area, we have 7 satellite locations or clinic sites across the state and region. Our providers work closely with local physician workforce as well as with the hospital acute care providers on education and training programs in addition to collaborative efforts enabling development of best practice protocols.

Relative to teen births, consistent with overall volumes, Norton delivers the majority of babies of teen mothers. Norton participates with local programs in the community, such as the Center for Adolescent Pregnancy Prevention (CAPP) to promote education and awareness, in addition to supporting the local Family Health Centers, who play a key role in reaching underserved areas of the community. We also have a strong child advocacy program, which is another vehicle used to promote prevention, wellness and health education.

Lastly, as it relates to newborn and neonatal care, Norton will continue to advance initiatives to reduce caesarian rates and improve outcomes and recover rates for mothers. Likewise, Norton will advance specific clinical excellence initiatives at Kosair Children’s Hospital and Norton Suburban Hospital to improve mortality rates and quality outcomes of our low birth weight, very low birth weight, complex and other neonates in our community.

<i>Norton Hospital</i>	<i>Norton Audubon Hospital</i>	<i>Norton Suburban Hospital</i>	<i>Norton Brownsboro Hospital</i>	<i>Kosair Children’s Hospital</i>
✓		✓		✓

Diabetes

Diabetes is a chronic disease that requires ongoing maintenance and management throughout a person's lifespan. These patients often have other co-morbidities, such as cardiovascular disease, obesity, depression, arthritis and dementia, and the diabetes diagnosis exacerbates any other health issue. Of our nation's leading causes of death, diabetes is one of the most preventable. According to the American Diabetes Association 25.8 million children and adults are living with diabetes in the U.S., and in 2010 alone there were 1.9 million new cases of diabetes in people 20 years and older.

The age-adjusted diabetes mortality rate was 35 deaths per 100,000 people in Louisville Metro in 2009. This rate was higher than both the state (29) and national (21) rates. For Louisville Metro African Americans the age-adjusted death rate was 76 compared to 28 for Louisville Metro whites. The death rate for males (46) was also noticeably higher than the rate for females (28).

According to the BRFSS survey, the number of Louisville residents reporting to have diabetes increased from 6.9% in 2004 to 13.2% in 2009. The percentage in 2009 was higher than those reported for the state (11.5%) and the nation (8.3%)¹¹.

It is estimated that over 88K adults in our service area have diabetes; and within the next five years it is expected to increase four percent. As you can see, consistent with population density, the vast majority of these patients reside in Jefferson County, Kentucky.

Adults with Diabetes

County	2012	2017	Inc/Dec
Bullitt, KY	6,411	7,136	725
Clark, IN	7,492	7,861	369
Floyd, IN	4,995	5,205	210
Harrison, IN	2,910	3,066	156
Jefferson, KY	60,122	61,607	1,485
Oldham, KY	4,236	4,764	528
Scott, IN	1,993	2,044	51
	88,159	91,682	3,523

Norton hospitals served over 61,828 inpatients in 2011 and 16% of those patients had a diagnosis of diabetes. During 2011, our inpatients with diabetes were primarily seen for cardiac care, pulmonary, general surgery, endocrinology and gastroenterology. Of these patients, over 15% didn't have a primary care physician. At Kosair Children's Hospital, we have a focused program to promote education and awareness while utilizing protocols for early detection of patients with diabetes. Additionally, as a significant chronic condition, our system Clinical Effectiveness team works with hospital level leaders to utilize best practice clinical protocols to identify these patients and recommend them to a specialist for ongoing care management to improve their overall health.

Conclusion Statements – Diabetes

Community Need – YES

The diabetes patient population continues to grow in Kentucky and our mortality rates for the state, as well as Louisville metro, continue to exceed national averages.

Norton’s Response

Employees and dependents can participate in a program, through our N Good Health initiative, that is designed to improve the health of employees who have diabetes mellitus and are covered by one of the Norton Healthcare’s employee health insurance plans. Those who participate in this program will actively engage in an education and health monitoring program and work with specially trained pharmacists to learn how to better manage their diabetes. As an incentive for participation in this program, Norton Healthcare offers reduced co-pays on diabetes prescriptions and testing supplies (test strips, syringes, lancets, glucometers, etc). In addition to saving money, Rx for Better Health is a resource provided by Norton Healthcare for self-care education, support and monitoring. Participants receive ongoing, private, face to face counseling from a specially trained pharmacist.

Norton encourages all our employees to complete a health assessment, which is shared with their primary care physician to identify areas of risk. Employees with Pre-Diabetes, as identified by their health assessment are offered the opportunity to join the YMCA Diabetes Prevention Program, subsidized at 75% of the cost for employees. It is a 16-week class designed to help prevent the development of diabetes in high-risk individuals. This also includes a 3-month YMCA family membership.

Norton initiated this program with our employees in 2010. We’ve increased incentives for employees to increase participation, aimed for early detection. We also have a program whereby we offer these assessments to employers in our service area. Following completion of the assessment by their employees, the employer receives a report outlining areas of recommended focus for intervention with their employees. Certainly, employees participate in improvement programs at their discretion. Nonetheless, Norton intends to track results of our employee participation and changes in health status over time. Additionally, we will continue to pursue relationships with employers in the community in an effort to identify these high risk patients, develop recommendations for prevention as well as treatment, including referral to a primary care physician or endocrinologist, as appropriate. In an effort to meet patient demand, Norton employs approximately 254 primary care physicians and 4 endocrinologists but will continue to enhance workforce to meet community need.

<i>Norton Hospital</i>	<i>Norton Audubon Hospital</i>	<i>Norton Suburban Hospital</i>	<i>Norton Brownsboro Hospital</i>	<i>Kosair Children’s Hospital</i>
✓	✓	✓	✓	✓

Active Lifestyles / Nutrition / Obesity

Fitness obviously plays a significant role in the health and wellness of an individual and the Louisville Mayor has promoted this through its “Healthy Hometown” initiative over the last several years. In 2009, 73.4% of Louisville residents reported engaging in some kind of physical activity outside of work in the past month. This is higher than the state rate (69.5%) but slightly lower than the national rate (75.4%). The Healthy People 2010 goal for adults engaging in moderate or vigorous physical activity was 50%, so Louisville has demonstrated success in this area. However, you can also see that about one-third of our adult population still leads a sedentary lifestyle.

Geographic Area	Percent of adults (20+) who report having no leisure time physical activity
Bullitt, KY	34%
Clark, IN	32%
Floyd, IN	25%
Harrison, IN	29%
Jefferson, KY	29%
Oldham, KY	28%
Scott, IN	32%

In addition to exercise, a body needs fuel to achieve such activities. Of Louisville Metro residents, 23.9% reported eating five or more servings of fruits and vegetables each day in 2009. This percentage was greater than what was reported for the state (21.1%) and the nation (23.4%). While Louisville residents are eating substantially more fruits and vegetables than in 2005 (18.0% report eating 5 servings of fruits and vegetables per day), the data suggests that the majority of residents are still not eating the recommended amount.

Jefferson County Public School’s lunch menus must adhere to U.S. Department of Agriculture dietary guidelines. These guidelines require school lunches to average no more than 30 percent calories from fat and no more than 10 percent calories from saturated fat in a one-week period. In addition, lunches must provide an average of one-third of the key nutrients including protein, Vitamins A and C, calcium, and iron and calories recommended daily for children.

The table below shows the percent of population that is low income and doesn’t have easy access to a grocery store and the percent of all restaurants that are fast food establishments.

Geographic Area	Percent of population that is low income without access to a grocery store	Percent of all restaurants that are fast food establishments
Bullitt, KY	17%	70%
Clark, IN	11%	47%
Floyd, IN	6%	63%
Harrison, IN	19%	59%
Jefferson, KY	5%	55%
Oldham, KY	9%	59%
Scott, IN	0%	71%

While it may be unfair to assume a direct correlation, it does appear that fast food is readily abundant as compared to a grocery for more healthy choices, which, in turn, may be contributing to a growing obesity problem in our community.

In 2009 an estimated 1.1 million adults in the state of Kentucky were obese. This was an increase of 353,000 or 0.03% from ten years prior. In Kentucky, 43.2% of non-Hispanic blacks are obese compared to 31.0% of non-Hispanic whites. Obesity has become a significant health issue for the Louisville area as well as the state of Kentucky. Almost two thirds of the population in our area report they are overweight and half of those folks report that they are obese. Exercise and nutrition play large roles in this health condition.

In 2004, 62% of Louisville residents indicated via a BRFSS survey that they were overweight (BMI of 25 to 29) or obese (BMI of 30 or more). This percentage increased to 64.9% in 2009. 33% of Louisville residents indicated they were obese, more than twice the Healthy People 2010 goal of 15%. The percentage of obese adults in Louisville was lower than in the state (67.1%) but higher than in the nation (63.1%).

Geographic Area	Percent of obese adults
Bullitt, KY	34%
Clark, IN	31%
Floyd, IN	31%
Harrison, IN	30%
Jefferson, KY	34%
Oldham, KY	30%
Scott, IN	29%

The Louisville Metro Health Status Report states that in 2009, 37.2% of children in Kentucky aged 10-17 were overweight. This puts Kentucky 48th out of 50 states in this category. The median percentage for all states is 30.6%. Through the Healthy, Hunger-Free Kids Act championed by the First Lady and signed by President Obama, USDA is making the first major changes in school meals in 15 years, which will help us raise a healthier generation of children. The new standards align school meals with the latest nutrition science and the real world circumstances of America's schools. These responsible reforms do what's right for children's health in a way that's achievable in schools across the Nation. Jefferson County Public Schools is proud to salute fifty-five (55) elementary schools that have achieved the United State Department of Agriculture's HealthierUS Gold Level Challenge; plus and additional sixteen (16) schools that have achieved HealthierUS Bronze Level Challenge. The criterion includes scheduled physical activity and nutrition education available to all students; healthy menus with fresh fruits and vegetables and whole grain bread available every day.

In 2012, Shaping Kentucky’s Future, a community guide for reducing obesity was made possible by funding from the Kentucky Department for Public Health, the Shaping Kentucky’s Future Collaborative and the Tides Foundation. Important findings are highlighted below:

- In Kentucky, 33% of children, 60% of women and 80% of men are overweight or obese
- Our overweight and obesity rates are the third highest in the nation for children, and the sixth highest for adults
- Health care costs attributable to obesity in Kentucky will reach an estimated \$2.3 billion in 2013
- This epidemic stands directly in the way of the better life we all want, especially for our children
- Diseases associated with obesity are diabetes, heart disease and some forms of cancer
- An unhealthy workforce is expensive to insure and under productive which undermines our ability to prosper economically

Prevention is especially important because it can save massive amounts of money. An analysis by Trust for American’s Health projected that a 5% reduction in the obesity rate would save \$30 billion in healthcare costs in the next five years.

Conclusion Statements – Active Lifestyles / Nutrition / Obesity

Community Need – YES

Statistics indicate a significant community need exists.

Norton’s Response

This is a global community wide issue and challenging to address as a hospital provider. However, there are actions we can implement more easily by utilizing our N Good Health program for our employees encouraging education and awareness of an individual’s health status and encouraging an active lifestyle in collaboration with a wellness plan developed with their primary care physician.

At Norton Healthcare, employees with a high risk of metabolic syndrome can participate in a medical weight management program, subsidized at 75% of the cost for employees. It’s a 12-week individualized treatment program that includes visits with a physician, dietitian, or mental health professional, as well as two sets of laboratory values and an EKG. Another option is the Heuser Clinic that is subsidized at 75% of the employee cost and includes a 12-week workout session that is appropriate for both novice and advanced participants. It focuses on all five components of fitness: cardiovascular, muscular strength, muscular endurance, flexibility and body composition.

<i>Norton Hospital</i>	<i>Norton Audubon Hospital</i>	<i>Norton Suburban Hospital</i>	<i>Norton Brownsboro Hospital</i>	<i>Kosair Children’s Hospital</i>
✓	✓	✓	✓	✓

Mental Health

Mental health is a term used in reference to mental illness. Mental illnesses are medical conditions that disrupt a person's thinking, feeling, mood, ability to relate to others and daily functioning. Currently, there are more than 200 forms of classified mental illness, with depression being the most common. The CDC reports that depression will be the leading cause of disability in the world by the year 2020.

Research has shown that mental illnesses, particularly depression, are related to the occurrence of chronic diseases such as diabetes, cancer and heart disease. It can also be a strong driver of many risk behaviors such as smoking, drug use, and physical inactivity.

The percentage of adults in Louisville reporting 14 or more "mentally unhealthy" days increased from 12.7% in 2004 to 15% in 2009. More females (9.4%) reported mentally unhealthy days compared to males (5.2%). The national average is 3.4 days.

Geographic Area	Avg. number of mentally unhealthy days reported in the last 30 days
Bullitt, KY	4.9
Clark, IN	4.9
Floyd, IN	4.1
Harrison, IN	2.9
Jefferson, KY	3.8
Oldham, KY	3.9
Scott, IN	5.3

Within the PSA there are 810 psychiatric inpatient beds.

Mental Health

Facility	County	Psychiatric
Our Lady of Peace	Jefferson, KY	396
The Brook Hospital	Jefferson, KY	86
The Brook Hospital - Dupont	Jefferson, KY	76
Norton Hospital & Kosair Children's Hospital	Jefferson, KY	46
Baptist Hospital East	Jefferson, KY	22
Jewish Hospital & St. Mary's Healthcare	Jefferson, KY	20
University of Louisville Hospital	Jefferson, KY	20
Wellstone Regional Hospital	Clark, IN	100
Clark Memorial Hospital	Clark, IN	44

810

Conclusion Statements – Mental Health**Community Need – NO**

Gaining access to mental health services doesn't appear to be a significant issue in our community. There are inpatient, outpatient and physician based office resources for both adults and children, especially considering the reach of Seven Counties Services.

Norton's Response

As an employer, we have mental health resources available through our Employee Assistance Program. With our partnership with University of Louisville, the Ackerly Child Psychiatry inpatient service of Kosair Children's Hospital specializes in the evaluation, stabilization and short-term treatment of emotionally distressed children aged two to 18 years. In addition to excellent psychiatric services, patients as well as their physicians have access to the comprehensive medical and surgical resources of Kosair Children's Hospital - the region's only free-standing, full service children's hospital. The service also offers psychiatric counseling to children staying at the hospital who are receiving other medical or surgical attention. The service evaluates and treats preschoolers, aged 2 to 4 years, with the parent remaining on the unit with the child to provide the highest degree of comfort for the patient.

Although, we provide mental health services, we are limited in our ability to focus on an expansion of services. However, we are in the process of developing an eating disorders program on the Norton Suburban Hospital campus.

Sexually Transmitted Diseases

The number of new primary and secondary syphilis cases in Louisville increased from 27 in 2008 to 41 in 2009. Men who have sex with men (MSM) and in particular HIV infected MSM are the most frequently exposed group in Louisville. The rates for black males and females were higher than those for white males and females both nationally and for Louisville. In Louisville the case rates per 100,000 population in 2009 were 22.4 for black males, 8.7 for white males, 1.3 for black females and 0.0 for white females. Nationally the rates were 31.3 for black males, 8.2 for black females, 3.9 for white males, and 0.4 for white females.

The number of new Chlamydia infections per 100,000 population in Louisville increased from 540.4 in 2008 to 561.0 in 2009. The rate in 2009 was higher than the rate of new infections seen in Kentucky (311) and in the nation (409). The rate of new infections was 1461.2 for Louisville black females, 959.2 for black males, 209.2 for white females, and 83.2 for white males.

Geographic Area	Chlamydia rate per. 100,000 pop.
Bullitt, KY	173
Clark, IN	265
Floyd, IN	338
Harrison, IN	197
Jefferson, KY	568
Oldham, KY	104
Scott, IN	368

The rate of new Gonorrhea cases in Louisville for 2009 was 259.8 per 100,000 population. This is significantly higher than the national rate of 99.1, almost three times higher than the state rate, and more than thirteen times higher than the Healthy People 2010 goal of 19.

HIV/AIDS Infection

2005 marked the first year of confidential name-based HIV reporting in the state of Kentucky. Since 2005 there has been relatively little change in the number of new cases per year. The new case rate per 100,000 population was 19.5 in 2005, peaked at 22.6 in 2007, and was last reported at 18.2 in 2009. The predominant mode of exposure is men who have sex with men (MSM) at 37.4%, followed by injection drug use (IDU) at 6.1%. For 52% of new HIV cases there was no exposure mode identified.

The new case rate for Louisville blacks in 2009 was 43.7 compared to the rate for whites of 11.2. This closely follows the national trend (49.3 to 5.3).

Geographic Area	Number of persons living with HIV per 100,000 Population
Bullitt, KY	30
Clark, IN	151
Floyd, IN	148
Harrison, IN	58
Jefferson, KY	305
Oldham, KY	181
Scott, IN	67

The Louisville hospitals treated 363 inpatient cases with an AIDS diagnosis; 90 discharges were from a Norton hospital.

A new study has been released at the XIX International AIDS Conference (AIDS 2012) that patients treated early and then taken off antiretroviral therapy have shown no signs of a resurgence of their HIV infection. The vision for the International AIDS Society strategy for an HIV cure is very clear: a safe, affordable and scalable cure will improve the health and quality-of-life for those with established infection, reduce the risk of transmission of virus to those not infected, and ultimately allow resources to be shifted to other needs.

Louisville Metro Public Health & Wellness has a specialty clinic on Outer Loop in the Okolona area. The specialty clinic diagnoses and treats sexually transmitted diseases includes: syphilis, gonorrhea, chlamydia, genital warts, etc. and HIV testing is also offered at this clinic. Patients are seen on a walk-in basis. An AIDS Resource Directory is available at <http://www.louisvilleky.gov/NR/rdonlyres/EAE49F4C-BAF2-496C-B1A7-3B848AA84527/0/louaidsresourcedirectory062012.pdf>

CDC's Sexually Transmitted Disease Prevention Strategy describes the prevention and control based on the following five major concepts:

- Education and counseling of persons at risk on ways to adopt safer sexual behavior
- Identification of infected persons--with or without symptoms--unlikely to seek diagnostic and treatment services
- Effective diagnosis and treatment of infected persons
- Evaluation, treatment, and counseling of sex partners of persons who are infected with an STD
- Pre-exposure vaccination of persons at risk for vaccine-preventable STDs

The Louisville Metro Public Health & Wellness currently provides adequate access for our community to seek services if needed.

Conclusion Statements – Sexually Transmitted Diseases**Community Need – YES**

Statistics indicate there is a continued need around sexually transmitted diseases and the contraction thereof.

Norton's Response

While it appears there is a community need, as outlined above by the CDC, prevention and control begins with education and counseling. As the leading obstetrical provider in the community, as well as a major employer of the obstetric workforce and the community's only pediatric provider, we'd like to be a part of the solution. However, due to the nature of these, we feel this need is best met through our employed physician workforce, including our 52 women's health physicians and 162 primary care physicians. We will continue education efforts at all of our physician offices as well as at our immediate care centers and our Marshall Women's Center, which focuses on comprehensive women's health.

Health Care Resources

This section will address the availability of health care resources to the residents of the community, and a critical component to the health of our community's residents and a measure of the soundness of the area's health care delivery system. Clearly, an adequate number of health care facilities and health care providers are vital for sustaining a community's health status. Fewer health care facilities and health care providers not only impacts the access to services but also the timely delivery of services.

Hospitals and Health Centers

The primary service area has good access to hospital care with over 4,100 inpatient acute care beds which equates to 3.6 beds per 1,000 people. Review of occupancy rates for each hospital indicates that the need is being met. The State Health Plan regulates health services provided, by a Certificate of Need process, which establishes criterion based on community need. With current capacity any expansion would introduce complexities.

Short Term Acute Care Beds by Hospital

Hospital	County	Acute
Norton Hospital	Jefferson, KY	614
Norton Audubon Hospital	Jefferson, KY	432
Norton Suburban Hospital	Jefferson, KY	373
Norton Brownsboro Hospital	Jefferson, KY	127
Kosair Children's Hospital	Jefferson, KY	245
Baptist Hospital East	Jefferson, KY	460
Jewish Hospital & St. Mary's Healthcare	Jefferson, KY	517
University of Louisville Hospital	Jefferson, KY	384
Saints Mary & Elizabeth Hospital	Jefferson, KY	298
Baptist Hospital Northeast	Oldham, KY	90
Jewish Hospital Medical Center South*	Bullitt, KY	-
Floyd Memorial Hospital & Health Services	Floyd, IN	236
Clark Memorial Hospital	Clark, IN	189
St. Catherine Regional Hospital	Clark, IN	96
Harrison County Hospital (CAH)	Harrison, IN	23
Scott Memorial Hospital (CAH)	Scott, IN	25

4,109

* provider has a Certificate of Need for 60 beds, not yet implemented

The primary service area has modest access to psychiatric inpatient care with only 810 beds which equates to 0.7 beds per 1,000 people and 414 of those beds are pediatric beds. Occupancy rates show a possible strain of providing needed services. And, these services are also regulated by the State Health Plan and the CON process.

Psychiatric Beds

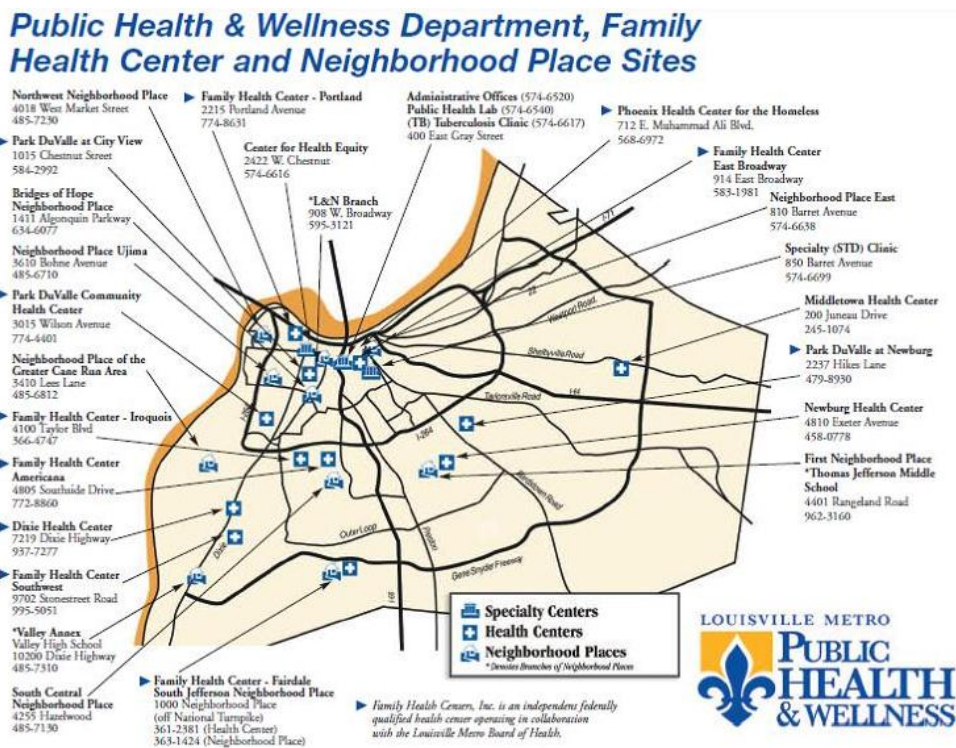
Facility	County	Psychiatric
Norton Hospital	Jefferson, KY	28
Kosair Children's Hospital	Jefferson, KY	18
University of Louisville Hospital	Jefferson, KY	20
Baptist Hospital East	Jefferson, KY	22
Jewish Hospital & St. Mary's Healthcare	Jefferson, KY	20
Our Lady of Peace	Jefferson, KY	396
The Brook Hospital	Jefferson, KY	86
The Brook Hospital - Dupont	Jefferson, KY	76
Wellstone Regional Hospital	Clark, IN	100
Clark Memorial Hospital	Clark, IN	44

810

Seven Counties Services', a local social services agency, mission is about helping individuals and families affected by mental illness and developmental abilities, addictions and abuse. The organization serves Bullitt, Henry, Jefferson, Oldham, Shelby, Spencer and Trimble counties in Kentucky. It has developed a strong affiliated network of providers to help meet the mental health needs of our community.

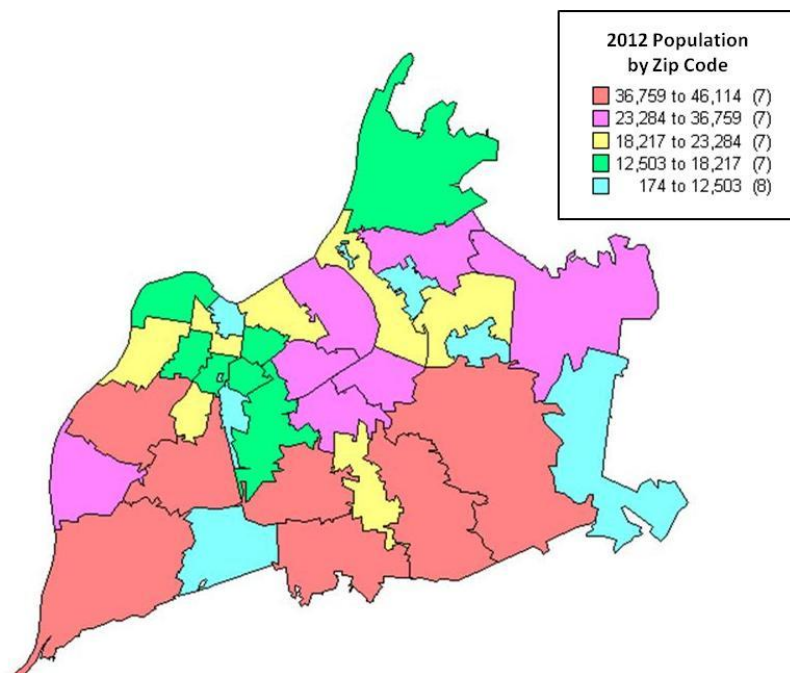
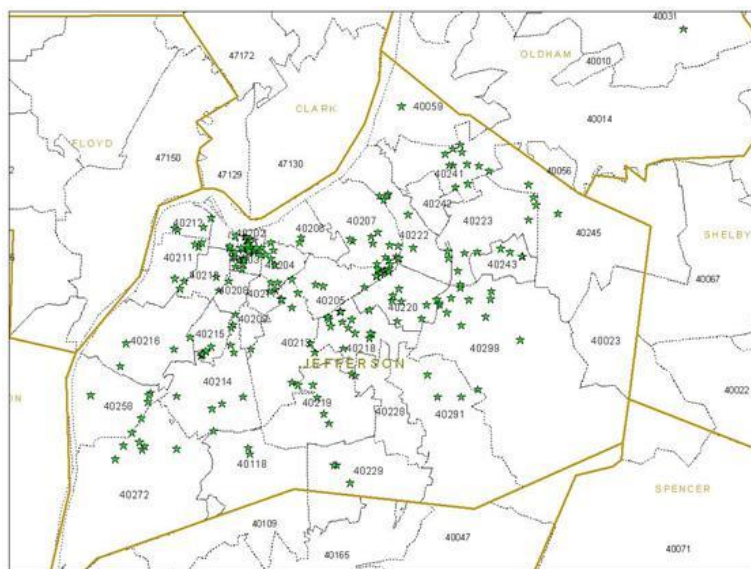
The Kentucky Office of the Inspector General's inventory lists 268 licensed non-hospital healthcare facilities in Jefferson County, 17 in Bullitt County and 14 in Oldham County. The types of facilities include ambulatory care facilities, adult day care, dialysis centers, rehabilitation agencies and special medical technology locations.

Each county also has its own health department which also oversees public health issues, monitoring environmental issues and providing education. The Louisville Metro Public Health & Wellness manages 26 neighborhood places, health centers and specialty centers.



It appears that the PSA has sufficient healthcare access with 16 acute care hospitals, almost 300 non-hospital healthcare facilities (such as adult day care, dialysis centers, etc.), and the 26 neighborhood places. There may be some inpatient psychiatric needs but the Kentucky State Health precludes our ability to expand these services at this time. In addition several primary care and specialty care physicians offices are located throughout the community.

The maps below represent the locations of the various health facilities throughout Jefferson County, Kentucky and the population by zip code. It appears that the county has adequate and reasonable access to healthcare services.



Conclusion Statements – Healthcare Resources**Community Need – NO**

The community is well represented with several levels of healthcare and access points. Duly noted, the perceived need for increased access to providers as identified from the community forum responses.

Norton's Response

Norton Healthcare will continue to monitor and evaluate any access needs identified. In addition, community forum responses also indicated the need for a single location to get access to health information, education, screenings, as well as available treatment options. Norton offers this on a limited and programmatic basis. For example, the Marshall Women's Health & Education Center at Norton Suburban Hospital was created to empower women to take charge of their health – from adolescence to menopause and beyond. The first of its kind in the region, the center provides women of all ages comprehensive, personalized support through information, education, navigation and physician referrals. And, the Norton Cancer Institute Cancer Resource Centers are 3 locations (Downtown medical campus, Norton Suburban Hospital and Norton Audubon Hospital) and each location has extensive resources related to cancer care.

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 was considered based on the type of services required by those patients served by area hospitals. The ability to attain certain relative market share of the community varies based on a number of factors, including the services provided, geographical location and accessibility of each competing facility. This table represents an analysis of 2011 inpatient discharges data for hospitals in the Louisville market.

Service Line	Other Providers*	NH	AUD	SUB	NBH	KCH	Total NHC	Total Lou Area Hosp	NHC%	Total Discharges
OB/DELIVERY	8,434	3,552	11	5,765	5	5	9,338	17,772	52.5%	17,772
PULMONARY	10,575	879	1,787	1,036	506	2,047	6,255	16,830	37.2%	16,830
MEDICAL CARDIOLOGY	9,778	874	1,885	764	328	174	4,025	13,803	29.2%	13,803
GASTROENTEROLOGY	8,995	1,128	1,240	1,081	351	576	4,376	13,371	32.7%	13,371
GENERAL SURGERY	7,913	1,476	1,117	1,251	309	785	4,938	12,851	38.4%	12,851
GENERAL MEDICINE	8,543	711	1,012	820	373	1,038	3,954	12,497	31.6%	12,497
ORTHOPEDICS	8,468	1,004	765	650	1,257	319	3,995	12,463	32.1%	12,463
NEUROLOGY	6,105	529	658	513	646	717	3,063	9,168	33.4%	9,168
INVASIVE CARDIOLOGY	6,214	692	1,632	195	110	28	2,657	8,871	30.0%	8,871
NEPHROLOGY	4,234	359	686	511	164	192	1,912	6,146	31.1%	6,146
PSYCHIATRY	4,257	633	306	65	34	576	1,614	5,871	27.5%	5,871
NEONATE	1,842	664		1,589	-	1,251	3,504	5,346	65.5%	5,346
ONCOLOGY MEDICAL	2,914	455	345	400	117	631	1,948	4,862	40.1%	4,862
SPINE	1,964	1,632	350	258	288	332	2,860	4,824	59.3%	4,824
ONCOLOGY SURGERY	2,356	912	287	314	144	56	1,713	4,069	42.1%	4,069
ENDOCRINE	2,169	274	408	284	112	479	1,557	3,726	41.8%	3,726
CARDIAC SURGERY	2,078	386	630	37	26	173	1,252	3,330	37.6%	3,330
UROLOGY	1,474	229	182	168	61	90	730	2,204	33.1%	2,204
VASCULAR SURGERY	1,339	273	277	191	94	16	851	2,190	38.9%	2,190
GYNECOLOGY	1,045	195	51	533	40	40	859	1,904	45.1%	1,904
NEURO SURGERY	469	134	64	39	212	193	642	1,111	57.8%	1,111
ENT	617	29	50	50	34	102	265	882	30.0%	882
THORACIC SURGERY	496	84	89	62	30	72	337	833	40.5%	833
OTHER	33	5	12	12	2	5	36	69	52.2%	69
Total **	102,312	17,109	13,844	16,588	5,243	9,897	62,681	164,993	38.0%	164,993
Lou Hospitals ONLY	70,043	17,109	13,844	16,588	5,243	9,897	62,681	132,724	47.2%	132,724

* includes Baptist Hospital East, Baptist Hospital Northeast, Jewish Hospital, Saints Mary & Elizabeth Hospital, University of Louisville Hospital, Clark Memorial Hospital and Floyd Memorial Hospital & Health Services

** Total includes all hospitals listed above

Notes: Clark Memorial Hospital and Floyd Memorial discharges were annualized from YTD Q3-2011. Scott Memorial Hospital is not included in market share analysis.

Source: Norton Healthcare and KHA InfoSuite

The mix of services in the table above shows that the majority of inpatient care was for OB/delivery, pulmonary, cardiology, gastroenterology and general surgery/medicine. The average length of stay was approximately five days.

Inpatient discharges have been fairly consistent the last five years, averaging approximately 132K discharges a year for Louisville hospitals. As more care is shifted to the outpatient setting it is not likely that discharge volumes will increase significantly in the future.

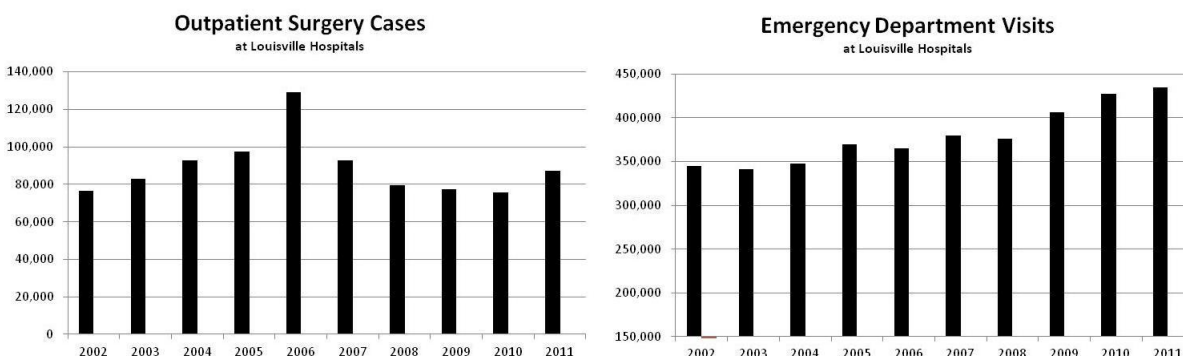
Acute Non-Psychiatric Discharges

Hospital	2007	2008	2009	2010	2011
Norton Hospital / Kosair Children's Hospital	26,446	26,067	26,367	25,774	25,549
Norton Audubon Hospital	13,249	13,110	12,493	13,055	13,970
Norton Suburban Hospital	17,522	17,287	15,900	15,955	15,803
Norton Brownsboro Hospital	-	-	902	4,280	5,293
Baptist Hospital East	25,464	25,379	27,960	28,272	26,433
Jewish Hospital & St. Mary's Healthcare	21,088	20,680	24,981	19,516	18,790
University of Louisville Hospital	14,914	14,322	14,772	16,396	16,433
Saints Mary & Elizabeth Hospital	11,681	12,139	11,701	11,589	10,364
	130,364	128,984	135,076	134,837	132,635

Source: Annual Kentucky Hospital Utilization and Service Report, Table 2 - Acute Non-Psychiatric Inpatient Utilization

Healthcare reform initiatives and advancements in patient care and treatment will ensure not only that ambulatory services will continue to grow, but also that they will move closer to the center of care delivery within hospital systems, rather than being offered as an adjunct to inpatient services. Outpatient settings will become the hub of a highly sophisticated array of multidisciplinary services delivered in an integrated environment to ensure high-quality care and excellent patient outcomes¹².

Below is a 10-year snapshot of outpatient surgery cases and emergency department visits for Louisville Hospitals. Based on expected changes in healthcare those trends are expected to increase in volume going forward.



In conclusion, with healthcare reform the way healthcare will be delivered will change. It is expected that demand for inpatient volume will shift downward and more care will be delivered in an outpatient setting.

Estimated Demand for Physician Services

Last spring, the Courier Journal reported that a primary care physician shortage looms for Louisville. The impending Louisville shortage is due to a number of factors: an aging population that will need more care, a large number of doctors approaching retirement, and medical students shunning primary care practices for specialties with higher pay and better hours. According to a study that the Louisville Primary Care Association commissioned, by 2020, Jefferson County will need 455 new primary care physicians – almost as many as the number that work in local medical practices now. The new doctors will be needed to replace current doctors who are expected to retire and to meet federal guidelines for serving the projected 2020 population. Note, that this doesn't account for the extra demand for more doctors when health reform could cause millions more Americans to have health insurance in 2014 was upheld.

A new nationwide survey of U.S. physicians, conducted by Jackson Healthcare, shows that 34 percent say they will leave the practice of medicine in the next decade. In 2012 alone, 16% of physicians are going part-time, retiring or leaving medicine. Young doctors, under the age of 55, are also considering leaving the practice of medicine, citing high costs of running a practice and not wanted to practice in the era of healthcare reform. According to the survey, specialists with the greatest propensity to retire from the profession in the next decade include oncologists, hematologist, otolaryngologists, general surgeons, cardiologist and urologists.

Norton outsources the physician demand analysis that utilizes a proprietary analysis and complex methodology to estimate physician need for each service area. Findings show several specialties have a physician need; especially primary care, general surgery, ophthalmology, anesthesiology, pathology, psychiatry, and radiology.

Physician Services, a division of Norton Healthcare continually assesses the need to recruit physicians to satisfy market demand based on changes in population needs, physician retirement and relocation. Recruiting physician specialties can be difficult based on a plethora of dynamics. Further, with health reform, it is possible the need for a significant supply of mid-level providers will be needed to support physicians in the future.

Conclusion Statements – Physician Demand

Community Need – YES

Based on the aging population, health care reform and other disease incidence rates, there is an ongoing need for physician workforce. However, it should be noted that it appears adequate access and workforce is available today.

Norton's Response

Norton will continue to monitor our employed and market workforce considering changing needs based on an aging workforce, changes in practice patterns, chronic disease needs, etc. Our physician services team, in collaboration with our acute care hospital leadership will continue to assess needs for the system and for each campus, developing and implementing appropriate recruiting plans.

Meeting turnout was small; however the attendees were responsive to the initiative. Forty-five people attended the four public meetings and approximately 40 business and medical professionals attended the meeting at the Medical Society (see *Appendix A* for response charts). Since the turnout was limited, LMPHW conducted online surveys through Survey Monkey and within a two month period over 1,800 people submitted an online survey. Although the responses were limited we were still able to glean helpful information from the input provided by those who represent broad interests of the community; including medically underserved, low-income and minority populations. Participants were primarily asked their perspectives on unmet health care needs and how to better coordinate care given perceived community circumstances. It's important to note that the attendees at the four public meetings were responsive to the initiative; however it didn't appear that healthcare was a high priority concern in relation to the demands of daily life.

Data was distributed fairly equally across the zip codes of Jefferson County and also closely mirrored the demographics of the county with one exception; the Hispanic community, 4% of the population, was the only notable absence. It is noted that the workgroup of Louisville hospital providers, sponsored by the Louisville Metro Public Health & Wellness, should identify more effective outreach strategies to encourage participation from the Hispanic community going forward.

Below is a summary categorized by themes expressed at the 5 meetings.

Access to Care Concerns

Convenient physician office hours and having adequate transportation were identified as significant barriers to care for the people that responded to the survey. Also, medical costs, Medicaid rules and other insurance issues were stated barriers.

- Physician office hours were identified as a barrier for 28.5% of respondents
- 38% of respondents identified transportation as an barrier to getting health care
- Expenses related to medical costs were a significant concern for respondents
- 42% of respondents were confused on where to go for their care once at a facility

Healthcare Literacy

Evaluating how we support healthcare literacy is an opportunity as we develop communications and marketing messages.

- Health care knowledge was identified as a significant concern (56%)

Insurance

- 86% thought that insurance issues were a barrier to healthcare
- Medicaid rules were a concern for 29% of respondents

Inclusion

- 37% of respondents listed culture and language was a health care barrier
- 15% felt discrimination or bias as a big barrier to healthcare
- 44% identified health beliefs as a significant barrier to care
- Stigma was a barrier to care for 26% of the respondents
- Fear of deportation was identified as barrier to seeking care for 19% of respondents

To provide context, the white non-Hispanic is still the largest population (77%) in the community, however we predict a greater portion of our community to be in the black, Asian, Hispanic ancestry categories.

Opportunities from the business and medical professional survey were:

- Opportunities to improve preventative care
- Need to do a better job with mental health services and oral health services
- Providing nutrition/weight management resources

Conclusion Statements – Community Health Survey**Community Need – YES**

Opportunities were identified to improve health literacy and promote an inclusive culture.

Norton's Response

Access to Care: Norton is a large integrated healthcare system and well represented by locations throughout the community.

Healthcare Literacy: Norton plans to engage in further conversations with internal and external leaders related to culture awareness, language barriers, health literacy, and education and poverty concerns.

Inclusion: Our purpose is to provide quality health care to all those we serve, in a manner that responds to the needs of our communities and honors our faith heritage. We will pursue our mission to improve the health of our community and all those within it by maintaining an inclusive environment in which our employees, suppliers, volunteers, medical staff and leadership understand, respect and reflect the diversity of the people we serve, and continuously strive to set the standard for quality and caring. In an effort to demonstrate our commitment to inclusion, we established a leadership role within Norton University, a part of Norton Healthcare, whose sole focus is to educate, measure, track, and promote an inclusive culture within our organization. We have multiple levels of diversity training that is required for all management and leadership. These programs will continue to evolve to allow ongoing adaptation, education and awareness.

Prioritization of Identified Health Needs

The community health concerns based on this assessment are:

- Heart Disease / Hypertension
- Cancer Incidence & Mortality
- Obstetrical care areas of prenatal care and teen births
- Infant care with a focus on lower birth weight and infant mortality as well as drug addicted newborns
- Diabetes
- Obesity
- Mental Health
- Tobacco Use
- Health Literacy
- Inclusion

The methodology used to prioritize the health care needs of the community is a weighted system of metrics for each identified opportunity. These metrics are:

- **Magnitude:** Measures the number of people affected.
- **Severity:** Measures the mortality rate.
- **Impact on Vulnerable Population:** Measures the disparity in how the issue affects vulnerable populations (racial minorities, the elderly, low income neighborhoods, etc.) versus the majority population.
- **Match to Government Priorities:** Does the issue match up with government priorities set out in *Healthy People 2020 Objectives*?
- **Organizational Expertise and Internal Resources:** Measures Norton's expertise and resources available to deal with a particular health issue.
- **Effectiveness of Possible Interventions:** Measures the potential success that an intervention might have at curbing the effect that a health issue has on the community.
- **Other Factors:** Other factors as listed.

Considerations for Meeting Identified Health Needs

The Community Health Needs Assessment is managed by Norton Healthcare's Strategic and Business Planning department. This department is responsible for coordinating the organization's strategic planning process from a system perspective which complements the intent of the community health needs assessment. The implementation plans for each hospital will most likely include capital requirements and resource allocation which from a management perspective makes it ideal to have this assessment as part of the strategic planning process so that the appropriate resources can be planned for from an efficient and systematic perspective.

After compiling and analyzing all the data in this assessment, we recommend that management consider the following health care concerns and further identify comprehensive tactical strategies. 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. The hospitals owned by Norton Hospitals, Inc. are capable of responding to these community needs:

- Heart Disease / Hypertension
- Cancer Incidence & Mortality
- Obstetrical care areas of prenatal care and teen births
- Infant care with a focus on lower birth weight and infant mortality as well as drug addicted newborns
- Diabetes
- Obesity
- Mental Health
- Tobacco Use
- Health Literacy
- Inclusion

Implementation Plan Focus by Hospital

For appropriate utilization of scarce resources, each hospital will specifically respond to the following identified health care needs:

Norton Hospital

- Heart Disease / Hypertension
- Cancer Incidence & Mortality
- Obstetrical care areas of prenatal care and teen births
- Infant care with a focus on lower birth weight and infant mortality as well as drug addicted newborns
- Diabetes
- Obesity
- Mental Health
- Tobacco Use

Norton Audubon Hospital

- Heart Disease / Hypertension
- Cancer Incidence & Mortality
- Diabetes
- Tobacco Use

Norton Suburban Hospital

- Cancer Incidence & Mortality
- Obstetrical care areas of prenatal care and teen births
- Infant care with a focus on lower birth weight and infant mortality as well as drug addicted newborns
- Diabetes
- Obesity
- Tobacco Use

Norton Brownsboro Hospital

- Heart Disease / Hypertension
- Diabetes
- Obesity
- Tobacco Use

Kosair Children's Hospital

- Diabetes
- Obesity
- Infant care – Very Low Birth Weight , Addicted Babies and Access

Implementation Plan

Note that this implementation plan summarizes and highlights the strategic tactics and is not intended to be exhaustive and do not imply there is only one way to address the identified need.

Socioeconomic Characteristics of the Community

Educational Attainment (Reference: Workforce Plan / Pillar: Service)

Our community leaders have an aggressive agenda to increase the number of college degrees. Lower education levels clearly impact employability.

Highlighted strategic tactics to improve educational attainment are:

- Expand job shadowing and mentoring experiences
- Develop a comprehensive and integrated career center
- Create virtual learning paths
- Further communicate and expand Norton University class offerings and delivery modalities

<i>Norton Hospital</i>	<i>Norton Audubon Hospital</i>	<i>Norton Suburban Hospital</i>	<i>Norton Brownsboro Hospital</i>	<i>Kosair Children's Hospital</i>
✓	✓	✓	✓	✓

Healthcare Needs

Cardiac Care (Reference: Cardiac Strategic Plan / Pillars: Service, Quality, and Growth; Center of Prevention and Wellness Strategic Plan/ Pillars: People, Service, Quality and Growth)

Norton's cardiovascular program has specific initiatives to expand advanced imaging to improve diagnosis rates. Further, our clinical programs are focused around quality initiatives and continuous enhancement of best practices and protocols. We continue to strive for excellence through attainment of advanced accreditation levels with national authorities and will continue enhancement of our workforce and programs to meet community needs.

Highlighted strategic tactics to improve cardiac care are:

- Broaden reach of cardiac services for early detection by partnering with Life Line Screenings, who provides basic wellness screenings as well as non-invasive testing for stroke, heart and vascular disease. This outreach initiative will help provide screenings and care for those that might not normally receive preventative care services.
- Develop and implement a comprehensive Cardiovascular Prevention and Wellness Program.
- Develop and implement a Regional AMI Program.

<i>Norton Hospital</i>	<i>Norton Audubon Hospital</i>	<i>Norton Suburban Hospital</i>	<i>Norton Brownsboro Hospital</i>	<i>Kosair Children's Hospital</i>
✓	✓	✓	✓	

Lung Cancer (Reference: Norton Cancer Institute Strategic Plan / Pillars: Service, Quality and Growth; Center for Prevention and Wellness Strategic Plan / Pillars: People, Service, Quality and Growth)

Norton Cancer Institute recognizes the need to increase access with a full scope of quality cancer services. Highlighted strategic tactics to improve lung cancer care are:

- Coordinate and advance the Thoracic Lung Nodule Program through a formal multidisciplinary patient assessment and review process.
- Increase lung CT screenings to detect at an earlier stage and promote better outcomes.
- Continue to collaborate with UK lung CT screening program.

<i>Norton Hospital</i>	<i>Norton Audubon Hospital</i>	<i>Norton Suburban Hospital</i>	<i>Norton Brownsboro Hospital</i>	<i>Kosair Children's Hospital</i>
✓		✓		

Breast Cancer (Reference: Norton Cancer Institute Strategic Plan / Pillars: Service, Quality and Growth; Center for Prevention and Wellness Strategic Plan / Pillars: People, Service, Quality and Growth)

Breast cancer is the second leading cause of death among women and the rate in Louisville exceeds national rates by almost 300%. Norton is committed to providing comprehensive services to women as well as in the area of oncology.

Highlighted strategic tactics to improve breast cancer care are:

- Involve Norton Cancer Institute & Norton Medical Group in Breast Program expansion plan for both space and clinical care improvement in collaboration with Norton Women's Hospital & physician services leadership
- Increase physician coverage for medical oncology with breast care experience.

<i>Norton Hospital</i>	<i>Norton Audubon Hospital</i>	<i>Norton Suburban Hospital</i>	<i>Norton Brownsboro Hospital</i>	<i>Kosair Children's Hospital</i>
✓	✓	✓	✓	

Prostate Cancer (Reference: Norton Cancer Institute Strategic Plan / Pillars: Quality and Growth; Center for Prevention and Wellness Strategic Plan / Pillars: People, Service, Quality and Growth)

Incidence rates for prostate cancer exceed national levels and clearly present an opportunity for improvement in our community. Further, prostate cancer is the second leading cause of death among men.

Highlighted strategic tactics to improve prostate cancer care are:

- Increase prostate cancer screenings
- Develop and implement new programs and services.

<i>Norton Hospital</i>	<i>Norton Audubon Hospital</i>	<i>Norton Suburban Hospital</i>	<i>Norton Brownsboro Hospital</i>	<i>Kosair Children's Hospital</i>
✓	✓	✓		

Obstetrical Care Areas of Prenatal Care and Teen Births (Reference: Women’s Strategic Plan / Pillars: People, Quality, Stewardship and Growth)

As the largest birthing and neonatal provider in the state and region, we feel a responsibility to enhance and expand outreach services for the area to ensure appropriate care is delivered to enable the highest quality of life for both Mom and baby. One of our biggest priorities is converting one of our hospital campuses to focus on women’s services at our new Norton Women’s and Kosair Children’s Hospital. The facility is the largest OB acute care provider in the state and will offer innovative care programs focused on women’s needs.

Highlighted strategic tactics to improve obstetric and prenatal care are:

- Continue to promote awareness for prenatal care
- Continue to participate with local programs in the community to promote education and awareness, especially supporting the local Family Health Centers, who play a key role in reaching underserved areas of the community.
- Continue to advance initiatives to improve outcomes and recovery rates for mothers.
- Continue to improve mortality rates and quality outcomes of low birth weight, very low birth weight, complex and other neonates in our community.

<i>Norton Hospital</i>	<i>Norton Audubon Hospital</i>	<i>Norton Suburban Hospital</i>	<i>Norton Brownsboro Hospital</i>	<i>Kosair Children’s Hospital</i>
✓		✓		✓

Addicted Babies (Reference: Women’s Strategic Plan / Pillar: Quality)

Addicted babies are the tiniest victims of Kentucky’s prescription pill epidemic and the use and abuse of illegal drugs; and their numbers are soaring. Findings show, the patient origin of these Kentucky babies were primarily from Jefferson and these babies were either a Passport, Medicaid, charity or self-pay patient.

In addition to the highlighted strategic tactics outlined above, the hospitals are participating in a new state Perinatal Advisory Committee with the Kentucky Cabinet which is focusing specifically on improvement of:

- Infant mortality
- Preterm birth
- Substance abuse during pregnancy
- Neonatal Withdrawal Syndrome (NAS)
- Maternal mortality

<i>Norton Hospital</i>	<i>Norton Audubon Hospital</i>	<i>Norton Suburban Hospital</i>	<i>Norton Brownsboro Hospital</i>	<i>Kosair Children’s Hospital</i>
✓		✓		✓

Low Birth Weight and Infant Mortality (Reference: Women’s Strategic Plan / Pillars: People, Quality, Stewardship and Growth; Kosair Children’s Hospital and Pediatric Strategic Plan / Pillars: People, Service, Quality and Growth)

When babies need advanced care, Norton Healthcare’s neonatal intensive care units (NICUs) have specialized staff and technology to support the newborn’s needs.

Highlighted strategic tactics to improve obstetric and prenatal care in regard to low birth weight and infant mortality, in addition to those noted above, are:

- Continue to participate with local programs in the community to promote education and awareness, especially supporting the local Family Health Centers, who play a key role in reaching underserved areas of the community.
- Continue to improve mortality rates and quality outcomes of low birth weight, very low birth weight, complex and other neonates in our community.

<i>Norton Hospital</i>	<i>Norton Audubon Hospital</i>	<i>Norton Suburban Hospital</i>	<i>Norton Brownsboro Hospital</i>	<i>Kosair Children’s Hospital</i>
✓		✓		✓

Diabetes (Reference: Center for Prevention and Wellness Strategic Plan / Pillars: Service, Quality and Growth; Kosair Children’s Hospital and Pediatric Strategic Plan / Pillars: People, Service and Quality)

Norton hospitals served over 61,828 inpatients in 2011 and 16% of those patients had a diagnosis of diabetes. Our inpatients with diabetes were primarily seen for cardiac care, pulmonary, general surgery, endocrinology and gastroenterology. Of these patients, over 15% didn’t have a primary care physician. At Kosair Children’s Hospital, we have a focused program to promote education and awareness while utilizing protocols for early detection of patients with diabetes.

The diabetes patient population continues to grow in Kentucky and our mortality rates for the state, as well as Louisville metro, continue to exceed national averages.

Highlighted strategic tactics to improve diabetic care are:

- Implementation of specific diabetes management programs through our NGood Health program as well as our care management group
- Enhance mechanisms and communications for providing preventive health screening services and education
- Increase education and outreach to promote health equity and health literacy
- Communicate service offerings such as Weight Watchers and YMCA diabetes management

<i>Norton Hospital</i>	<i>Norton Audubon Hospital</i>	<i>Norton Suburban Hospital</i>	<i>Norton Brownsboro Hospital</i>	<i>Kosair Children’s Hospital</i>
✓	✓	✓	✓	✓

Active Lifestyles / Nutrition / Obesity (Reference: Center for Prevention and Wellness Strategic Plan / Pillars: Service, Quality and Growth; Kosair Children’s Hospital and Pediatric Strategic Plan / Pillars: People, Service, Quality and Growth)

This is a global community wide issue and challenging to address as a hospital provider. However, there are actions we can implement more easily by utilizing our N Good Health program for our 12,000+ employees. The organization encourages education and awareness of an individual’s health status and supports an active lifestyle in collaboration with a wellness plan developed with their primary care physician.

The organization also continues to partner with other community organizations such as the Coalition for Louisville Youth and Jefferson County Public Schools.

<i>Norton Hospital</i>	<i>Norton Audubon Hospital</i>	<i>Norton Suburban Hospital</i>	<i>Norton Brownsboro Hospital</i>	<i>Kosair Children’s Hospital</i>
✓	✓	✓	✓	✓

Sexually Transmitted Disease (Areas to be address in collaboration with Norton Physician Services Workforce Plan)

Statistics indicate there is a continued need around sexually transmitted diseases and the contraction thereof. As the leading obstetrical provider in the community, as well as a major employer of the obstetric workforce and the community’s only pediatric provider, we’d like to be a part of the solution. However, due to the nature of these, we feel this need is best met through our employed physician workforce, including our 52 women’s health physicians and 162 primary care physicians. We will continue education efforts at all of our physician offices as well as at our immediate care centers and our Marshall Women’s Center, which focuses on comprehensive women’s health.

<i>Norton Hospital</i>	<i>Norton Audubon Hospital</i>	<i>Norton Suburban Hospital</i>	<i>Norton Brownsboro Hospital</i>	<i>Kosair Children’s Hospital</i>

Healthcare Resources

Physician Demand (Reference: Service Line Strategic Plans / Pillars: People; Norton Physician Services Workforce Plan / Pillars: People)

Based on the aging population, health care reform and other disease incidence rates, there is an ongoing need for physician workforce. However, it should be noted that it appears adequate access and workforce is available today.

Highlighted strategic tactics to ensure appropriate physician coverage are:

- Develop and implement a statistical model based on physician capacity and utilization rates to determine physician workforce needs
- Establish best practice clinical model to ensure maximum throughput, including innovative ways to efficiently leverage those resources through the use of mid-level providers and the clinical support team
- Continuous updates of our Medical Staff Plan, including physicians as well as other clinical workforce needs.

<i>Norton Hospital</i>	<i>Norton Audubon Hospital</i>	<i>Norton Suburban Hospital</i>	<i>Norton Brownsboro Hospital</i>	<i>Kosair Children's Hospital</i>
✓	✓	✓	✓	✓

Healthcare Literacy (Reference: Center for Prevention and Wellness Strategic Plan / Pillar: Service)

Opportunities were identified to improve health literacy and promote an inclusive culture in the community. Norton is a large integrated healthcare system and well represented by locations throughout the community. Norton plans to engage in further conversations with internal and external leaders related to culture awareness, language barriers, health literacy, and education and poverty concerns.

Highlighted strategic tactics to promote healthcare literacy are:

- Partner with clinics and non-profit organizations in underserved communities to promote prevention and wellness and reduce health care disparities
- Ensure preventive screening materials are at appropriate literacy level and monitor health equity benchmarks
- Utilize our physician practices and Immediate Care Centers to enhance and distribute educational materials

<i>Norton Hospital</i>	<i>Norton Audubon Hospital</i>	<i>Norton Suburban Hospital</i>	<i>Norton Brownsboro Hospital</i>	<i>Kosair Children's Hospital</i>
✓	✓	✓	✓	✓

Inclusion (Reference: Center for Prevention and Wellness Strategic Plan / Pillar: Service; Workforce Plan / Pillars: People, Service and Quality)

Opportunities were identified to improve health literacy and promote an inclusive culture in the community. Norton is a large integrated healthcare system and well represented by locations throughout the community. Norton plans to engage in further conversations with internal and external leaders related to culture awareness, language barriers, health literacy, and education and poverty concerns.

Highlighted strategic tactics to promote inclusion are:

- Partner with clinics and non-profit organizations in underserved communities to promote prevention and wellness and reduce health care disparities
- Create and implement employee resource groups within the organization to demonstrate and improve inclusiveness
- Identify appropriate external partners and establish formal relationships that facilitate and enhance our inclusive culture.
- Identify diverse employee focus groups for employee engagement survey to provide feedback that will help determine areas of opportunity to improve inclusion.

<i>Norton Hospital</i>	<i>Norton Audubon Hospital</i>	<i>Norton Suburban Hospital</i>	<i>Norton Brownsboro Hospital</i>	<i>Kosair Children's Hospital</i>
✓	✓	✓	✓	✓

Conclusion

As previously stated, the Community Health Needs Assessment is managed by Norton Healthcare's Strategic and Business Planning department. This department is responsible for coordinating the organization's strategic planning process from a system perspective which complements the intent of the community health needs assessment. It is anticipated that the organization's comprehensive strategic plan along with the CHNA implementation plan will narrow the gap of identified community healthcare needs, which will further support a healthier community. The organization's culture of high accountability and commitment to community supports the CHNA implementation plan requirements to address the health needs and anticipate the impact of the actions; which will be evaluated by a review model to identify opportunities for continual improvement.

Appendix A

Checklist of Requirements Met (for graphical representation only)

Schedule H (Form 990) 2013

Page 4

Part V Facility Information (continued)

Section B. Facility Policies and Practices

(Complete a separate Section B for each of the hospital facilities or facility reporting groups listed in Part V, Section A)

Name of hospital facility or facility reporting group _____

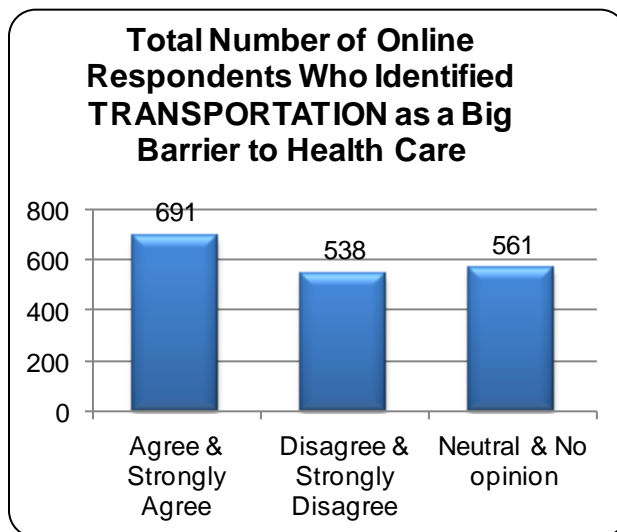
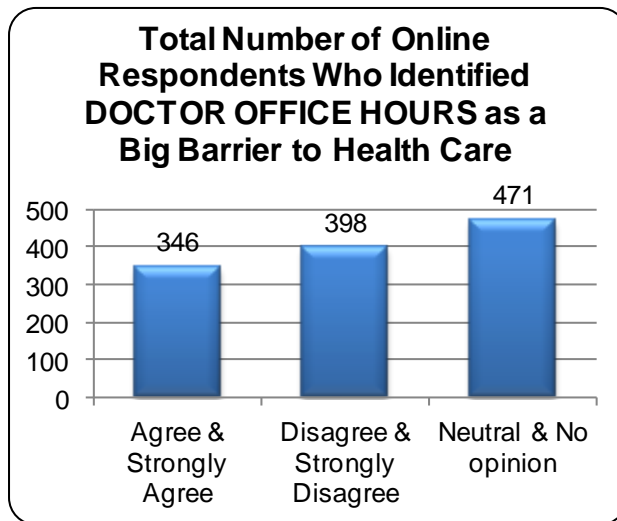
If reporting on Part V, Section B for a single hospital facility only: line number of hospital facility (from Schedule H, Part V, Section A) _____

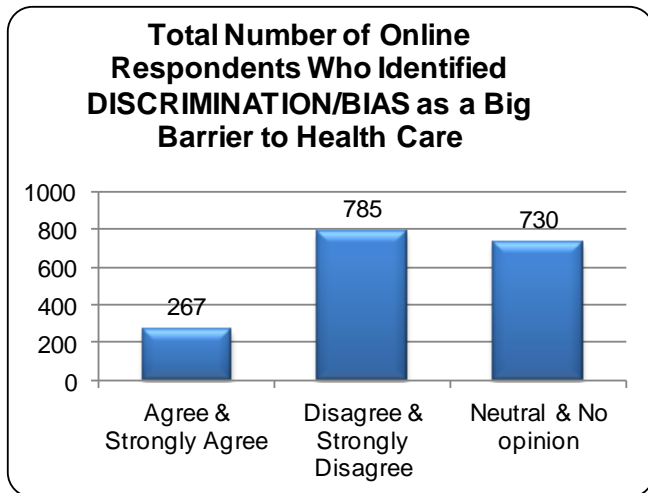
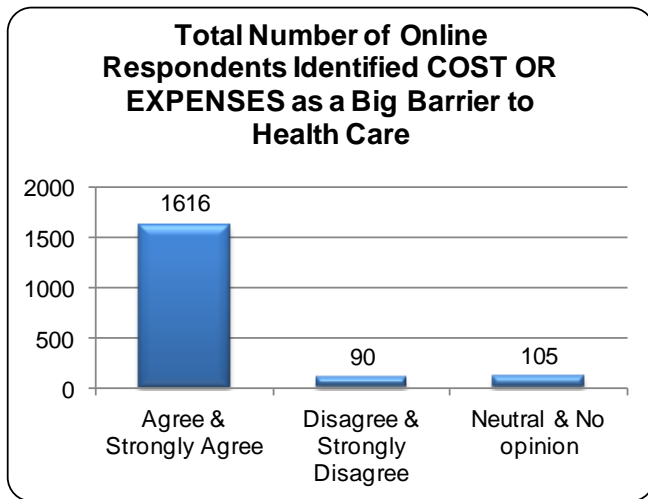
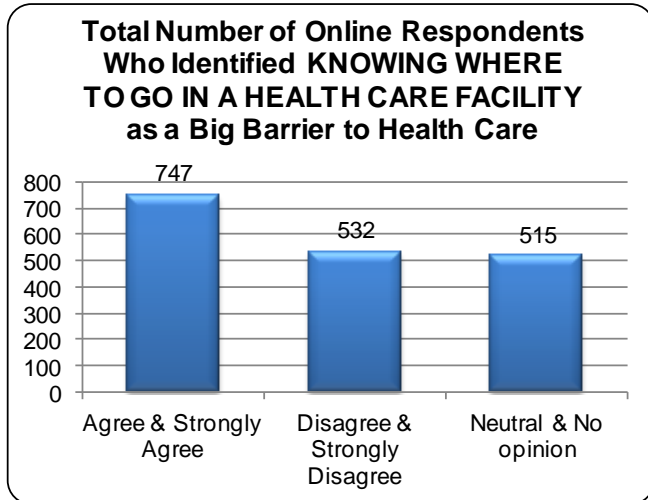
		Yes	No
Community Health Needs Assessment (Lines 1 through 8c are optional for tax years beginning on or before March 23, 2012)			
1	During the tax year or either of the two immediately preceding tax years, did the hospital facility conduct a community health needs assessment (CHNA)? If "No," skip to line 9.	2013 1 ✓	
If "Yes," indicate what the CHNA report describes (check all that apply):			
a	<input checked="" type="checkbox"/> A definition of the community served by the hospital facility		
b	<input checked="" type="checkbox"/> Demographics of the community		
c	<input checked="" type="checkbox"/> Existing health care facilities and resources within the community that are available to respond to the health needs of the community		
d	<input checked="" type="checkbox"/> How data was obtained		
e	<input checked="" type="checkbox"/> The health needs of the community		
f	<input checked="" type="checkbox"/> Primary and chronic disease needs and other health issues of uninsured persons, low-income persons, and minority groups		
g	<input checked="" type="checkbox"/> The process for identifying and prioritizing community health needs and services to meet the community health needs		
h	<input checked="" type="checkbox"/> The process for consulting with persons representing the community's interests		
i	<input checked="" type="checkbox"/> Information gaps that limit the hospital facility's ability to assess the community's health needs		
j	<input type="checkbox"/> Other (describe in Section C)		
2	Indicate the tax year the hospital facility last conducted a CHNA: 20 <input type="text" value=""/> <input type="text" value=""/>		
3	In conducting its most recent CHNA, did the hospital facility take into account input from persons who represent the broad interests of the community served by the hospital facility, including those with special knowledge of or expertise in public health? If "Yes," describe in Section C how the hospital facility took into account input from persons who represent the community, and identify the persons the hospital facility consulted.	3 ✓	
4	Was the hospital facility's CHNA conducted with one or more other hospital facilities? If "Yes," list the other hospital facilities in Section C.	4 ✓	
5	Did the hospital facility make its CHNA report widely available to the public?	5 ✓	
If "Yes," indicate how the CHNA report was made widely available (check all that apply):			
a	<input checked="" type="checkbox"/> Hospital facility's website (list url): _____		
b	<input checked="" type="checkbox"/> Other website (list url): _____		
c	<input checked="" type="checkbox"/> Available upon request from the hospital facility		
d	<input type="checkbox"/> Other (describe in Section C)		
6	If the hospital facility addressed needs identified in its most recently conducted CHNA, indicate how (check all that apply as of the end of the tax year):		
a	<input checked="" type="checkbox"/> Adoption of an implementation strategy that addresses each of the community health needs identified through the CHNA		
b	<input type="checkbox"/> Execution of the implementation strategy		
c	<input type="checkbox"/> Participation in the development of a community-wide plan		
d	<input type="checkbox"/> Participation in the execution of a community-wide plan		
e	<input checked="" type="checkbox"/> Inclusion of a community benefit section in operational plans		
f	<input type="checkbox"/> Adoption of a budget for provision of services that address the needs identified in the CHNA		
g	<input checked="" type="checkbox"/> Prioritization of health needs in its community		
h	<input checked="" type="checkbox"/> Prioritization of services that the hospital facility will undertake to meet health needs in its community		
i	<input type="checkbox"/> Other (describe in Section C)		
7	Did the hospital facility address all of the needs identified in its most recently conducted CHNA? If "No," explain in Section C which needs it has not addressed and the reasons why it has not addressed such needs.	7 ✓	
8a	Did the organization incur an excise tax under section 4959 for the hospital facility's failure to conduct a CHNA as required by section 501(r)(3)?	8a	✓
b	If "Yes" to line 8a, did the organization file Form 4720 to report the section 4959 excise tax?	8b	
c	If "Yes" to line 8b, what is the total amount of section 4959 excise tax the organization reported on Form 4720 for all of its hospital facilities? \$ _____		

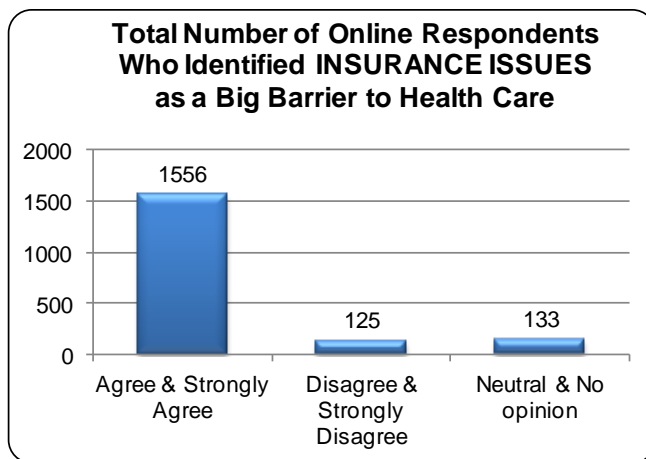
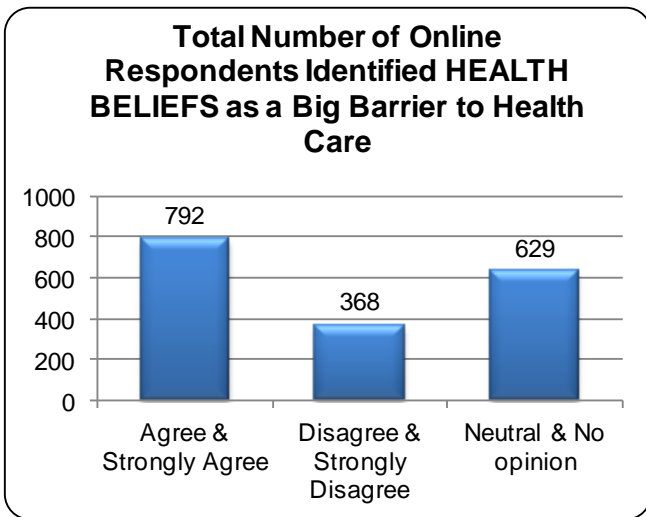
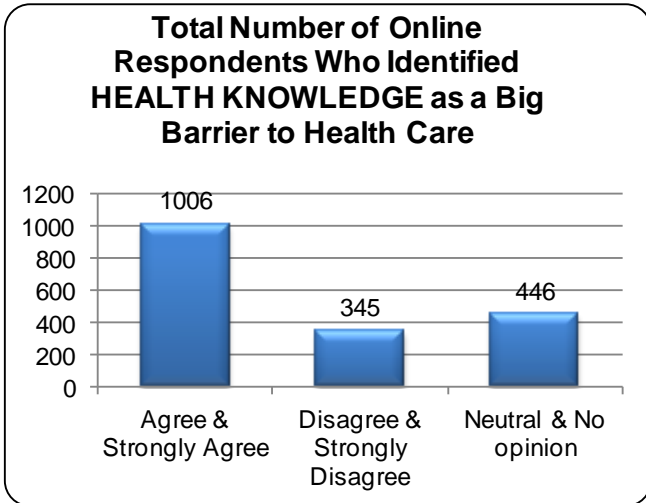
Schedule H (Form 990) 2013

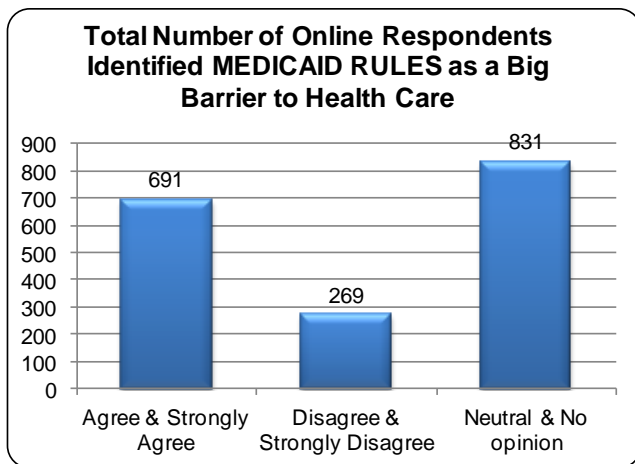
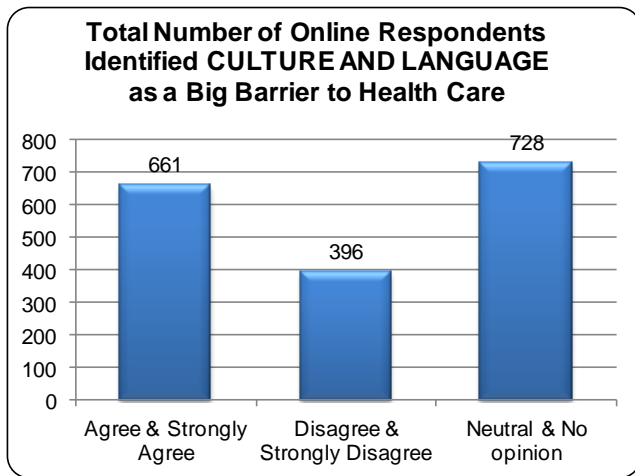
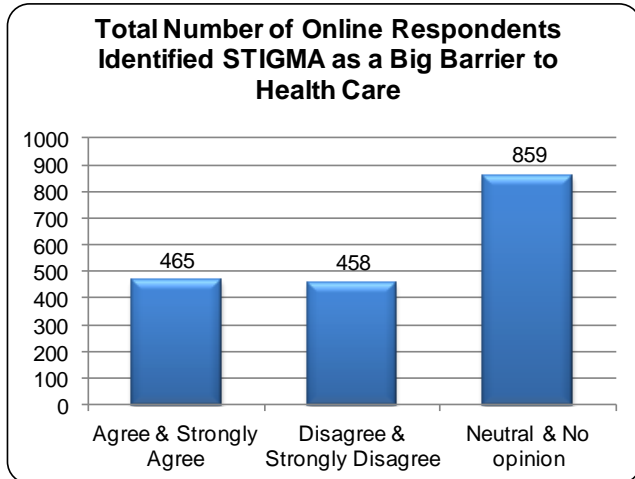
Appendix B

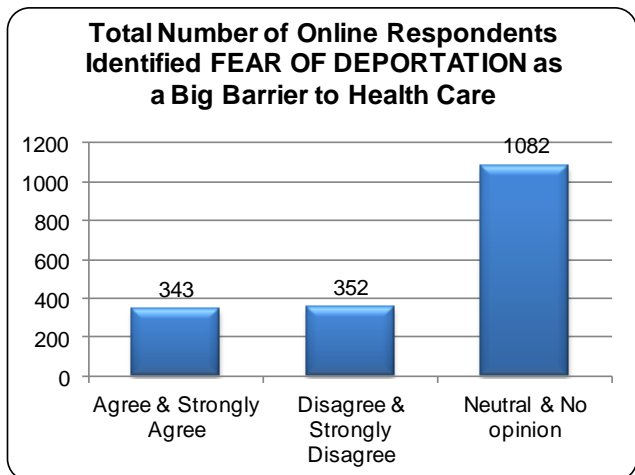
The following charts reflect the general public responses to the online survey.



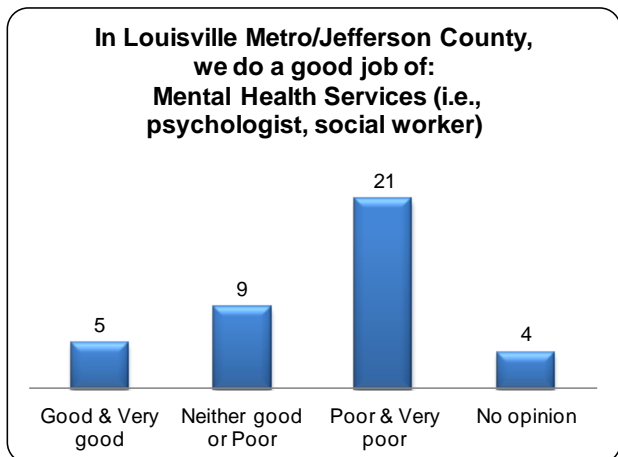
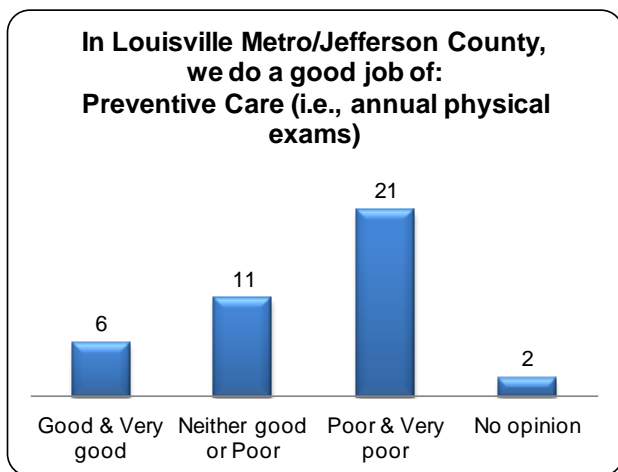




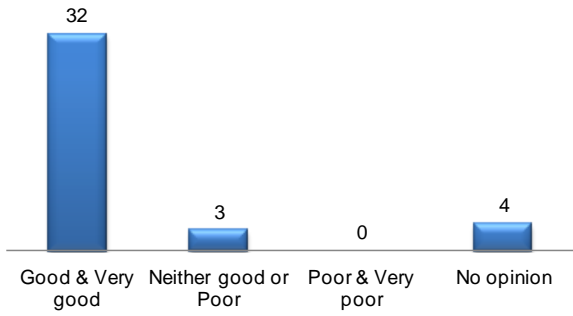




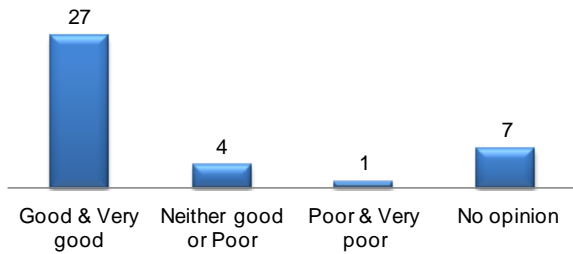
These remaining charts reflect the community leader responses to the survey. Although only 40 business and professional people attended, the results are included in their assessment as a gauge and baseline for future assessments.



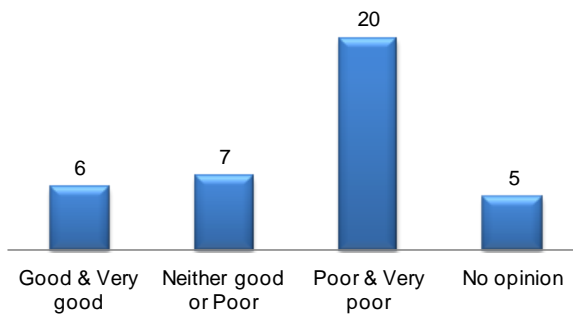
In Louisville Metro/Jefferson County, we do a good job of:Emergency Services

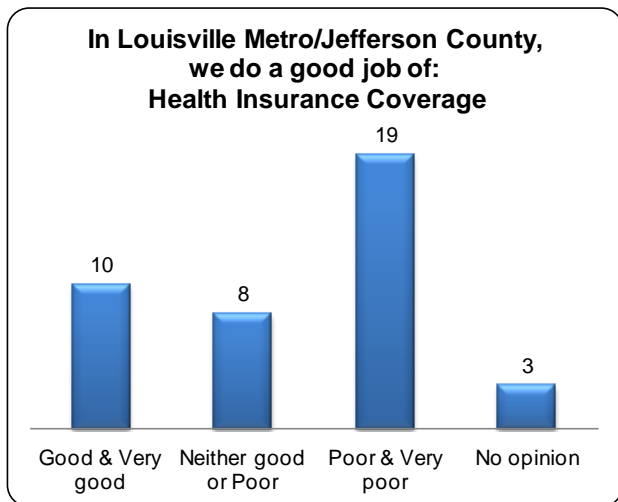
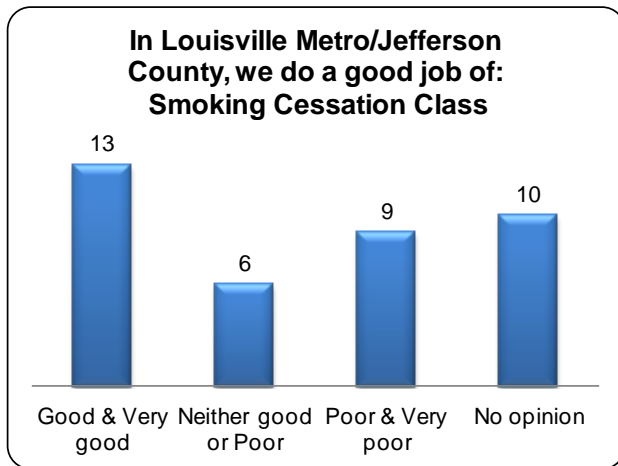
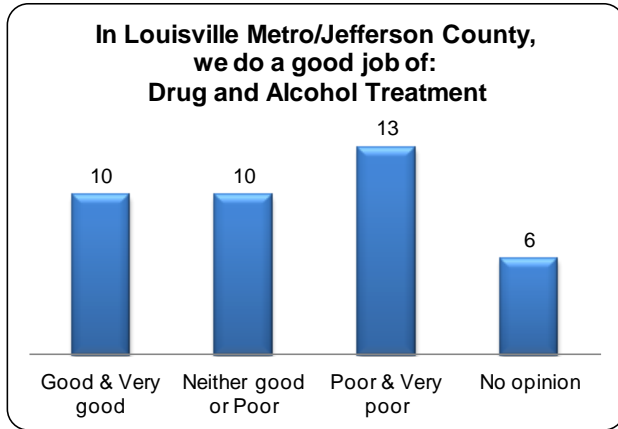


In Louisville Metro/Jefferson County, we do a good job of: Shots/Immunizations



In Louisville Metro/Jefferson County, we do a good job of:Oral Health Services

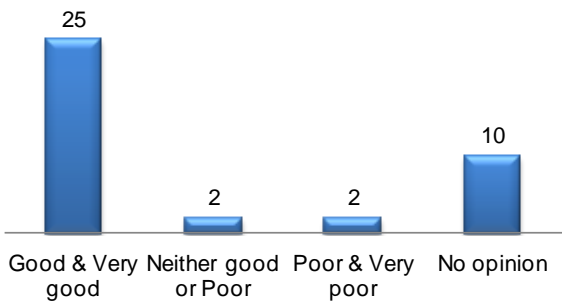




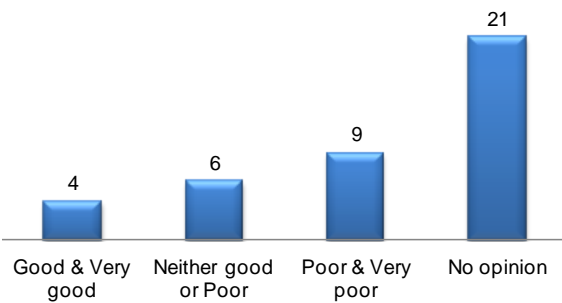
**In Louisville Metro/Jefferson County, we do a good job of:
Prenatal Classes and
Lactation/Breastfeeding Support**

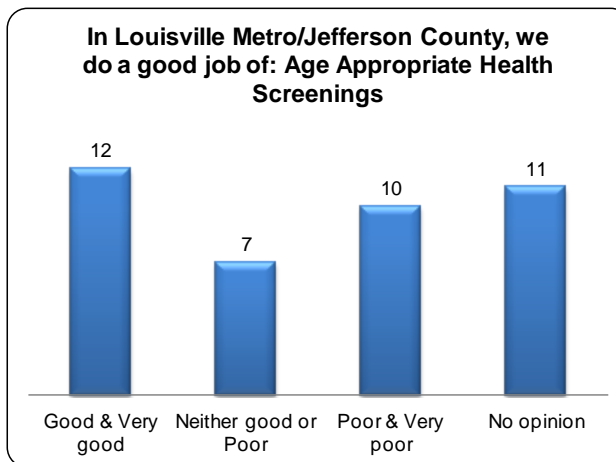
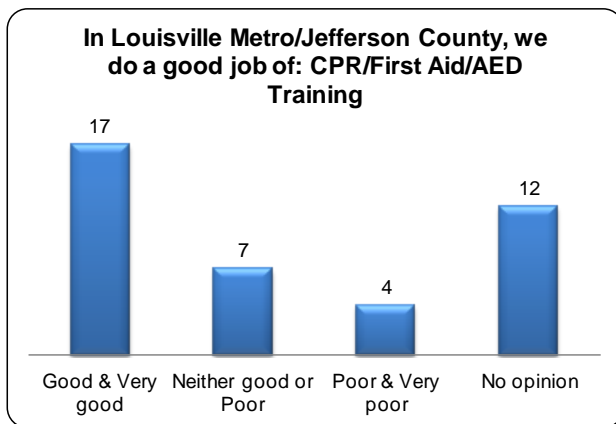
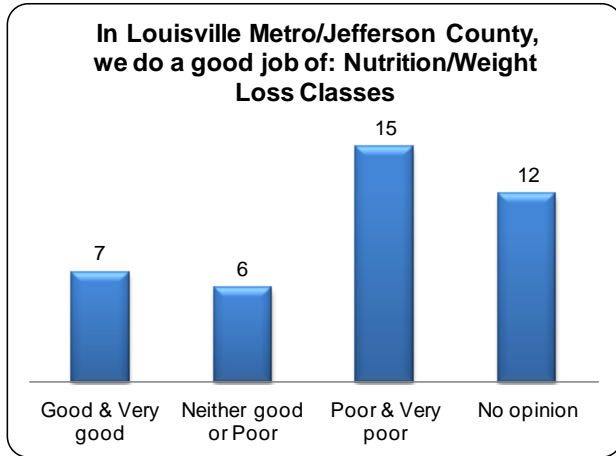


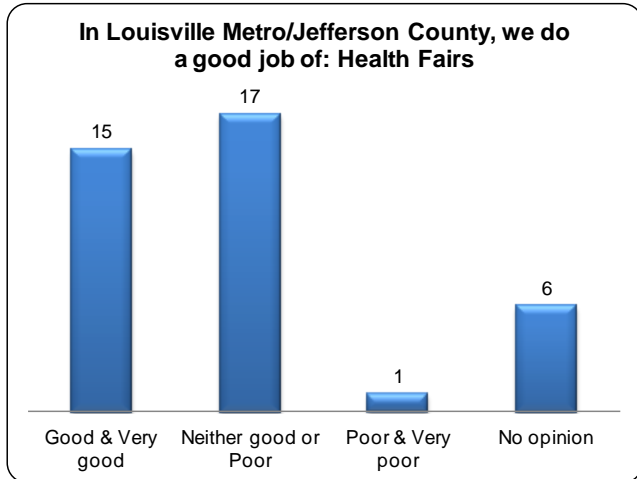
In Louisville Metro/Jefferson County, we do a good job of: Blood Drives



In Louisville Metro/Jefferson County, we do a good job of: Nurse Hotline







¹ National Research Council

² The Urban Institute

³ Louisville Metro Health Status Report, 2012

⁴ Business-Higher Education Forum

⁵ Louisville Metro Health Status Report, 2012

⁶ Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Med. Exp. Plan Survey, 2008

⁷ Hospitals & Health Networks, October 2012

⁸ Kentucky and Indiana Vital Statistics

⁹ www.helpguide.org

¹⁰ Louisville Metro Health Status Report, 2012

¹¹ Louisville Metro Health Status Report, 2012

¹² Healthcare Financial Management Association