

Pattie A. Clay
REGIONAL MEDICAL CENTER

Community Health Needs Assessment
for Madison County, Kentucky

2012

Community Health Needs Assessment

Table of Contents

Introduction	1
Organization Description	1
Description of Pattie A. Clay Regional Medical Center	1
Community Served	2
Determination of Service Area	4
Mission, Vision and Values	4
Purpose	5
Executive Summary	6
Framework – Strategic Planning Model	7
Key Stakeholders	7
Baptist Health System	7
Pattie A. Clay Regional Medical Center	7
Community	8
Process/Methodology	9
Assessment Tools and Process	9
Profile of Madison County	13
Demographics	13
Vital Statistics	20
Primary Data	27
Secondary Data	37
Other Hospital Specific Sources	50
Community Health Care Resources	54
Health Priority Issues and Strategies	56
Identified Needs/Overview in Prioritized Order	56
Priority Health Issues and Processes	58
Path Ahead/Next Steps	64
Implementation strategy	64
Communication Plan	72

List of Maps, Tables, and Graphs

Maps

Madison County Census Tract Population, 2010	15
Madison County Health Care Facilities, 2012	59

Tables

Race/Ethnicity	13
Age Distribution	13
Kentucky Youth Advocates Educational Attainment Rankings	17
Persons Living Below the US Poverty Thresholds	18
Birth Measures	22
Infant Mortality	22
Death Measures	23
Leading Causes of Death in Madison County and the US, 2007	23
Age-adjusted Cancer Mortality Rates	25
Resident Birth and Death Data for Kentucky and Madison County 2009-2011	26
Primary Data – Ranking of Need	31
Birth Statistics	40
Vital Statistics	40
Other Child Health Indicators	40
Economic Well-Being of Children	40
Health Behaviors	41
Drug Use in Madison County	44
Major Part 1 Crime Arrests in Madison County	48
2011 Top 10 Admitting Diagnoses for All Madison County Patients	51
2011 Top 10 Admitting Diagnoses for Pattie A. Clay RMC	51
Community Health Care Resources	58
Primary Care Outreach Plan	66
CHNA Communication Plan	72

Graphs

Madison County Population by Age	14
Total Population Living in Poverty	19
Children 18 and Under Living in Poverty	19
Madison County Population Pyramids	20
Madison County Births	21
Leading Causes of Death in Madison County and the US, 2007	24
Age-adjusted Cancer Mortality Rates for Madison County	24
Age-adjusted Cancer Mortality Rates – All Types	25
Risk Factors for Premature Death	42
Part 1 Criminal Arrests in Madison County	48
Arrests	49
2011 Madison County Admission Rates	52
2011 PACRMC Admission Rates	52
2011 Admission Rates	53

**Community Health Needs Assessment
Pattie A. Clay Regional Medical Center
Richmond, Kentucky**

Introduction

This Community Health Needs Assessment was conducted by Pattie A. Clay Regional Medical Center as mandated by the Patient Protection and Affordable Care Act signed into law by President Barak Obama on March 23, 2010. Information contained herein was gathered and compiled and the assessment written from January 8, 2012 through July 31, 2012. This assessment is a thorough review and analysis of feedback provided by the citizens of Madison County, Kentucky and data and publications prepared by city, county, state and federal governmental entities, non-profit organizations and news media.

Assessment findings will guide Pattie A. Clay Regional Medical Center (PACRMC) in recognizing and responding to Madison County's health care needs and improving the wellness of the community. The Medical Center will evaluate whether or not each identified need can be addressed at present. It will set forth a strategic plan focusing on viable needs through implementation of new programs and services or improvement to existing efforts.

Organization Description

Pattie A. Clay Regional Medical Center

Pattie A. Clay Regional Medical Center is a fully accredited, non-profit 501 (c) (3) hospital located in Richmond, Kentucky. Licensed for 105 beds, the Pattie A. Clay is a small, rural, acute care facility that serves about 88,000 patients a year. We have served the people of Madison County for the last 120 years.

Our core programs include inpatient, outpatient, diagnostic and community services. Our doctors provide care in 23 specialty areas, and we have three board-certified hospitalists. We offer cardiac and pulmonary rehabilitation; occupational, physical and respiratory therapy; and women's health and childbirth services. Staffed with board-certified emergency physicians and nurses, our Emergency Department treats more than 29,000 patients a year and trains for disaster preparedness annually with the federal government's Chemical Stockpile Emergency Preparedness Program (CSEPP). We have the region's only hospital based, 24/7 Sexual Assault Nurse Examiner (SANE) program.

We offer outpatient surgery and oncology on campus, and we have community-based lab, wound care, occupational medicine and instant care clinics. Our diagnostic services include a clinical laboratory, CT, MRI and radiologic imaging, nuclear medicine, cardiac catheterization, angioplasty and sleep disorders.

The original hospital mission—to care for all members of our community regardless of their race, creed or ability to pay—still guides us today. People sought care at Pattie A. Clay more than 100,800 times last year; many of them were among the area’s rural poor. More than one third of our patients are from low-income households or underserved populations, and 97% of them live in Appalachia. Lately, our charity and uncompensated care has run around \$14 million a year, or more than 21% of our entire expenditure budget. This is more than double the uncompensated care we provided only six years ago.

We are active community partners. We work with local government, businesses and civic organizations, education systems, and social service agencies to strengthen the community and provide opportunities for those less fortunate. We Bowl for Kids’ Sake, Paint the Town Pink, fill Salvation Army holiday meal bags, hold blood drives and support the United Way. We offer numerous free health care classes, medical screenings, and health fairs, and our staff members serve on boards and local committees, speak at meetings, and give freely of their time as volunteers. Last year, Pattie A. Clay contributed more than \$138,000 in free health care classes, screenings, services and community benefits. We also invested nearly \$90,000 in preparing regional students to enter the workplace through education, clinical rotations and preceptor programs.

Less visible services are freely given as well. Volunteers are on hand daily to visit with patients, deliver their mail and run errands for them. They form our board of directors, staff our gift shop and organize events to raise money for hospital needs. Through their kindness, soft teddy bears are provided for young patients to ease the emotional trauma often associated with a child’s hospital visit. Coloring books, crayons and small toys are given to young inpatients to help pass the time. If families staying with loved ones cannot afford to buy food, meals are provided. Volunteers craft hand-made tiny, beautifully smocked gowns for burial of stillborn babies. When power was lost for several days during a recent ice storm, we provided warm hospital rooms and specially prepared meals at no charge for community members with medical conditions. Meals were also made to order and transported to community shelters and the county’s critical access hospital that was unable to provide food for its patients. These too, were freely given.

Community Served

The Medical Center is located in Richmond, Kentucky. Richmond is the county seat of Madison, one of Kentucky’s larger counties, and is located in the Appalachian region of

the state. Interstate 75 bisects the county from North to South and runs through both Richmond, the county seat, and Berea, the county's other principal city. Richmond lies about 40 minutes south of Lexington (26 miles) and an hour and 45 minutes southeast of Louisville. It is 106 miles south of Cincinnati, Ohio and 147 miles northwest of Knoxville, Tennessee.

Originally part of Virginia, Madison became one of Kentucky's original counties in 1792. Today, it is a blend of urban, suburban, and rural environments measuring 443 square miles, 441 of which is land and 2 is covered in water. Two major cities and several smaller communities make up the county. The centrally located city of Richmond was established in 1798, and Berea was incorporated in 1854 near the southern boundary of the county. Both cities lie along Interstate 75. In addition to the two cities, there are also several distinctive communities, among them Boonesboro, Waco, Baldwin, Union City, Kirksville, Kingston, Bybee, and a portion of Paint Lick, which also lies in neighboring Garrard County. Bybee is widely known for its distinctive pottery and the Berea area is recognized nationwide for its crafts.

Madison County is one of Kentucky's fastest growing areas. According to the US Census Bureau, the population of Madison County in 2010 was 82,916, a 17% increase over its 2000 population count. Richmond is the tenth fastest growing city in Kentucky at 13.78%, and Berea is the third with a growth rate of 34.3%. The population is predominantly white, followed by African/Americans, Hispanic and Latinos, and people who reported being two or more races. There are only a few reported American Indians and Asians.

The county lies within the eight-county Lexington/Fayette County Labor Market area. Four Madison County businesses are among that labor market area's major employers: Eastern Kentucky University (employs approximately 5,000), Tokiko (USA) Inc. (900), Pattie A. Clay Regional Medical Center (700), and NACCO Materials Handling Group (575). Other major employers include Madison County Schools, The Blue Grass Army Depot, EnerSys, The Okonite Company, and KI (USA) Corporation. As of February, 2012, Madison County's labor force was 43,420 and unemployment stood at 8.0%

Richmond is home to Eastern Kentucky University, Berea College, National College and Madison County Schools. Eastern Kentucky University offers more than 160 degree programs at the associate, baccalaureate, master's and doctoral levels. Its five academic colleges include Arts and Sciences, Business and Technology, Health Sciences, Education and Justice and Safety. Student enrollment in the fall of 2010 was 16,515, a 2% increase over the year before. In late 2011, the university opened its 2,000 seat EKU Center for the Arts, providing the area with a wide range of cultural offerings including international

symphonies, Broadway plays, musicians and vocalists, ballet and nationally recognized dance troupes. The Center has both a large concert hall and an intimate black box theater.

Berea College is a liberal arts college offering bachelor degrees in 32 majors as well as independent student-designed majors and a dual degree engineering program in cooperation with Washington University, St. Louis and the University of Kentucky. Enrollment for the 2010 semester was 1,552 undergraduates, representing 44 states and Washington DC, US territories and 58 foreign countries. Seventy percent (70%) of the student body is from Kentucky or Appalachia. Berea College is unique in that students pay no tuition; each is essentially given a four year full scholarship. Students are required to work at least 10 hours per week in campus and service jobs.

National College is a small career college that offers Associate's degree and short-term diploma programs in Business Administration Accounting and Management, Medical Assisting, Office Technology and Computerized Office Applications. Enrollment averages around 400.

The Madison County School District includes 10 elementary schools, four middle schools, two high schools and a semi-private Model Lab School for students grade K through 12. The school district also offers an area technical center, an alternative school and the Middle College, where high school students can take college courses on the ECU campus. Enrollment stood at 10,903 during the 2011-2012 school year. The graduation rate was 90%, and 61.2% of the graduates went on to college. On the whole, Madison County school students compared favorably with Kentucky grade point and ACT score averages.

Determination of Service Area

Madison County was chosen as our service area because 75% to 85% of our patients live in the county. Last year, 78% of our patients lived in Madison County, and if we assume that patients with out of state addresses are Eastern Kentucky University students, the proportion of patients from Madison County grew to 80%.

Mission, Vision and Values

Our Mission: The mission of Pattie A. Clay Regional Medical Center is to provide quality health care by a team of highly-skilled physicians and staff through nurturing, personalized services.

Our Vision: The vision of Pattie A. Clay Regional Medical Center is to be the provider of choice in the communities we serve.

Our Values: Pattie A. Clay Regional Medical Center will honor our commitment to the community guided by: Accountability, Compassion, Excellence, Integrity, and Partnership.

Purpose

Our Purpose: The purpose of Pattie A. Clay Regional Medical Center is to provide culturally competent quality health care to a diverse population in Madison County and neighboring communities.

Our Goals: Our goals are responsive to our mission, vision, values and purpose. They are:

- **Quality Patient Care** – to nurture a culture that promotes exceptional quality
- **Customer Relations** – to create a patient-focused and customer-friendly environment
- **Physician Integration** – to create an environment that encourages and supports physician alignment with Pattie A. Clay Regional Medical Center services
- **Financial Performance** – to manage resources and expand services to enhance our financial viability
- **Workforce Development** – to create an environment that provides meaningful work, engagement and professional enrichment for hospital staff and physicians

Executive Summary

Madison County, Kentucky is one of the commonwealth's healthier places to live, and equally important, it continues to improve on several indices. The 2012 County Health Rankings, a study released by the Robert Wood Johnson Foundation and the University of Wisconsin's Population Health Institute, placed Madison County as the 20th healthiest out of Kentucky's 120 Counties, up 14 places from its 34th standing the year before.

In an effort to identify ways that the county can continue improving the health of its citizens and in response to the Affordable Care Act, the Pattie A. Clay Regional Medical Center has conducted this Community Health Needs Assessment. It has been a priority for both the hospital and community since the fall of 2011. All of Madison County has shown a spirit of cooperation and an eagerness to participate. Community stakeholders – leaders of government, education, health care, business and industry, the ministry and civic, social and community services – enthusiastically gave of their time and expertise. Focus groups were energetic and candid, and sessions continued long beyond their scheduled times. Response to the community survey provided insight into public opinions and needs.

We have surveyed and studied Madison County's health needs for just short of a year, and throughout the process, we have received five key messages that span every source of primary and secondary data. These key messages are:

- Care for the uninsured and underinsured spans the spectrum of community health needs
- There is a need for an integrated health care delivery system involving hospitals, health departments, clinics, etc.
- The delivery of health care is changing with more care being provided by physicians' assistants, nurse practitioners, etc. We need to adapt to these changes and help patients navigate the system
- There is a need for emphasis on prevention and healthy lifestyles to arrest disease early or before it starts
- Mental health and substance abuse services in Madison County are inadequate

The community has identified the following as the top five health care priorities for Madison County:

1. Outpatient Disease Management
2. Preventive Health
3. Mental Health Services
4. Services for the Underinsured
5. Substance Abuse Services

This assessment will be shared with civic, business and community leaders and organizations, key stakeholders and the community at large. It will also be published on the Pattie A. Clay Regional Medical Center web site (www.pattieaclay.org).

Framework – Strategic Planning Model

Key Stakeholders

Baptist Health System

The Baptist Healthcare System, Inc. (BHS) and Baptist Health care Affiliates Inc. (BHA), a wholly controlled affiliate of BHS, own and operate all five of the Baptist affiliated hospitals located in the Commonwealth of Kentucky. BHS and BHA own more than 1,600 licensed acute care hospital beds in Louisville, LaGrange, Lexington, Paducah and Corbin and manage the 300 bed Hardin Memorial Hospital in Elizabethtown Kentucky and the 105 bed Pattie A. Clay Regional Medical Center in Richmond, Kentucky.

Baptist Healthcare System began as a single hospital in 1924 with the opening of Kentucky Baptist Hospital in Louisville. In the 1950's, the system opened Western Baptist Hospital in Paducah and Central Baptist Hospital in Lexington. Today, Baptist Healthcare System is the largest not-for-profit health care system in Kentucky and is comprised of five acute-care hospitals, two managed acute-care hospitals, a not-for-profit provider sponsored health plan, two surgery centers, occupational medicine clinics, diagnostic centers, urgent care centers and physician offices.

The mission of Baptist Healthcare System is to exemplify our Christian heritage of providing quality health care services by enhancing the health of the people and the communities we serve. The vision of Baptist Healthcare System is to be nationally recognized as the health care leader in Kentucky. Its values statement is: Baptist Healthcare System will live out its Christ-centered mission and achieve its vision guided by Integrity, Respect, Stewardship, Excellence and Collaboration. Key strategies include:

- Quality and Patient Safety – Nurture a culture that promotes world-class quality and patient safety.
- Customer Relations – create a culture that is consumer focused and customer friendly.
- Financial Performance – Manage system resources so that Baptist Healthcare System remains financially strong and healthy.

Pattie A. Clay Regional Medical Center

The Pattie A. Clay Regional Medical Center board of directors entered into an agreement with Baptist Healthcare System in late 2010. The partnership is designed to strengthen alignment of the two health care providers and provide a more comprehensive,

high-quality health care system for Madison County and neighboring communities. New leadership is guiding Pattie A. Clay in providing a wider range of accessible, quality health care services, meeting the challenges of health care reform, and identifying opportunities to share resources, reduce costs and maintain affordable health care services. We have developed a leadership program that empowers our employees to achieve their full potential, renovated our Intensive Care Unit and augmented our Emergency Department service with 24 hour surgical coverage.

Shortly after joining with BHS, Pattie A. Clay recommitted the hospital and its services to the community, patients and physicians it serves. In September of 2010, Pattie A. Clay implemented a comprehensive professional development and engagement initiative encouraging employees to recommit themselves to Pattie A. Clay and patient care; to be the BEST by Bringing Excellence and Service Together. Our staff and board engaged in a planning process that created strategies and goals to guide us through the next three years. Our goals reflect our mission, vision, values and purpose. They are:

- Quality Patient Care – to nurture a culture that promotes exceptional quality
- Customer Relations – to create a patient-focused and customer-friendly environment
- Physician Integration – to create an environment that encourages and supports physician alignment with Pattie A. Clay Regional Medical Center services
- Financial Performance – to manage resources and expand services to enhance our financial viability
- Workforce Development – to create an environment that provides meaningful work, engagement and professional enrichment for hospital staff and physicians

Pattie A. Clay Regional Medical Center continues to honor its 120 years of commitment to the community by adhering to the values that have guided it for more than a century: accountability, compassion, excellence, integrity and partnership. These values are demonstrated in our accomplishments, substantiated in our goals and evidenced in everything we do to provide the best of care for our patients and community.

Community

The entire Madison County community has shown a spirit of cooperation and an eagerness to participate in the health needs assessment. When community stakeholders – leaders of government, education, business, industry, health care, the ministry, and civic, social and community services – were invited to participate in the assessment interviews and on the Assessment Advisory Committee, they enthusiastically gave of their time and expertise to offer their perceptions of the community's health care strengths and areas for improvement. Focus group participants were enthusiastic and candid, and high interest

levels kept sessions going beyond their scheduled times. Response to the online and written community survey, which was distributed through the newspaper and an advertising mailer delivered to every household, helped identify trends and provide insights into public opinions and needs.

In conducting the needs assessment, we sought input from individuals who represented the broad interests of the community in our stakeholder interviews, as participants in our focus groups, and as Advisory Committee members. Several individuals represented more than one area of expertise. In all, the individuals we met with included:

- 12 people with expertise in public health
- 21 representatives from agencies that have current data on community health needs
- 18 leaders, representatives or members of the medically underinsured or uninsured
- 19 leaders, representatives or members of low income populations
- 27 leaders, representatives or members of minority populations
- 10 leaders, representatives or members of people with chronic disease needs
- 14 health care consumer advocates
- 24 nonprofit organizations
- 6 academic experts
- 15 local and state government officials
- 26 community based organizations
- 13 health care providers including those focusing on medically underserved, low income, minority and those with chronic disease
- 4 representatives of managed care organizations

In addition to the above, we worked with representatives of business and industry, the religious community, colleges and universities, and community volunteers.

Process/Methodology

Assessment Tools and Process

Primary data was collected through confidential interviews with community stakeholders (43 participants), focus groups (44 participants) and a community-wide survey (340 respondents). While the stakeholder interviews revealed opinions about community needs, the focus groups and survey responses tended to be more personalized – *what do I need, what health care services do I want* – so the top community health needs identified through primary data collection were greatly influenced by the tallies of individual responses. The responses indicated that the most important health care needs in Madison County were:

1. Specialists
2. Mental Health Counseling
3. Emergency Department
4. Primary Care Physicians
5. Substance Abuse and Alcohol Counseling

While the primary data was being collected, we assembled an Assessment Advisory Committee and compiled secondary data, a collection of published statistics describing Madison County. Members of the Advisory Committee are:

- Nancy Crewe – Director, Madison County Health Department
- Larry Brock – Chief of Police, City of Richmond
- Becky Carr – School Health Coordinator, Madison County Schools
- Carl Richards – Director, Madison County Emergency Management Agency
- Sandra Powell – Chair, Madison County Human Rights Commission
- Paula Maionchi, MD – Board of Directors – Foundation for a Healthy Kentucky, Kentucky River Foothills Development Council, Liberty Place, Pattie A. Clay Regional Medical Center
- Pradeep Bose, MD – Director, Student Health Services, Eastern Kentucky University
- Vicki Jozefowicz – Executive Director, Kentucky River Foothills Development Council
- Duane Curry – Planning Administrator, Madison County Government
- Tammy Sullivan – Vice President and CNO, Pattie A. Clay Regional Medical Center
- Janice Blythe, PhD – Acting Chair, Department of Child and Family Studies, Berea College
- Gina Noe – Agent for Family and Consumer Sciences, Madison County Cooperative Extension Service

Whenever possible, secondary data for Madison County was compared to the numbers for Kentucky and the US. Secondary data covered demographics, education, poverty, health and well-being indicators, drug use and crime, morbidity and mortality and the likely causes of each, and health care availability and utilization. Two separate reports – one on primary data and one on secondary data – were mailed to the Assessment Advisory Committee.

These, along with Urgent Treatment Centers (number 6, added by Woodburn, Kyle & Co.), were presented to the Assessment Advisory Committee on April 26, 2012. The committee was encouraged to discuss the identified needs and suggest additional priorities. They suggested 5 additional priorities, which were more global in nature. These 5 priorities were added to the original 6 as significant health care needs in Madison County:

1. Outpatient Disease Management
2. Underinsured
3. Dental Care
4. Preventive Health – obesity, nutrition, dietary
5. Geriatric Services

Considering all 11 needs, the Advisory Committee members ranked the 3 needs they felt were most important, giving their priorities 3, 2, or 1 points depending on their perceived level of importance:

1. Mental Health Counseling - 15
2. Underinsured - 11
3. Preventive Health - 10
4. Outpatient Disease Management - 9
5. Substance Abuse and Alcohol Counseling - 8
6. Geriatric Service - 4
7. Dental Care - 2
8. Primary Care Physicians - 1

Specialists, the Emergency Department and Urgent Treatment Centers received no votes and were dropped from the list.

The Advisory Committee ranked the needs again in terms of (1) Magnitude in proportion to the service area, (2) Prevalence within the service area, and (3) High need among vulnerable populations:

1. Mental Health Counseling – 15
2. Substance Abuse and Alcohol Counseling – 14
3. Preventive Health Services – 11
4. Outpatient Disease Management – 10
5. Underinsured – 6
6. Dental Care – 2
7. Primary Care Physicians – 1

This time, geriatrics received no votes and was dropped from the list.

The Advisory Committee ranked a third time considering (1) if there were another entity meeting the need, (2) the community's current capacity to meet the need – are there opportunities to partner?, and (3) the impact on the community and on other health related issues. The group felt that even though dental care and geriatric services received too few votes to be included in the final list, they were too important to drop. It seemed as though

both fit well as components of outpatient disease management and preventive health, so after defining terminology and services included in the categories, the final ranking was:

1. Outpatient Disease Management (dental, diseases caused by obesity, geriatrics) – 18
2. Preventive Health (includes dental, obesity and geriatrics) – 14
3. Mental Health Services – 12
4. Services for the Underinsured – 8
5. Substance Abuse Services - 8

Profile of Madison County

Demographics

Madison County is one of Kentucky's fastest growing areas. According to the 2010 US Census, the population of Madison County was 82,916, a 17% increase over its 2000 population count. The county is predominantly white, followed by African/Americans, Hispanic and Latinos, and people who reported being two or more races. There are only a few reported American Indians and Asians.

	Race/Ethnicity					
	Madison Co.		Kentucky		U.S.	
	Number	Percent	Number	Percent	Number	Percent
Total Population	82,916	100%	4,339,367	100%	308,745,538	100%
White	74,967	90.4%	3,809,537	87.8%	223,553,265	72.4%
African-American	3,565	4.3%	337,520	7.8%	38,929,319	12.6%
American Indian/Alaska Native	225	0.3%	10,120	0.2%	2,932,248	0.9%
Asian	753	0.9%	48,930	1.1%	14,674,252	4.8%
Native Hawaiian/Pacific Islander	30	0.0%	2,501	0.1%	540,013	0.2%
Some Other Race Alone	116	0.1%	55,551	1.3%	19,107,368	6.2%
Hispanic/Latino	1,813	2.2%	132,836	3.1%	50,477,594	16.3%
Two or more races	1,447	1.7%	75,208	1.7%	9,009,073	2.9%

U.S. Census Bureau American Fact Finder

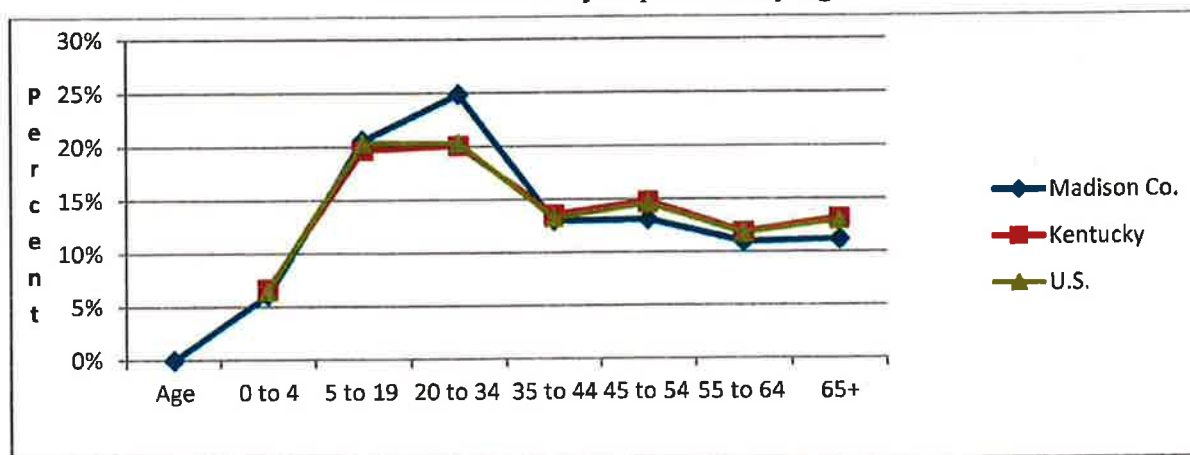
Females make up 51.4% of the population, and males account for 48.6%. More than three quarters of the population is adult, with 78.5% being 18 years and over. Madison County's population is slightly younger than that of Kentucky and the United States, with the largest difference being the number of 20 to 34 year olds. The median age is 33.7, which is younger than both Kentucky (37.7) and the United States (37.2).

Age Distribution

Age	Madison Co.		Kentucky		U.S.	
	Number	Percent	Number	Percent	Number	Percent
0 to 4 years	5,069	6.1%	290,407	6.7%	20,201,362	6.5%
5 to 19 years	17,116	20.6%	850,736	19.7%	63,066,194	20.4%
20 to 34 years	20,665	24.9%	867,398	20.1%	62,649,947	20.3%
35 to 44 years	10,751	13.0%	584,865	13.6%	41,070,606	13.3%
45 to 54 years	10,888	13.1%	636,992	14.8%	45,006,716	14.6%
55 to 64 years	9,115	11.0%	513,381	11.9%	36,482,729	11.8%
65+ years	9,312	11.2%	570,334	13.2%	40,267,984	13.0%
Total	82,916	99.9%	4,314,113	100%	308,745,538	99.9%

U.S. Census Bureau American Fact Finder

Madison County Population by Age

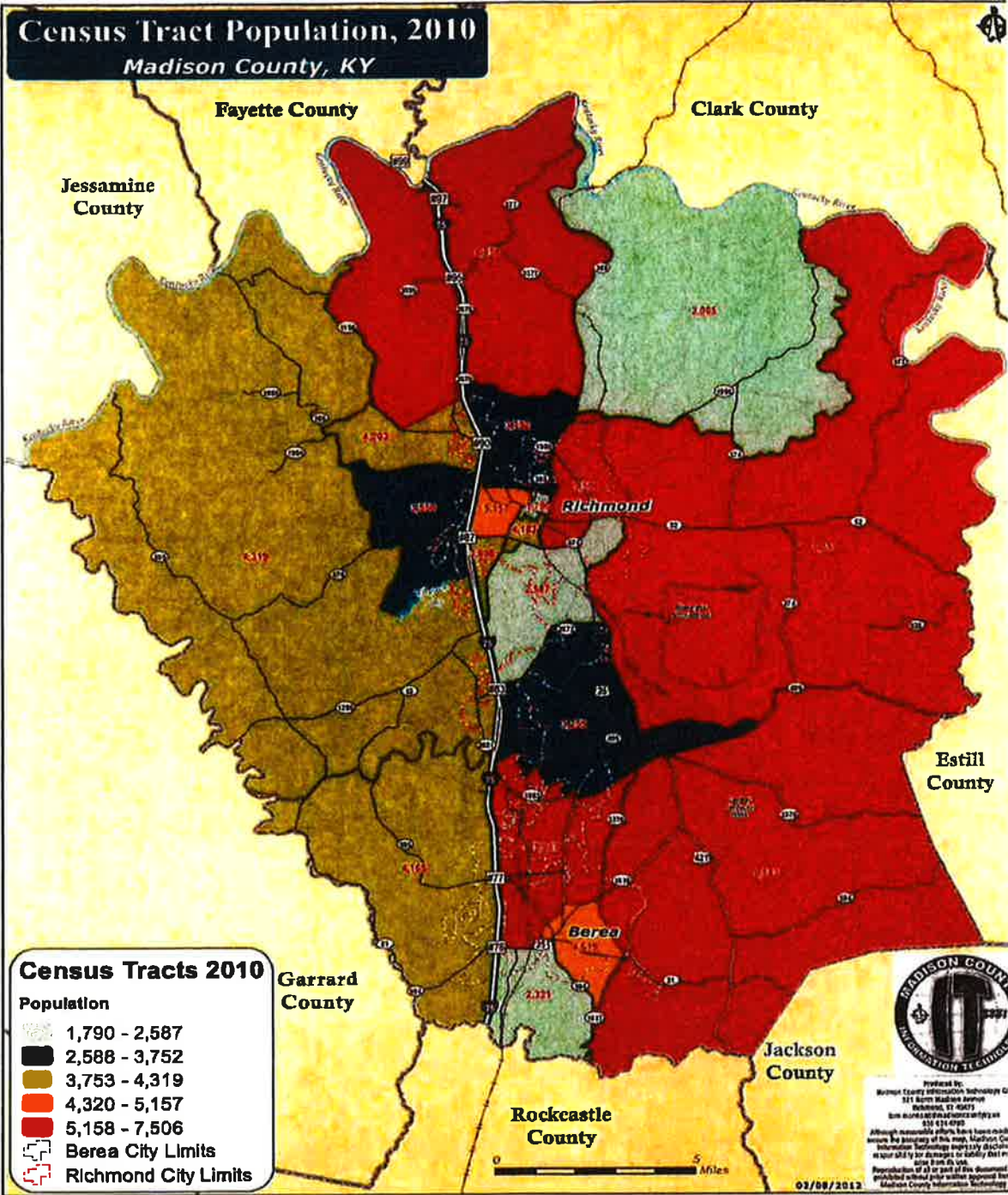


Madison County's population density is just over 187 people per square mile. A little more than half of the residents can be found in Richmond and Berea. According to the 2010 census, most residents (31,364) live in Richmond, the county seat. Another 13,561 live to the south in Berea. Approximately 38,000 live in Madison County's many unincorporated communities including Waco, Paint Lick, Boonesboro, Bighill, Bybee, Kirksville, Round Hill, Union City and Valley View or in the more rural farming areas. See map on following page.

Madison County is home to Eastern Kentucky University, Berea College and National College as well as Madison County Public Schools. The Madison County School District includes 10 elementary schools, four middle schools, two high schools and a semi-private Model Lab School for students grade K through 12. The school district also offers an area technical center, an alternative school and the Middle College, where high school students can take college courses on the ECU campus.

Eastern Kentucky University comprises five academic colleges (Arts and Sciences, Business and Technology, Health Sciences, Education, and Justice and Safety) and a graduate school. It offers more than 160 degree programs at associate, baccalaureate, master's and doctoral levels. In the fall of 2010, the main campus in Richmond had a student enrollment of 14,520. There are satellite campuses in Corbin (fall 2010 enrollment of 950), Danville (fall 2010 enrollment of 553) and Manchester (fall 2010 enrollment of 294). Total enrollment for all campuses was 16,567. In 2010, the student body was 58% women and 42% men. Student demographics were:

- White non Hispanic 77%
- African-American 6%
- Asian or Pacific Islander 1%
- Hispanic 2%
- Other or multi race 5%



Berea College is a liberal arts work college founded in 1855. It charges no tuition, and every student is provided the equivalent of a four year full tuition scholarship. Students participate in a full work study program and are required to work in campus and service jobs at least 10 hours per week. The college offers bachelor's degrees in 32 majors and a dual degree engineering program in cooperation with Washington University and the University of Kentucky. In the 2009–2010 academic year, Berea College enrolled 1,552 undergraduates representing 44 states, Washington DC, US territories and 58 foreign countries. Seventy percent (70%) of the student body was from the Appalachian region and Kentucky. Berea College employs 119 full-time faculty and 39 part-time; the student to faculty ratio is 11:1.

Madison County is also home to National College, a private two-year career college that offers associate degrees and diplomas in business, health care and other vocations. It is a small college with an enrollment of about 400 and a 15:1 professor-student ratio.

During the Madison County School District's current school year (2011-2012), 10,903 students are enrolled in grades K through 12. The number of elementary students (just over 5,400) almost equals the number of middle and high school students combined (just under 5,500). The student population's gender is fairly evenly split as well with (51%) males and (49%) females. Eighty-eight percent (88%) of the students are white. More than half of the district's children are eligible for free and reduced meals; the rate for the county is 54%. Enrollment by grade is as follows:

Kindergarten	919
1 st grade	940
2 nd grade	901
3 rd grade	876
4 th grade	877
5 th grade	897
6 th grade	849
7 th grade	852
8 th grade	825
9 th grade	842
10 th grade	781
11 th grade	694
12 th grade	643
14	7

Grade 14 is actually a number of special education students who have exceeded their 12th grade year but are still enrolled.

Madison County's high school drop out rates have been lower than the Kentucky average for the last five years reported (2003 - 2007). During the same time period, its

five-year graduation rates have exceeded the state average every year. Model Laboratory High School has the highest graduation rate, followed by Madison Southern High School and Madison Central High School in that order.

The Kentucky College and Career Readiness High School Feedback Report for the Class of 2008 lists Madison County's high school graduation rate at 90%. The percentage of high school graduates going on to college was 61.2%. The percentage of graduates with developmental needs in one or more subjects was 40.5%, with 20.6% having developmental needs in English and 32.3% having developmental needs in mathematics. The average high school GPA matched Kentucky's average at 2.94, but the percentage of advanced placement tests with scores of 3 or higher was 43.8%, falling below Kentucky as a whole at 48.8%. Average ACT scores of Madison County high schools compared favorably with Kentucky. They were:

	Madison County	Kentucky
English	20.7	20.2
Mathematics	19.6	20.0
Reading	21.9	21.3
Science	20.7	20.6
Composite	20.9	20.7

The Kentucky Youth Advocates Kids Count data center ranks Madison County with other school districts and the state as a whole on a number of educational measures. On the whole, Madison County Schools scores well; outscoring the Kentucky benchmark in all categories except the percent of entering college freshmen who graduate from a four-year college within a six year period.

Kentucky Youth Advocates Educational Attainment Rankings

	Madison County	Kentucky
CATS test score and percent of goal attained (2008) [Scale: 79%-118%]	100%	96%
Successful transition after High School (2010) [Scale: 71%-100%]	94%	94%
2008-2010 Averaged freshman graduation rate [Scale: 53.9%-100%]	83.9%	80.5%
Students entering college with academic needs [Scale: 13%-68%]	25%	34%
Six year college graduation rate [Scale: 13%-69%]	37%	47%

Residents of Madison County are better educated than Kentucky as a whole, with 83.8% of people age 25 and over having graduated high school and another 27.4% of people 25 and over having earned a Bachelor's degree or higher. Beyond a high school degree, the county lags behind the US. In 2010, there were 35,043 housing units and the homeownership rate from 2006 through 2010 was 62%. The median value of owner-

occupied housing is \$141,100. Estimates for 2006 – 2010 showed that Madison County had 30,756 households, with an average of 2.45 occupants each. Per capita income for the same time period averaged \$21,536 and the median household income was \$41,894. As of February, 2012, Madison County's labor force numbered 43,420. Of that number, 39,954 were employed and 3,466 were unemployed. The unemployment rate was 8.0%.

Poverty thresholds are determined each year by the US government and issued by the Census Bureau. They represent the amount of cash required to support a person or families of various sizes. Poverty thresholds for 2010 ranged from \$10,481 for one person aged 65 and over to \$42,249 for a family of nine people or more (all children must be related and under the age of 18). According to the U. S. Census Bureau's Small Area Estimates Branch, 21.4% of Madison County residents (16,558) live below the United States poverty thresholds. The number of Madison County's children under age 18 living in poverty is even higher – 25.1%, or 4,401 children.

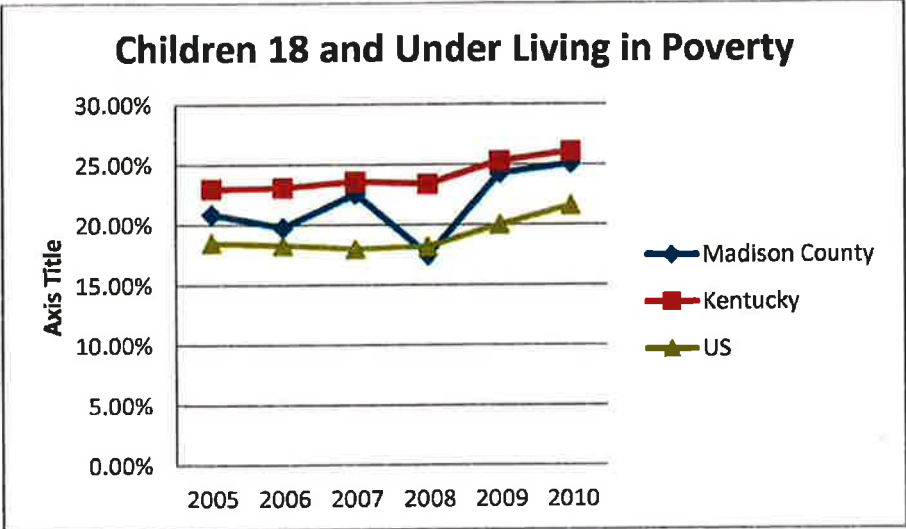
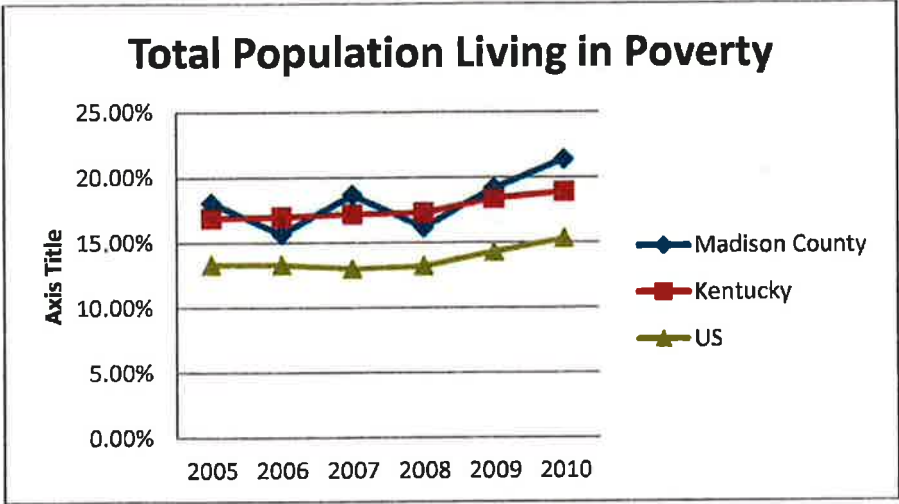
Of Kentucky's 120 counties, only 50 have more people living in poverty than Madison County. Eighty (80) Kentucky counties have more children under age 18 who live in poverty. The county fares worse than both Kentucky and the United States in measures of all people living in poverty (18.9% and 15.3% respectively). The proportion of Madison County's children under age 18 living below the poverty threshold (25.1%) is worse than the nation (21.6%) yet better than the state's (26.1%).

Persons Living Below the US Poverty Thresholds

	Madison County		Kentucky		United States	
	Total Population	Children Under 18	Total Population	Children Under 18	Total Population	Children Under 18
2010	21.4%	25.1%	18.9%	26.1%	15.3%	21.6%
2009	19.2%	24.3%	18.4%	25.3%	14.3%	20.0%
2008	16.2%	17.5%	17.3%	23.4%	13.2%	18.2%
2007	18.7%	22.6%	17.2%	23.6%	13.0%	18.0%
2006	15.7%	19.8%	17.0%	23.1%	13.3%	18.3%
2005	18.1%	20.9%	16.9%	23.0%	13.3%	18.5%

U.S. Census Bureau Small Area Estimates Branch

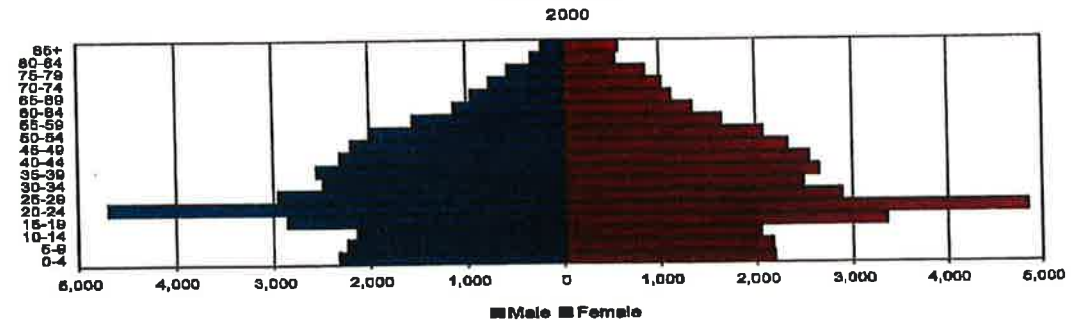
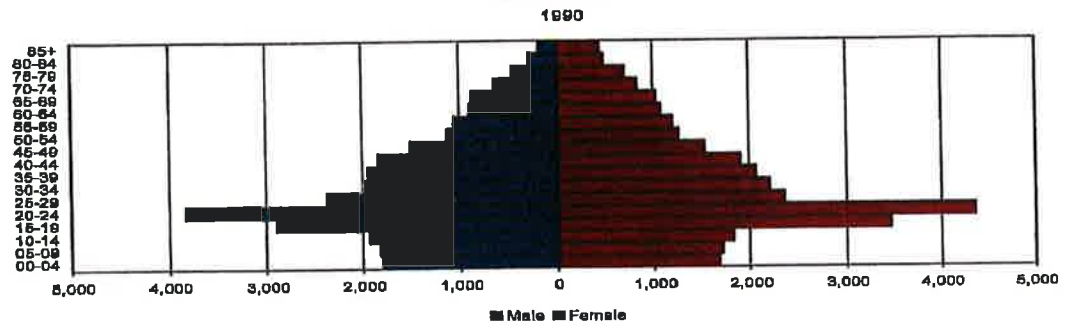
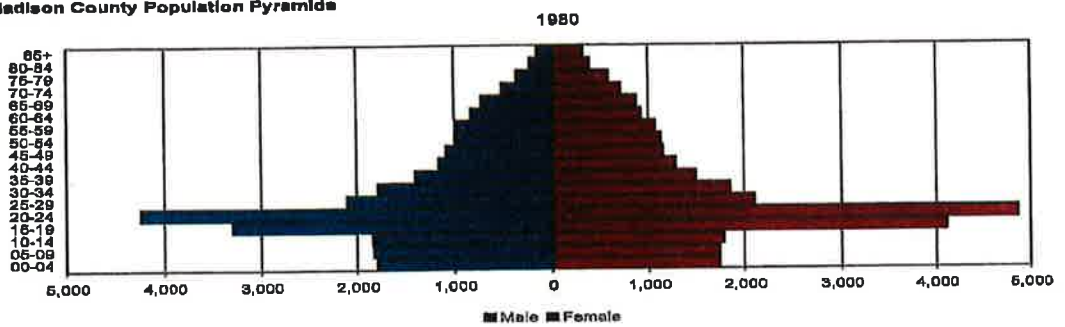
For the last six years, a greater percent of Madison County's total population lived in poverty than the national average, and in every year but 2008, a far greater percentage of Madison County's children lived below the poverty threshold. The average monthly number of children enrolled in the Kentucky Children's Health Insurance Program (KCHIP) nearly doubled in the last decade, rising from 573 in 2000 to 1,002 in 2010. The average monthly number of children receiving Medicaid fared slightly better, with 3,769 enrolled in 2000 compared to 6,486 in 2010.



Vital Statistics

The 2010 population of Madison County according to the U.S. Census Bureau was 82,916, a 17% increase over 70,892 in 2000. The population grew steadily from the 1980's through the 2000's, but the shape of the population pyramid is shifting. People are living longer, so the pyramids are becoming more heavily weighted towards ages 60 and above.

Madison County Population Pyramids



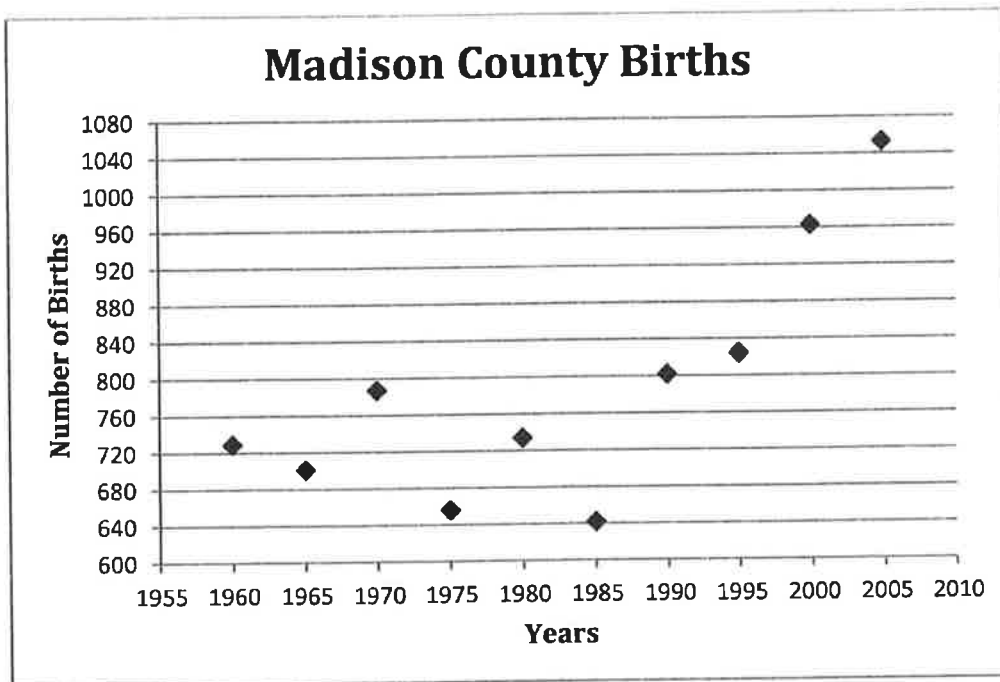
Source: 1980, 1990, and 2000 Census
 Produced by the Office of Workforce Research and Analysis, Kentucky Cabinet for Workforce Development

According to City Data website, the number of births and deaths in Madison County hover around Kentucky's average – usually just below the state for births and a little more so for deaths. While the numbers of both births and deaths have increased along with the general population growth, the rate per 1,000 has decreased slightly for both statistics.

Madison County births per 1000 population from 1990 to 1999: 13.4
 Madison County births per 1000 population from 2000 to 2006: 13.3

Madison County deaths per 1000 population from 1990 to 1999: 7.5
 Madison County deaths per 1000 population from 2000 to 2006: 7.4

Between 1960 and 1985, births in Madison County ranged between about 640 and 780 per year. In 1990; however, the birth rate began to accelerate, and by 2005 more than 1,000 babies were born here.



Birth statistics	1999-2001	2007-2009
Preterm births	11%	9%
Low birth weight (less than 5 lbs. 8 oz.)	8%	8%
Births to teens 15 – 19 (rate per 1,000)	39	30
Repeat births to teens 15-19	20%	16%

2011 Kids Count Kentucky Data Book

<u>Vital statistics</u>	<u>2005</u>	<u>2009</u>
Live births	1,053	1,024
Infant deaths	5	10
Child deaths (ages 1 – 14)	1	1
Teen deaths (ages 15 – 19)	5	0

2011 Kids Count Kentucky Data Book

The U.S. Department for Health and Human Services issued a Community Health Status Report for Madison County in 2009. Part of the report listed comparison measures of birth and death for Madison County and the United States. Birth measures were reported in percentages; infant mortality was reported in deaths per 1000 live births and death measures were reported as age-adjusted to the year 2000 standard, per 100,000 population. While Madison County had a higher rate of very tiny newborns and premature births, its infant mortality rate was lower than the national figure in all reported categories.

Birth Measures

	<u>Madison County</u>	<u>U.S.</u>
Low Birth Weight (2500 g)	9.3	8.2
Very Low Birth Weight (<1500 g)	1.8	1.5
Premature Births (37 weeks)	13.5	12.7
Births to Women under 18	3.2	3.4
Births to Women age 40 – 54	1.5	2.7
Births to Unmarried Women	29.5	36.9
No Care in First Trimester	comparative data not available	

Infant Mortality

	<u>Madison County Rate</u>	<u>U.S. Rate</u>
Infant Mortality	4.2	6.9
White non-Hispanic Infant Mortality	4.1	5.8
Black non-Hispanic Infant Mortality	no report	13.6
Hispanic Infant Mortality	no report	5.6
Neonatal Infant Mortality	2.4	4.5
Post-neonatal Infant Mortality	1.8	2.3

Madison County reported higher incidence of deaths attributable to colon cancer, lung cancer, motor vehicle injuries, and stroke than the national rate.

Death Measures

	Madison County Rate	U.S. Rate
Breast Cancer (female)	19.2	24.1
Colon Cancer	18.6	17.5
Coronary Heart Disease	85.8	154.0
Homicide	no report	6.1
Lung Cancer	74.9	52.6
Motor Vehicle Injuries	19.4	14.6
Stroke	58.2	47.0
Suicide	9.3	10.9
Unintentional Injury	25.2	39.1

The County Health Rankings reports on counties' Health Outcomes by measuring mortality, or years of potential life lost and morbidity, or the quality of life. Madison County ranks 15th in the state for mortality. This is measured by the number of people who die before the age of 75, the age at which the research sets death as premature, or preventable. Madison County's 2012 mortality rate is 7,285. This is better than the 7,388 reported the year before, and also better than Kentucky's rate of 8,781, but it is still well below the national benchmark of 5,466.

The five leading causes of death in Madison County for the year 2007 combined to represent 99.2% of all fatalities. The top five causes of mortality were:

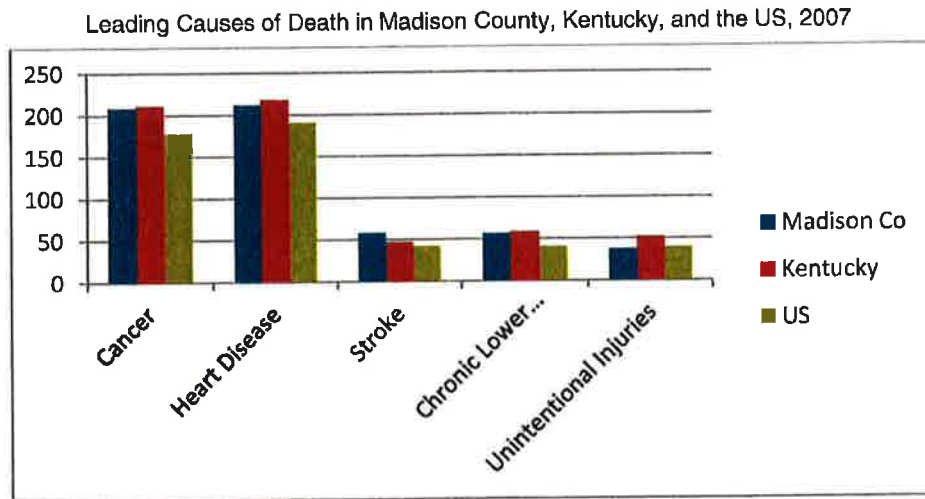
Leading Causes of Death in Madison County, Kentucky, and the US, 2007
Rate per 100,000 Total Population

	Madison Co	Kentucky	US
Cancer	208.7	211.1	178.4
Heart Disease	211.8	218.2	190.9
Stroke	58.3	47.2	42.2
Chronic Lower Respiratory Disease	56.8	58.6	40.8
Unintentional Injuries	37.6	51.8	40

Kentucky Center for Smoke-free Policy

Madison County's leading causes of death mirror those of Kentucky except that heart disease is the state's number one cause of death and cancer is number two. Both the county and the state have registered fewer cancer deaths in 2008. The leading four causes of death are all associated with smoking and exposure to second hand smoke. Motor vehicle deaths and occupational fatalities account for a large number of deaths by

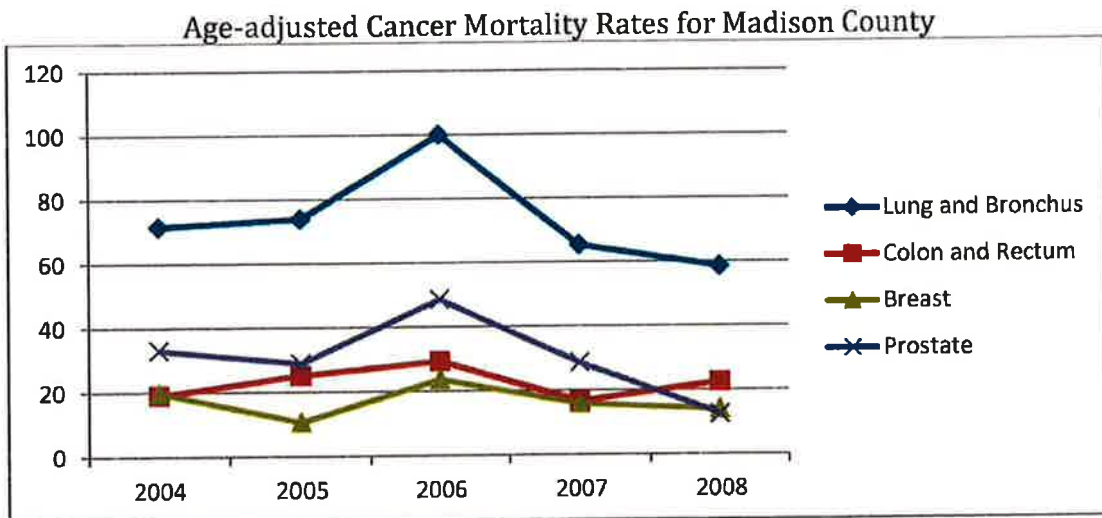
unintentional injuries. Motor vehicle deaths account for 0.9 fatalities in Madison County per 100,000,000 miles driven (2.1 in Kentucky and 1.5 in the US), and occupational fatalities occur at a rate of 2.1 per 100,000 workers (8.0 in Kentucky and 5.0 in the US).



In the Kentucky Cancer Registry's most recent statistics for Madison County, the four types of cancer that are responsible for the most deaths are (all are age-adjusted to the 2000 US standard population to facilitate comparison):

1. Lung and bronchus at 58.52 per 100,000 total population
2. Colorectal at 22.54 per 100,000 total population
3. Breast at 14.03 per 100,000 total population
4. Prostate at 12.56 per 100,000 total population

Incidence of death from all four cancers spiked in 2006, but with the exception of colorectal cancer, death rates decreased in 2007 and 2008.

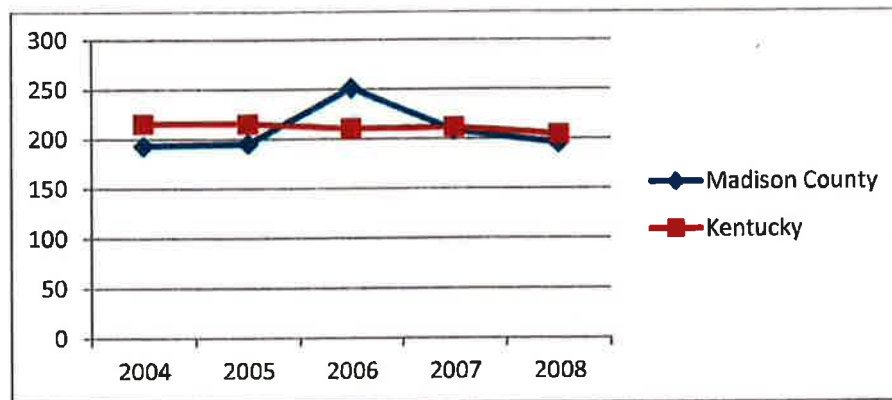


Age-adjusted Cancer Mortality Rates

	All Cancers				
	2004	2005	2006	2007	2008
Madison County	193.4	195.5	251.4	208.7	195.6
Kentucky	215.6	215.5	210.6	211.9	204.6

Kentucky Cancer Registry

Age-adjusted Cancer Mortality Rates – All Types



A news release issued in 2005 by the Kentucky Cabinet for Health and Family Services stated that in Kentucky, 50% more people die by suicide each year than by homicide. From 2000 through 2003, Madison County had 71 suicide attempts and self-inflicted injuries. There were 24 deaths by suicide during that period, but the rate per 100,000 people dropped steadily each year from 12.7 in 2000 to 4.2 in 2003. The 2009 Kentucky Kids Count Data Book reports that in 2006, Kentucky ranked 32nd in the nation for deaths among teens. Most deaths were the result of motor vehicle crashes and other accidental deaths, but suicide was the second leading cause of death among teens between the years of 2005 and 2007, accounting for 13% of Kentucky's teen deaths. Homicide was the third leading cause of death in teens during the period. The rate of teen deaths from all causes was 32 per 100,000 people from 1999 – 2001 and 41 per 100,000 from 2005 – 2007.

While Madison County has one of the lowest mortality rates of Kentucky's counties – only 14 counties have lower mortality rates – it still scores higher than the United States as a whole on all leading causes of death except one – unintentional injuries. Each of the leading four causes of premature death can be associated with poor lifestyle choices – those

that can lead to preventable diseases and premature death. Behavioral risk factors such as use of tobacco, unhealthy diet, and lack of exercise can not only lead to premature death, but can significantly lower the quality of life as well.

The following birth and death data was furnished by the Kentucky Cabinet for Health and Family Services.

Resident Birth and Death Data for Kentucky and Madison County, 2009-2011*

		2009		2010		2011	
		Kentucky	Madison	Kentucky	Madison	Kentucky	Madison
Birth	Pre-term¹	6327	95	6247	85	5895	84
	Total	55955	1,025	54128	958	52,977	983
Death	Diseases of Heart²	9,501	144	9,639	150	9,403	137
	Cerebrovascular Diseases³	1,973	27	1,986	31	1,893	38
	Malignant Neoplasms⁴	9,478	140	9,926	166	9,235	162
	Unintentional Injuries⁵	2,253	35	2,585	58	2,330	38
	Infant⁶	362	10	379	<5	308	<5
	Total	40,464	620	41,948	651	40,989	672

¹Pre-term Birth: <37 completed weeks of gestation

²Disease of Heart: ICD-10 codes I00-I09, I11, I13, I20-I51

³Cerebrovascular Diseases: ICD-10 codes I60-I69

⁴Malignant neoplasms: ICD-10 codes C00-C97

⁵Unintentional Injuries: ICD-10 codes V01-X59, Y85-Y86

⁶Any death at any time from birth up to, but not including, one year of age

*Both birth and death data for the years 2009-2011 are preliminary

Primary Data

Introduction

This Community Health Needs Assessment (CHNA) for Madison County Kentucky was conducted by Pattie A. Clay Regional Medical Center (PACRMC) as mandated by the Patient Protection and Affordable Care Act signed into law by President Barack Obama on March 23, 2010. This report was planned, information gathered and compiled from January 8, 2012 to February 27, 2012.

Planners/Researchers

This report was conducted with the collaboration of the following:

- Larry Bailey – Director, Pattie A. Clay Foundation
- Charline Martin – Grant Writer, Pattie A. Clay Foundation
- Jill Williams – Director of Marketing & Public Relations, Pattie A. Clay Regional Medical Center
- Peter Woodburn – Senior Partner and CEO, Woodburn, Kyle & Company
- Wayne Kyle – Senior Partner, Woodburn, Kyle & Company
- Jill Davis – Director of Client Services, Woodburn, Kyle & Company

Methodology

Woodburn, Kyle & Company collaborated with the representatives of Pattie A. Clay Regional Medical Center to design, implement, collect, and analyze the primary data for Pattie A. Clay Regional Medical Center's Community Health Needs Assessment Report (CHNA).

The CHNA primary data consists of:

- Individual Interviews: conducted with community stakeholders, local health care providers, and individuals involved with health care delivery.

- Focus Groups: conducted with specific groups that were thought to have specific healthcare needs or challenges accessing care.
- Community Survey: designed to invite the residents of Madison County to respond to a questionnaire.

Individual Interviews: A questionnaire was developed by Woodburn, Kyle & Company to elicit responses from community stakeholders, healthcare providers, and those associated with its delivery to learn about their unique perspectives. The interviewees were selected by the Pattie A. Clay Regional Medical Center representatives who also arranged the interviews. A Woodburn, Kyle & Company representative conducted the interviews with the stipulation of confidentiality.

Focus Groups: Four focus groups were scheduled to seek specific in-depth information from the following segments of the community: Hispanics, African-Americans, the Uninsured and Underinsured, and Seniors. A list of questions and discussion topics was developed and used for all of the groups. A Woodburn, Kyle & Company representative conducted the focus groups and the Pattie A. Clay Regional Medical Center representatives recorded the proceedings.

A fifth focus group of low income and underinsured individuals did not materialize. Because their responses were seen as essential to this report, a representative of Pattie A. Clay interviewed eight (8) individuals, chosen at random, while they waited for an appointment at a free healthcare clinic. The same questions and discussion points that were used for the focus groups were posed to the individual interviewees.

Survey: A website was developed that described the survey's purpose and invited Madison County residents to complete its specially developed questionnaire. Advertisements appeared in the *Richmond Register* and the *Madison County Advertiser* directing residents to the website and included an identical mail-in survey instrument. The responses were tabulated and any individual comments, relating to open-ended questions, were recorded and tabulated by reference to a needed service. The ads ran twice in the *Richmond Register* and *Madison County Advertiser* and were delivered to every Madison County household.

Compilation: Responses were tabulated by the following methods:

- Check the box
- Interpreting and tallying the qualifying comments to open-ended survey questions
- Interpreting and tallying the responses from focus group transcripts

Responses from the above methods to determine needs were added together. The criteria to count a response was that it describe or infer a service. However, an overwhelming number of mentions occurred either directly or indirectly relating to “affordable healthcare.” This was a strong theme throughout the entire survey and was closely linked to the need for more primary care physicians.

Roles

Members of Pattie A. Clay Regional Medical Center were responsible for the following:

- Select and arrange interviews with community stakeholders, and identify and recruit focus group participants representative of non-traditional recipients of routine, traditional medical care
- Make logistical arrangements for interviews and focus groups
- Complete profile forms for each interviewee and obtain personal information for focus group participants
- Create a transcript of each focus group
- Produce newspaper advertising for, and distribute, the community-wide survey

Members of Woodburn, Kyle & Company:

- Develop a questionnaire for the personal interviews
- Conduct 40 to 45 personal interviews with community stakeholders
- Tabulate the statistical responses and extract comments from personal interview questionnaires

- Design focus group topics and survey questions based on community stakeholder interviews
- Facilitate 5 focus groups
- Design the community-wide survey instrument
- Monitor and download the community-wide survey responses
- Compile the information generated from the interviews, focus groups, and community-wide survey

Report

Woodburn, Kyle & Company produced a findings report of Madison County's greatest healthcare needs. The report addresses the following:

- Healthcare services missing in Madison County
- Existing services in need of improvement
- Healthcare delivery challenges

The role of Woodburn, Kyle & Company was to document findings through statistical information and comments generated during this process. The purpose of this report is to provide evidence but not recommendations for ensuing action. The decision to implement any findings of this report is, by the definition of the process, stipulated to be at the discretion of Pattie A. Clay Regional Medical Center Board of Directors and Staff.

RANKING OF NEED

	Community Surveys			Personal Interviews			Focus Groups					Totals
	Need to improve	Need more of	Greatest need in Madison County	Requires most attention	Services need to be added	Services to be improved most	African American	Hispanics	Uninsured/Underinsured	Senior	Low Income	
Specialists	106	128	38	30	4	8	2		1		1	318
Mental Health Counseling	94	92	48	22	6	3			1			266
Emergency Department	121	65	1	12	1	1	2	1	1	4		209
Primary Care Physicians	78	100	19			1			1	1	1	201
Substance Abuse Services	77	84		18	3	1			10		1	194
Urgent Treatment Centers	69	64	30			1			1	1		166
Senior Care	65	65	11		1	2		2				146
Dentists	42	34	3	8	1			1	1			90
Pediatric Doctors	33	47	1			1						82
Diabetes Care	1		26			1						28
Community Education				17			1		1			19
Primary Care Providers				10	3	1						14
Detox Unit									10			10
Preventative Care	1	1			3	4						9
Community Healthcare Directory					2		1	1	2	1		7
Cancer Care	1		4									5
Urgent Care Hours	1				1		1			1		4
Exercise facilities					3							3
Exercise Trails					3							3
Transportation							2		1			3
Diagnostics Improved					1	1						2
Sliding Scale Payments							1		1			2
Home Healthcare		1				1						2
Alzheimer's/ Dementia			1									1
Caregiver Respite Services					1							1
Dialysis							1					1
Diversity Training								1				1
Gate Keeper to ER					1							1
Holistic Care			1									1
Hospital Follow-up					1							1
Optician									1			1
Prescription Assistance Program											1	1
Rehab			1									1
Special Needs Children						1						1
Translation Service								1				1

SUMMARY OF TOP 5 NEEDS

1. *Specialists*

Madison County's greatest healthcare need is additional medical specialists. (318 Responses)

Findings:

- The need for cardiac and pediatric specialists is mentioned most often.
- Specialists are in demand because of limited accessibility. Some practice locally only one day a week or less often and are frequently unavailable in the event of an emergency.
- Although the need for specialists is cited most often, few mentioned specific disciplines. Others receiving mention were:
 - Allergy
 - Dermatology
 - Endocrinology
 - Gastroenterology
 - General Surgery
 - Geriatric Care
 - Internal Medicine
 - Nephrology
 - Neurology
 - Obstetrics/Gynecology
 - Oncology
 - Orthopedics
 - Pediatric Dentistry
 - Physical Medicine & Rehabilitation
 - Psychiatry
 - Psychologists
 - Radiology
 - Rheumatology

Observations:

- Study participants perceive the number of specialty practices in Madison County is growing.
- Residents know that more sophisticated medical services are available in Lexington.
- Seeing a specialist in Lexington is not perceived as inconvenient because residents go there frequently already.
- People with an unstable cardiac situation are uncertain if they should seek immediate diagnosis at Pattie A. Clay Regional Medical Center or go directly to Lexington where more advanced cardiac care is available if needed.

2. Mental Health Counseling

The second most needed healthcare service is an increase in the availability of mental health counseling that is better integrated and more easily accessible. Mental health counseling is not seen as an integral component of Madison County's healthcare delivery, and respondents feel that the local Comprehensive Care office does not provide adequate service. (266 responses)

Findings:

- Patient dissatisfaction with Comprehensive Care is high because of long waiting periods and the inaccessibility of appropriate counselors.
- Healthcare professionals mentioned long delays and difficulty referring patients – especially the uninsured – to Comprehensive Care.
- Law enforcement indicates that appropriate specialists are frequently unavailable or nonexistent locally when there is a need to evaluate an unstable individual. In those cases, it is often necessary to accompany the patient on a round trip to Lexington, usually requiring around five hours or longer if a period of observation is required.
- Because it is not available locally, students who require long-term mental health counseling must withdraw from school in order to receive it.
- Psychiatric patients requiring long-term medication have difficulty finding medical professionals to monitor their therapy.

Observation:

- Psychiatric care has widespread impact on the healthcare delivery system of Madison County.
- Comprehensive Care is the major provider of mental health services in Madison County and is the "mental health hub" for the general public, other healthcare providers, substance abuse counselors, educational administration, and law enforcement.

3. Emergency Department (ED)

The delivery of emergency care is seen as the third most needed healthcare service in Madison County. While the question was posed about emergency care in general, many participants framed their responses in terms of Pattie A. Clay Regional Medical Center's Emergency Department. Respondents describe emergency care at Pattie A. Clay Regional Medical Center as substandard because of the lack of speed with which care is given, accuracy of diagnoses, scope of the hospital's services, and professionalism displayed by staff. People with serious health issues report traveling to Lexington for emergency care because those hospitals offer a greater range of services and a higher level of professionalism among staff. (209 responses)

Findings:

- Many see Pattie A. Clay's Emergency Department as "a place of last resort;" however, some participants thought the care provided by the Emergency Department was reliable, professional, and accurate in diagnosis.
- Increased awareness about the emergency services offered at Pattie A. Clay Regional Medical Center would help residents make more informed decisions about where to go for emergency care.
- Respondents prefer Instant Care over Pattie A. Clay's Emergency Department because of the speed and accuracy of diagnoses, which optimize effective treatment.

Observations:

- Community residents are concerned about the length of wait times, accuracy of diagnoses, and quality of treatment.
- Seniors are most concerned with the availability of quick, accurate, and quality care.
- Some participants noted that Pattie A. Clay's Emergency Department staff lacked professionalism.
- Confusion exists about whether to use Instant Care or Pattie A. Clay's Emergency Department.
- Cardiac patients question going straight to Lexington for emergency care or going to Pattie A. Clay, which is closer but where service is more limited, as this might result in being transferred to Lexington.

4. Primary Care Physicians

Madison County's fourth most needed healthcare service is additional Primary Care Physicians. Numerous comments indicate that people have difficulty in either scheduling an appointment with their existing physician or finding a physician who would take them as a patient. While the need for affordable healthcare is mentioned throughout the assessment, it becomes most apparent here because continuity of care requires a patient to have a regular physician. Respondents indicate that a two-tiered healthcare system exists within Madison County – one for those with health insurance and another for those without.

Medical care is available to the uninsured and underinsured at a limited number of free or sliding scale clinics; however, these resources are most frequently used as emergency or stopgap measures. There is a need for more physicians to accept the uninsured or underinsured as patients and more physicians who will charge for medical care on a sliding scale based on the patient's income. Comments on the affordability of care span the areas of emergency care, dental and vision, mental health and substance abuse counseling, prescription drugs, laboratory procedures and various medical tests; but it is most evident when discussing the continuity of care found with a Primary Care Physician. (201 responses)

Findings:

- People think there should be more Primary Care Physicians practicing in Madison County.
- The uninsured/underinsured want access to Primary Care Physicians who will provide quality care and offer a sliding-scale payment arrangement.

Observations:

- Primary Care Physicians are the most trusted sources of healthcare guidance for families.
- Patients are waiting longer for an appointment with their doctor.
- Patients have a high level of confidence in their Primary Care Physician when being referred to a specialist.
- Some participants mentioned the need for more pediatric physicians and for their offices to be located with a group practice of primary care or family physicians.
- Many people stated that everyone should have the right to quality basic healthcare.

5. Substance Abuse & Alcohol Counseling

The fifth most frequently mentioned healthcare need in Madison County is more substance abuse and alcohol counseling. Respondents state that Madison County's healthcare system is not adequately treating or equipped to handle the volume of substance abusers who need help. (194 responses)

Findings:

- There is no long-term residential treatment program for men in Madison County.
- There is no medically supervised detoxification unit in Madison County.
- Physicians need to watch more closely for signs of substance abuse with their patients to enable the safe prescribing of medications for treatment.
- Healthcare providers need to develop better methods of communication to reach substance abusers.
- The need for substance abuse treatment exceeds the services available.

Observations:

- Little differentiation is made between substance abuse and alcohol abuse.
- Substance abusers are more likely to engage in counseling and treatment when it is recommended by another person.
- Substance abusers are not likely to communicate their chemical dependency to a physician when being treated. This puts them at risk to be prescribed medications that could cause harmful interactions.
- Rehabilitation is more successful with longer residential treatment programs.
- Some feel that the court-ordered, short treatment programs are ineffective.
- Substance abusers frequently do not know where to find help.
- Many substance abusers do not quit using because there is no medically supervised detoxification unit in Madison County.

Secondary Data

Madison is one of Kentucky's healthier counties. However, the fact that Madison County outscores the state average on most measures dims a little when considering Kentucky's standing in the nation. A little over a year ago, Kentucky made the news in both the *Washington Post* and in Jay Leno's Tonight Show monologue, when Manchester, Kentucky was profiled as one of the fattest towns in America. Adult obesity in Manchester and Clay County is estimated at 52%, which is more than twice the national level. Adult obesity in Madison County is 30% -- much better than Clay County and somewhat better than Kentucky as a whole, but still far above the national benchmark of 25%.

America's Health Rankings 2011, a study released by the United Health Foundation ranks Kentucky's overall health at 43rd in the nation, up one from last year. It listed Kentucky's strengths:

- low prevalence of binge drinking
- low violent crime rate

and Kentucky's challenges:

- high prevalence of smoking
- high prevalence of obesity
- high rate of preventable hospitalizations
- high rate of cancer deaths

The report states that while smoking among adults has decreased over the past ten years (from 30.5% to 24.8%), 822,000 Kentuckians still smoke. More than 1 million Kentucky adults are obese. Diabetes decreased from 11.5% to 10% of the population from 2010 to 2011, but there are still 332,000 adults with diabetes in Kentucky. Over the past five years, the uninsured population increased from 13% to 15.4%, and in the past 10 years, the percentage of children under the age of 18 living in poverty increased from 15.2% to 24.7%.

Well-Being Index and County Health Rankings Studies

Gallup, the firm responsible for the Gallup Polls, recently released the Gallup-Healthways Well-Being Index for 2011. Gallup conducted random telephone interviews with 1,000 people a day for 350 days throughout 2011, asking about people's physical health (chronic conditions, obesity), lifestyle behaviors (smoking, diet and exercise), emotional health (feelings of happiness or sadness), work environment, basic access to health care and food, and how they rate their lives in general. Only West Virginia scored

lower than Kentucky on measures of well-being, which are used to determine the healthiness of the state. Out of a possible 100 points, Kentucky scored 63.3. In Kentucky, 13.7% reported having diabetes, 29.5% considered themselves obese, 48% said they exercised frequently, and 56.1% said that they ate produce regularly. Nineteen percent (19%) of the respondents were uninsured. In the measures of emotional health, Kentucky scores were the worst in the nation.

Kentucky led the nation in the percentage of smokers. More than a quarter (29.5%) of Kentucky adults is obese, earning the state the rank of 45 out of 50. More than a third (36.3%) of our population has high blood pressure, which puts Kentucky at 47th out of 50 states. Kentucky has the second highest ranking of the number of adults with diabetes, putting it at number 49 out of 50. It is also next to last in the number of adults who rate their lives as “thriving” on the poll’s Life Evaluation Index. Kentucky was dead last in practicing healthful behaviors, including eating healthily, exercising and not smoking. The overall analysis highlights the relationship between obesity and poor health outcomes. States with high obesity rates – and Kentucky has one of the highest – have more chronic disease, more headaches and pain. Blood pressures are higher and there is more diabetes. Productivity is compromised because workers take more sick days. All of these variables contribute to the fact that Kentuckians’ sense of well-being is nearly the lowest in the nation – 49 out of 50.

But Madison County *is* improving its standing in health indices for Kentucky counties. A recently released study by the University of Wisconsin Population Health Institute and the Robert Wood Johnson Foundation ranked Madison County as the 20th healthiest of Kentucky’s 120 counties. The study evaluated data from many sources to rate each county’s health by comparing health outcomes (morbidity, or the quality of life and mortality, the length of life), health factors (health behaviors, clinical care, social and economic factors, and the physical environment), and local programs and policies. The report, called County Health Rankings, showed that Madison County had improved its standing from last year’s ranking of 34.

On most factors, Madison County scored higher than the state as a whole. However, in the areas of Clinical Care and Health Care, the county scored less favorably than Kentucky on nearly every measure. Madison County scored more favorably than Kentucky on only two Clinical Care and Health Care measures – fewer preventable hospital stays and percentage of people screened for diabetes. Particularly noteworthy is the proportion of health care providers to individuals. Further, Kentucky scores well below the national benchmarks. National benchmarks were provided for some data, but not all. When available, they are included in the following table.

	<u>Madison County</u>	<u>Kentucky</u>	<u>US</u>
Primary Care Physicians	1,306:1	922:1	631:1
Mental Health Providers	5,142:1	3,909:1	
Dentists	2,781:1	2,689:1	
Uninsured Adults	22%	20%	11%
Could Not See Doctor Due to Costs	18%	17%	
Diabetic Screening	88%	82%	89%
Mammography Screening	61%	63%	74%
Preventable Hospital Stays*	66	104	49%
Health Care Costs	\$10,486	\$10,375	

County Health Rankings and Roadmaps, University of Wisconsin Population Health Institute and RWJF

*Rate per 1,000 people

Children's Health

In addition to increasing its overall health ranking, Madison County showed improvement in most indicators of its children's health and well-being. The decade between 2000 and 2010 saw a 15.07% increase in the number of children between ages 0 and 17. Of the 17,850 children living in Madison County in 2010, 721 were African-American, 644 Hispanic, 15,491 Caucasian and 994 one or more other races. Just over twenty-five percent, 25.1% lived in poverty, up from 18% in 2000.

All babies deserve a healthy start in life. Much of their future depends on the care and precautions taken by their mothers before they are born. Prenatal care involves regular checkups during pregnancy, including screening and treatment for the mothers; monitoring the fetus' development and testing for birth defects and diseases; and education for the mother on nutrition, healthy lifestyle choices and behaviors detrimental to the unborn child. Mothers who engage in prenatal care tend to stay healthy throughout their pregnancies and deliver healthier babies.

Even though the percent of Madison County mothers receiving early and regular prenatal care fell from 63% to 61% from the 2004-2006 period of measurement to the 2007-2009, maternal behavior statistics indicate improvement in several areas.

	<u>2004-2006</u>	<u>2007-2009</u>
Births to mothers receiving early and regular prenatal care	63%	61%
Births to mothers who reported smoking during pregnancy	24%	22%
Babies being breastfed at hospital discharge	57%	62%

2011 Kids Count Kentucky Data Book

MSN News recently published an article declaring that teen births in the United States have hit a record low. Based on information provided by the Centers for Disease

Control and Prevention's Division of Vital Statistics, the report states that births to women ages 15 through 19 dropped 9% between 2009 and 2010, now standing at 34 births per 1,000 women in that age group. Numbers available to us at the county level allow comparisons from 1999–2001 and 2007–2009. In Madison County, the number of births to women ages 15 through 19 decreased by 23% during that time. While we cannot directly compare the two percentages because they are based on different time periods, we do know that Madison County is heading in the right direction and that from 2007 to 2009, the number of births per 1,000 women ages 15 through 19 stands at 30, which is better than the national rate.

<u>Birth statistics</u>	<u>1999-2001</u>	<u>2007-2009</u>
Preterm births	11%	9%
Low birth weight (less than 5 lbs. 8 oz.)	8%	8%
Births to teens 15 – 19 (rate per 1,000)	39	30
Repeat births to teens 15-19	20%	16%

2011 Kids Count Kentucky Data Book

<u>Vital statistics</u>	<u>2005</u>	<u>2009</u>
Live births	1,053	1,024
Infant deaths	5	10
Child deaths (ages 1 – 14)	1	1
Teen deaths (ages 15 – 19)	5	0

2011 Kids Count Kentucky Data Book

<u>Other child health indicators</u>	<u>2005</u>	<u>2009</u>
Asthma hospitalizations (3 year average)	70	64
Children under 6 screened for lead poisoning	5%	2%
Early childhood obesity	16.7%	15.9%

2011 Kids Count Kentucky Data Book

<u>Economic Well-being of Children</u>	<u>2006</u>	<u>2010</u>
Child poverty rate	19.8	25.1
Children and infants receiving WIC	1,457	1,669
Children eligible for free and reduced price meals (2006 & 2011)	47%	50%
Children enrolled in Medicaid	5,159	6,486
Children enrolled in KCHIP	730	1,002
Children enrolled in Medicaid or KCHIP receiving dental services	2,601	4,533
Children receiving food stamps	3,800	4,759
Kentucky Transitional Assistance Program (child only)	44%	53%
Unemployment rate	4.9	8.8

2011 Kids Count Kentucky Data Book

<u>Child abuse and neglect substantiated by type</u>	<u>2006</u>	<u>2010</u>
Child neglect	41%	40%
Physical abuse	14%	12%
Sexual abuse	19%	20%
Child victims of abuse who are repeat victims	3%	7%

2011 Kids Count Kentucky Data Book

Morbidity and Mortality

Morbidity measures how healthy people report that they feel. The County Health Rankings report ranks Madison County 28th in the state for morbidity. Madison County residents reported feeling healthier on several measures again this year, as they did in 2011. The county equals or outscores Kentucky in every morbidity ranking, but it also falls below the national benchmark in nearly every category. This year, 18% reported that they had poor or fair health; poor physical health days were reported at 4.3 per month and poor mental health days at 3.6 per month.

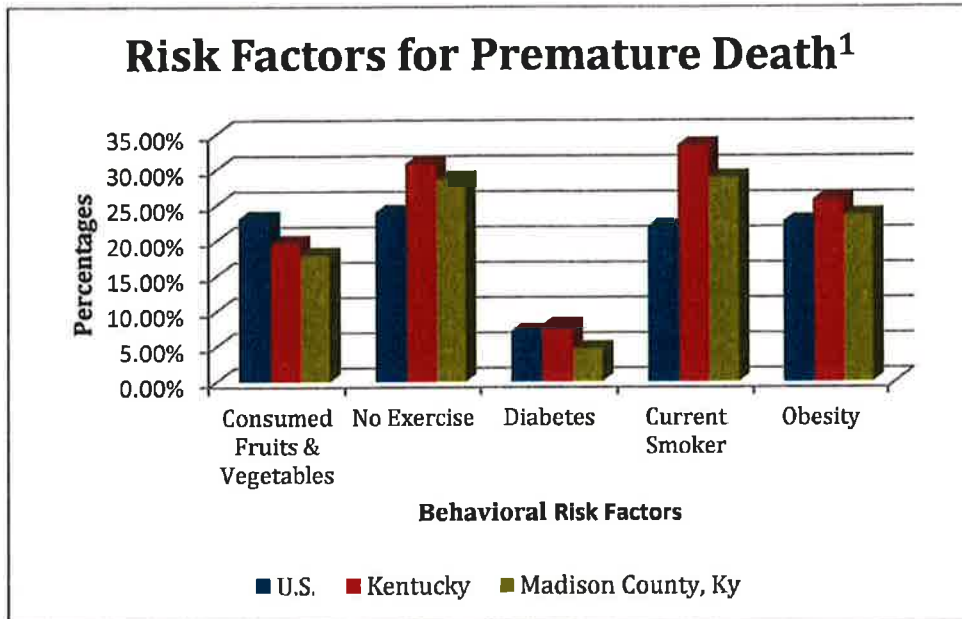
Respondents also report on their health behaviors, and over the three years that the report has been published, Madison County's scores have either remained the same or improved. This year, the county scored 4th in the state for health behaviors, which is its best ranking ever. On each measure, Madison County scored better than the state, but even though its health behaviors scored better than all but three counties, its score failed to meet or exceed the national benchmark on all but one measure, excessive drinking.

Health Behaviors

	Madison County	Kentucky	National Benchmark
Adult Smoking	22%	27%	14%
Adult Obesity	30%	33%	25%
Physical Inactivity	30%	31%	21%
Excessive Drinking	6%	11%	8%
Motor Vehicle Crash Death Rate	16%	22%	12%
Sexually Transmitted Infections*	223	311	84
Teen Birth Rate*	33	52	22

County Health Rankings and Roadmaps

*Rate per 100,000 people



¹ Adapted from CDC. Behavioral Risk Factor Surveillance System, 2000-2006

Risk Factors	U.S %	KY %	Madison %
F&V*	23.10%	19.66%	18.00%
Exercise**	23.97%	30.80%	28.70%
Diabetes	7.08%	7.86%	4.70%
Smoker	21.89%	33.40%	28.90%
Obesity	22.63%	25.71%	23.60%

* percentage that actually consumed Fruits & Vegetables

** percentage that did not exercise

Kentucky Health Facts reports on the prevalence of disease in Madison County's adult population. Eleven percent of the population had asthma, 8% had diabetes and 32.7% had hypertension. The HIV prevalence rate for Madison County is 68 cases per 100,000 people. The Kentucky Cancer Registry reports on the incidence of invasive cancer rates in 2009 for Madison County and Kentucky as follows. All rates are per 100,000 population; rates are age-adjusted to the 2000 US standard million population.

	Madison Co.	Kentucky
Colorectal	32.41	52.84
Lung and Bronchus	85.14	96.90
Breast	70.13	65.00
Prostate	162.47	121.74
All Invasive Cancers	526.29	508.74

The Kentucky River Foothills Development Council, Inc. offers a broad range of services to fight poverty and help people living in Kentucky. The agency primarily serves four central Kentucky counties – Clark, Estill, Madison and Powell – but it offers services to more than 30 other counties in central and eastern Kentucky. It offers many services for children through senior citizens in the areas of education, health and welfare, housing, financial counseling, emergency service, medical and prescription assistance and alcohol and drug recovery. It recently published its 2011 Community Assessment, from which the following observations on alcohol and drug abuse are taken.

“The production, distribution, and abuse of illicit drugs pose a serious threat to Kentucky. Most illicit drugs are readily available in the state, and the number of drug related arrests, seizures, and treatment admissions have increased dramatically. The level of methamphetamine production, distribution, abuse and violence has increased substantially, particularly in the rural areas of the state. Cocaine poses a significant threat to most metropolitan areas of the state because it is abused at high levels, is increasingly available, and its distribution and abuse are frequently associated with violent crime. Marijuana also poses a considerable threat to Kentucky and surrounding states because it is the most prevalent illicit drug. It accounts for more drug-related treatment admissions than any other drug, and a significant amount of the nation’s marijuana is produced in the state. Diverted pharmaceuticals, club drugs such as MDMA and GHB, and hallucinogens are increasingly available and abused. The distribution and abuse of heroin pose a low threat to the state.”

2011 Community Assessment, Kentucky River Foothills Development Council, Inc.

Cocaine is readily available and poses the greatest threat to metropolitan areas. Methamphetamine is growing rapidly as a major threat, especially among youth and in rural areas. The number of methamphetamine labs in Kentucky increased by 73% from 2008 to 2009, and meth is used by 12.7% of Kentucky youth, compared to 9% nationwide. Marijuana is Kentucky’s leading cash crop, and Kentucky produces more of it than all states except one. It is the most widely available and frequently used illegal drug. The diversion of pharmaceuticals – Lortab, Lorcet, Vicodin and OxyContin – along with hallucinogens and club drugs continues to be a significant problem in the state. In 2009, there were 61,705 drug arrests in Kentucky; just over 2% of them were in Madison County. The following statistics were provided by the Kentucky State Police (KSP).

Drug use in Madison County

	2006	2007	2008	2009	2010
Opium or cocaine reported usage	136	170	58	66	32
Marijuana arrests	532	601	302	421	251
Drug arrests	1,279	1,639	949	1,271	909
DUI arrests	1,140	1,098	750	708	619

The County Health Rankings report defines excessive alcohol use as binge drinking (consuming more than 4 drinks for women or 5 for men on a single occasion in the past 30 days), or heavy drinking (more than one drink per day for women and more than two per day for men). Excessive drinking is a risk factor for many unfavorable health outcomes, for example hypertension, acute myocardial infarction, alcohol poisoning, fetal alcohol syndrome, interpersonal violence and motor vehicle crashes. There is a strong association between alcohol consumption and impaired driving, and binge and heavy drinkers accounted for the most instances of alcohol-impaired driving. The report ranked Madison County's prevalence of excessive alcohol use at 6%. In 2010, there were 619 arrests for driving under the influence in Madison County and 498 convictions. There were 815 arrests for drunkenness. Kentucky's Highway Safety Performance Plan for FY 2009 reported that in 2007, Madison was one of the 15 counties responsible for 53% of the state's alcohol related collisions. According to the National Highway Traffic Safety Administration, Madison was the 4th of Kentucky's top 10 counties for traffic fatalities in 2010. The NHTSA's 2008 report recorded five fatalities caused by alcohol impaired driving in Madison County.

The National Alliance for Mental Illness issues report cards for each state on the condition of their mental health systems. In 2006, Kentucky received an F. Three years later, the grade hadn't changed. Kentucky falls short on the number of quality programs, ER wait times, quantity of psychiatric beds, financing, consumer and family empowerment programs and collaboration among state mental health agencies and other state agencies and systems. Neither of Madison County's hospitals has psychiatric beds.

The County Health Rankings survey measured poor mental health days by asking the following: "In thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?" Responses from Madison County indicated that on average, mental health was not good on 3.6 days out of the last thirty. Madison County had better scores than Kentucky (4.3 days) but worse than the national benchmark of 2.3.

In 2008, 30% of Kentucky adults reported that they did not participate in any kind of physical exercise during the month. More women did not participate in exercise than

men, and adults with lower levels of education were more sedentary. Lack of physical activity increased with age; the highest proportion of people responding that they did not exercise was age 65 and older. In the 2012 County Health Rankings survey, 30% of Madison County adults reported that they participated in no leisure time physical activity. Again, Madison County scored better than Kentucky (31%) but lower than the national benchmark of 21%. The report indicated that there were 13 recreational facilities per 100,000 people in Madison County. This number is high because there are fewer than 100,000 people in the county. The actual number of recreational facilities in 2008 was 12.

It is logical that an unhealthy diet, coupled with lack of exercise, contributes to obesity. Obesity, in turn increases a person's risk of type-two diabetes, heart and coronary artery disease, hypertension, stroke, cancer, osteoarthritis, respiratory problems and a long list of other conditions.

The numbers of people eating the recommended fruit and vegetable intake is low – only 12.1%. In this instance, Madison County lags behind Kentucky as a whole (21.1%). Groceries and markets are available to everyone in the county; in no area of the county is it difficult for a person with low income to find a source of healthy food. Also readily available to everyone are fast food establishments, which make up 59% of all restaurants in the county.

In an effort to provide young people with the opportunity for at least one nutritious meal a day, most of Madison County's school children are eligible for the free and reduced lunch program. Only 94 of Kentucky's 120 counties supply more free and reduced price lunches for their students. This year, the Madison County School District expanded their free meals to students from low income families. All students in high poverty areas will be eligible for free meals for the next four years under the program made possible by the National School Lunch and National School Breakfast programs.

Health Care Utilization

In 2010, Madison County residents were admitted to area hospitals 8,720 times. The most frequent Major Diagnostic Categories for discharge were:

1. Circulatory System
2. Pregnancy and Childbirth
3. Respiratory System
4. Newborns and Neonates
5. Digestive System
6. Musculoskeletal System and Connective Tissue
7. Kidney and Urinary Tract
8. Mental Diseases and Disorders
9. Metabolic Diseases and Disorders
10. Female Reproductive System

Because not all services are offered at all hospitals, patients who live in Madison County were discharged from 58 hospitals throughout Kentucky in 2010. More than 78% of these hospitalizations occurred at five area hospitals: Pattie A. Clay Regional Medical Center (2,780), University of Kentucky Hospital (1,119), Central Baptist Hospital (1,073), St. Joseph East (1,052) and St. Joseph Berea (796). Hospitalizations of Madison County residents resulted in 41,128 patient days; the average length of stay was 4.7 days. Of the total 8,720 Madison County residents who were inpatients in 2010, 573 were hospitalized for mental diseases and disorders (361) and substance use (212). Pattie A. Clay Regional Medical Center is not equipped to care for psychiatric patients or those with substance abuse issues. Mental Health Counseling and Substance Abuse and Alcohol Counseling were two of the top five needs identified through this Community Health Needs Assessment.

Pattie A. Clay Regional Medical Center is an acute care hospital. It admitted 4,266 patients in 2010. These patients were hospitalized for a total of 14,323 days (measured in discharge days). During that time period, there were also 25,262 visits to Pattie A. Clay's Emergency Department (ED). Including ED visits, 40,123 outpatients were seen. Medicaid and Medicare patients combined to account for more than three quarters of Pattie A. Clay's inpatient census and nearly half of the visits to our Emergency Department. During the same time period, St. Joseph Berea, a critical access facility, admitted 1,520 patients and had 18,966 ED visits. Including the ED visits, St. Joseph Berea saw 55,519 outpatients. Medicare and Medicaid patients accounted for 80% of St. Joseph's inpatient census and just under half of its Emergency Department visits.

	Pattie A. Clay RMC			St. Joseph Berea			Madison County Total		
	Medicaid	Medicare	Other Payor	Medicaid	Medicare	Other Payor	Medicaid	Medicare	Other Payor
Inpatient Hospitalization Days	4,061 (28%)	6,865 (48%)	3,397 (24%)	619 (12%)	3,430 (68%)	969 (19%)	4,680 (24%)	10,295 (53%)	4,366 (23%)
Emergency Department Visits	7,238 (29%)	4,198 (17%)	13,826 (55%)	6,099 (32%)	3,034 (16%)	9,833 (52%)	13,337 (30%)	7,232 (16%)	23,659 (54%)
Hospital Payor Mix Total	11,299 (29%)	11,063 (28%)	17,223 (44%)	6,718 (28%)	6,464 (27%)	10,802 (45%)	18,017 (23%)	17,527 (28%)	28,025 (44%)

Together, the hospitals offer the following for Madison County:

	Pattie A. Clay RMC Acute Care Capacity	St. Joseph Berea Critical Access Capacity	Madison Co. Total Beds
Medical/Surgical Adult and Pediatric Beds	44	21	65
Obstetric Beds	21		21
ICU/CCU/Burn Beds	8	4	12
BassInets	21		21
Operating Rooms	5	4	9
Cystoscopy Rooms	1	1	2
Lithotripter Units	1		1

Medical services are available in Madison County. The community has two hospitals, student health services at both Eastern Kentucky University and Berea College, seven long-term care facilities, urgent treatment facilities, dialysis clinics and standalone MRI facilities, occupational medicine and wound care centers, and many pharmacies. According to Kentucky Health Facts, there are 108 physicians and 31 dentists practicing in the county.

While services are available, they are not accessible to all Madison County residents. The cost of health care is prohibitive to many, and access to health insurance is becoming financially impossible for a growing number of citizens. Research shows a strong relation between higher income and better health. Kentucky Health Facts reports that 21% of Madison County's adult population under age 65 has no health insurance and that 15% forgo medical care due to cost. Lack of health care coverage for adults decreased with increasing age, increasing educational level and increasing income level. The highest percentages of residents with no health care coverage in 2008 were adults aged 18 - 24 (29.8%), adults with less than a high school education (25.6%) and adults earning less than \$15,000 a year (30.8%). The average monthly number of Madison County children enrolled in the Kentucky Children's Health Insurance Program (KCHIP) was 1,002 in 2010. This is a 75% increase from 10 years before. The average number of children enrolled in Medicaid during 2010 was 6,486, a 72% increase over 2000.

Although relatively limited, the area does provide health care services for residents who cannot afford to pay for care. Among these are the Madison County Health Department and MEPCO Home Health, which offer adult and child health care services, diabetes care and home health care services; two White House Clinics offer health care, dentistry and pharmaceutical services on a sliding cost basis; HealthNOW operates free health care clinic two nights a week in downtown Richmond; and the Berea Health Ministry offers a rural health clinic in the southern part of the county.

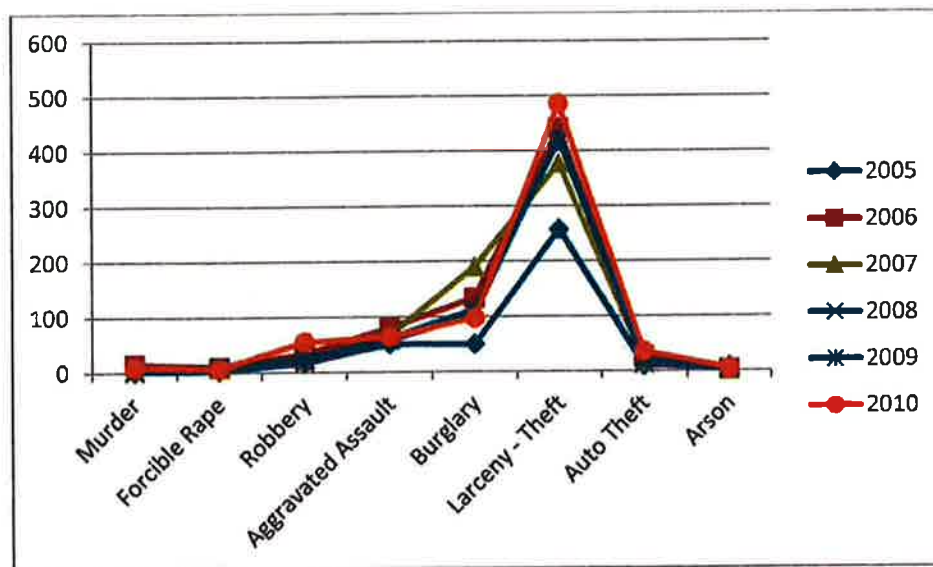
Social and Community Issues

Every community has crime and Madison County is no exception. Crime in Madison County has increased steadily over the past six years, with the exception of 2006 and to a lesser extent 2007, which appear to be particularly violent years across many types of criminal activity. The information below represents arrests for Part I criminal activity, not incidence. Part I crimes, or Index crimes, are violent (aggravated assault, forcible rape, murder and robbery) and property (arson, burglary, larceny-theft, and motor vehicle theft) crimes. The percent increase in arrests from 2005 to 2010 was great for every type of Part I criminal activity except aggravated assault, which increased by 25% and arson, which actually decreased by 37%.

Major Part I Crime Arrests in Madison County

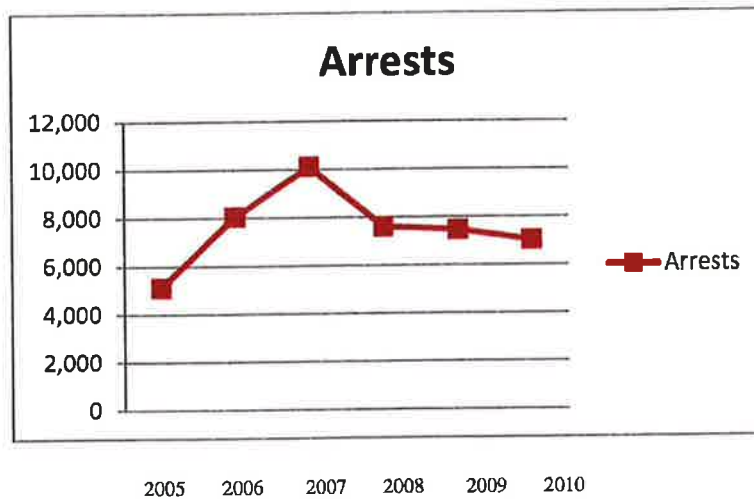
	2005	2006	2007	2008	2009	2010
Murder	1	15	5	1	2	9
Forcible Rape	3	10	7	11	11	7
Robbery	17	33	24	17	25	55
Aggravated Assault	51	80	66	57	61	64
Burglary	50	134	190	104	112	98
Larceny - Theft	258	441	377	430	420	486
Auto Theft	10	27	17	12	22	36
Arson	8	3	1	3	3	5
TOTAL	398	743	687	635	656	760

Part I Criminal Arrests in Madison County



Part II Crimes include the following: simple assault, curfew offenses and loitering, embezzlement, forgery and counterfeiting, disorderly conduct, driving under the influence, drug offenses, fraud, gambling, liquor offenses, offenses against the family, prostitution, public drunkenness, runaways, sex offenses, stolen property, vandalism, vagrancy, and weapons offenses. Arrests for Part II Crimes seemed to vary from year to year.

- 2005 – 5,115 arrests
- 2006 – 8,056 arrests
- 2007 – 10,133 arrests
- 2008 – 7,619 arrests
- 2009 – 7,479 arrests
- 2010 – 7,048 arrests



The most violent year for offenses against family was 2007, followed by 2006. Arrests for offenses against family have declined slightly but steadily over the past three years. Arrests for offenses against family were as follows:

- 70 arrests in 2005
- 168 arrests in 2006
- 205 arrests in 2007
- 139 arrests in 2008
- 135 arrests in 2009
- 134 arrests in 2010

There were 6 runaways in 2005, 17 in 2006, 6 in 2007, 4 in 2008, and 5 in both 2009 and 2010.

Other Hospital Specific Sources

Secondary data reveals that 21% of Madison County residents live in poverty. An analysis of Pattie A. Clay's payor data verifies that in 2011, 31% of the patients served by the hospital were Medicaid, DSH, KHCP, Madison County Health Department referrals or charity (self pay/uninsured). If we include Medicare patients, the proportion jumps to 61%. Only 39% of our patients were covered by commercial insurance in 2011.

While Madison County is ranked as one of Kentucky's healthiest counties, on most measures of healthy lifestyles, it still fell below the national benchmark. Controllable risk factors for diseases of the circulatory and respiratory systems are smoking, poor diet, high blood pressure and cholesterol levels, diabetes, obesity, and lack of physical activity – all behaviors and lifestyle choices in which Kentuckians indulge. In 2007, the Kentucky Center for Smoke-free Policy listed the leading causes of death in Madison County as Cancer, heart disease, stroke, chronic lower respiratory disease and unintentional injuries. Four out of the five are associated with smoking and second-hand smoke. Smokefree.gov website's 2011 state ranking of adult smokers lists Kentucky as the number one state in the country, with just over a quarter of the adult population (25.6%) partaking.

The Kentucky Hospital Association publishes inpatient origin data for every hospital in the state. Using this data, we compared the admitting diagnoses for every Madison County resident who was admitted to any Kentucky hospital for treatment in 2011 with the admitting diagnoses for every Madison County resident admitted to Pattie A. Clay Regional Medical Center.

In 2011, 9,093 Madison County residents were hospitalized. Of that number, 6,140 Madison County residents were hospitalized in facilities other than Pattie A. Clay Regional Medical Center, and 2,953 were hospitalized at Pattie A. Clay. More than 25% of all hospitalized patients from Madison County were admitted for diseases of the circulatory or respiratory system, followed by childbirth, newborns and neonates.

2011 Top Ten Admitting Diagnoses for All Madison County Patients

<i>Major Diagnostic Category Code</i>	<i>% for Madison County*</i>	<i># of Discharges</i>
Circulatory System	12.93%	1176
Respiratory System	12.36%	1124
Pregnancy, Childbirth, and the Puerperium	11.45%	1041
Newborns/Neonates	10.95%	996
Digestive System	8.13%	739
Musculoskeletal Sys & Connective Tissue	7.59%	690
Nervous System	5.82%	529
Kidney And Urinary Tract	4.89%	445
Metabolic Diseases/Disorders	3.93%	357
Mental Diseases/Disorders	3.44%	313

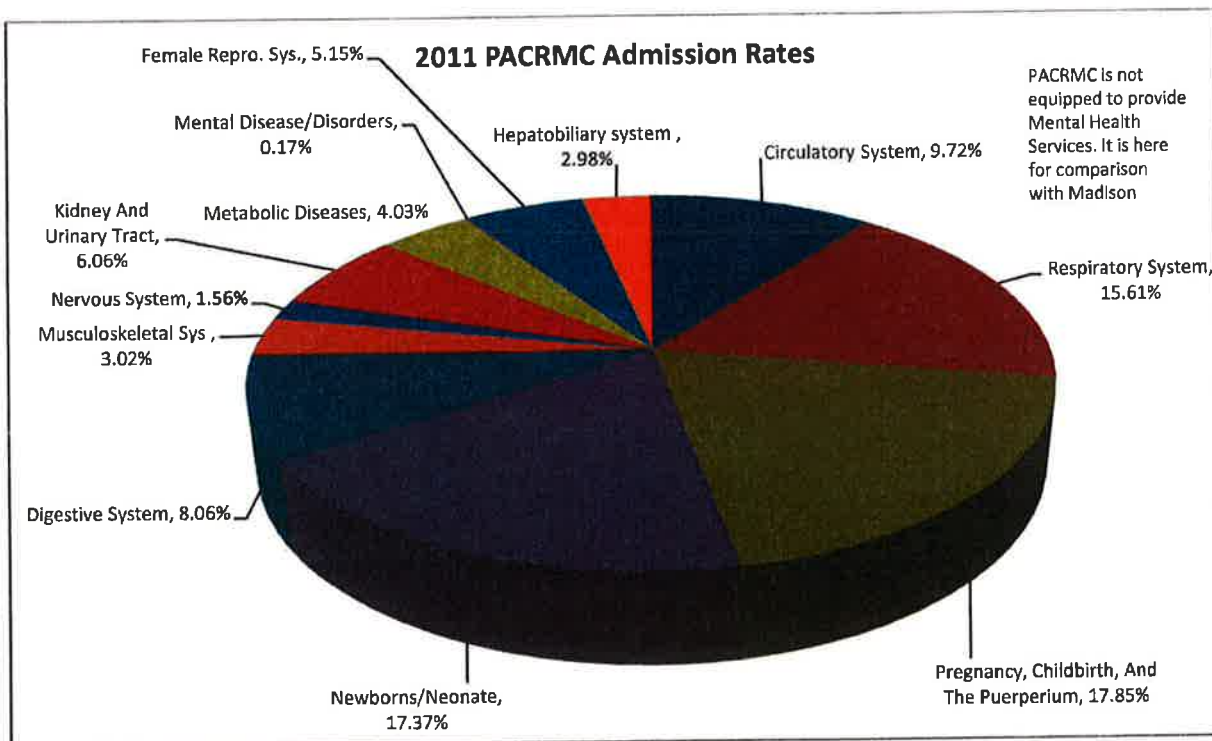
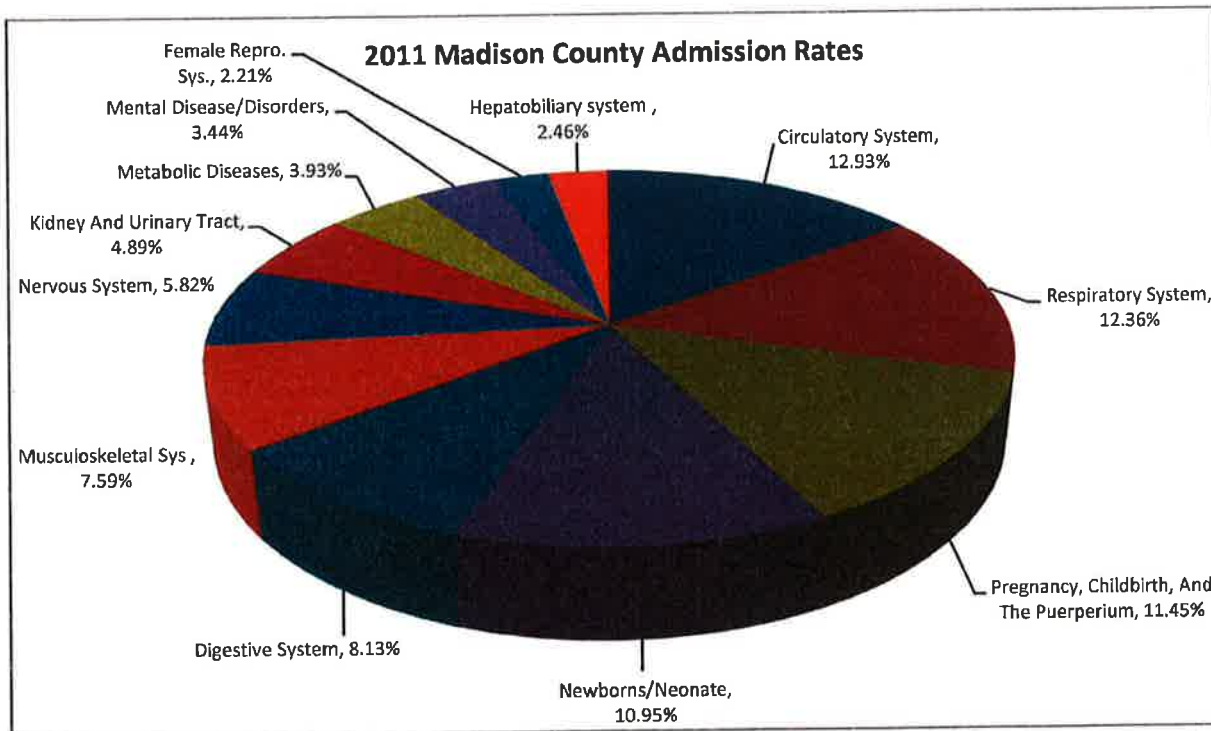
* percentages were calculated using the number of discharges for service/total number of discharges (9093)

At Pattie A. Clay, the majority of patients were hospitalized for pregnancy and childbirth including newborns and neonates, closely followed by the respiratory and circulatory systems.

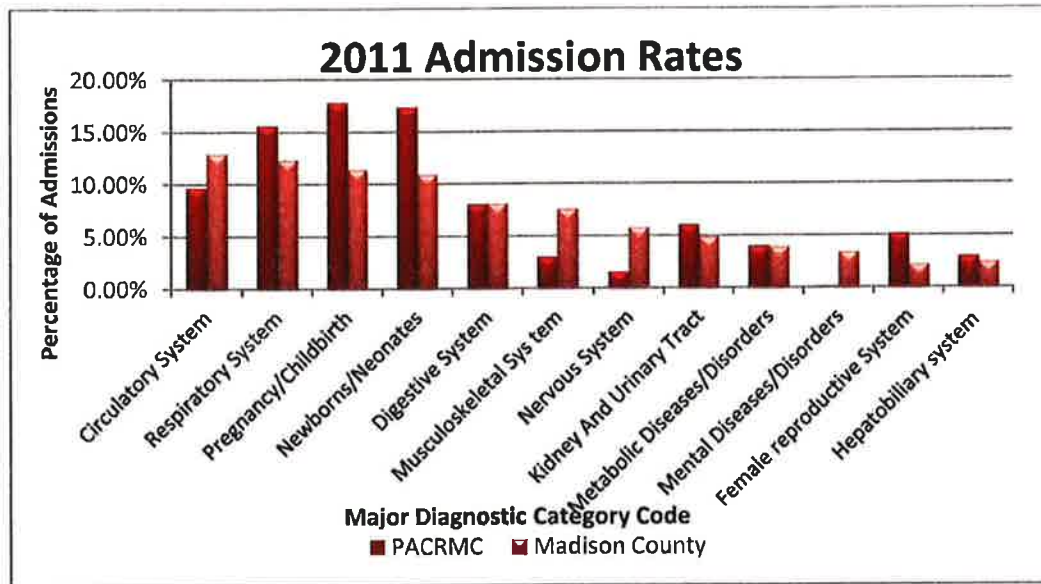
2011 Top Ten Admitting Diagnoses for Pattie A. Clay RMC (PACRMC)

<i>Major Diagnostic Category Code</i>	<i>% for PACRMC*</i>	<i># of Discharges</i>
Pregnancy, Childbirth, and the Puerperium	17.85%	527
Newborns/Neonates	17.37%	513
Respiratory System	15.61%	461
Circulatory System	9.72%	287
Digestive System	8.06%	238
Kidney And Urinary Tract	6.06%	179
Female Reproductive System	5.15%	152
Metabolic Diseases/Disorders	4.03%	119
Musculoskeletal Sys & Connective Tissue	3.02%	89
Hepatobiliary System And Pancreas	2.98%	88

* percentages were calculated using the number of discharges for service/total number of discharges for PACRMC (2953)



Among the top ten diagnoses for all of Madison County that were not seen at Pattie A. Clay were diseases of the nervous system and mental diseases and disorders. Diseases of the female reproductive system and the hepatobiliary system and pancreas were among the top ten diagnoses at Pattie A. Clay but not among the top diagnoses of all Kentucky hospitals treating patients from Madison County.



Community Health Care Resources

Pattie A. Clay Regional Medical Center is a non-profit 105 bed acute care facility that delivers all primary care and extensive secondary level health care services for Madison and surrounding counties in the Appalachian foothills. It is staffed by more than 70 physicians providing care in 23 specialty areas and encounters more than 100,000 patients annually. Four board certified hospitalists and an Advanced Registered Nurse Practitioner provide in-house coverage every day of the year.

Pattie A. Clay's core programs include inpatient, outpatient, diagnostic and community services. We offer cardiac and pulmonary rehabilitation; occupational, physical, speech and respiratory therapy; and women's health and childbirth services. Staffed with board certified emergency physicians and nurses, our Emergency Department treats more than 29,000 patients a year and trains annually with national disaster preparedness teams. Outpatient surgery and oncology are available on site, and we have community-based lab, wound care, occupational medicine and instant care clinics. Our diagnostic services include a clinical laboratory, CT, MRI and radiologic imaging, nuclear medicine, cardiac catheterization, angioplasty and an accredited sleep disorders center.

The commitment of Pattie A. Clay goes far beyond providing treatment within our hospital walls. Pattie A. Clay is an active part of our community and an educational resource for people who might not otherwise have access to the information they need to lead healthier lives. We contribute to our community and surrounding counties through quarterly newsletters, many free health screenings, health fairs, awareness events and healthy living classes.

Madison County is also home to St. Joseph Berea, a 25 bed critical access hospital in the southern part of the county. In 2010, it logged 5,018 inpatient days and 18,966 Emergency Department visits. It houses a family medicine practice, specialty clinic and wound care clinics, and diabetes and nutrition, sleep wellness and senior renewal centers.

Madison County is home to 79 physicians' offices and clinics. Practice areas and specialty offices include:

- 38 Primary care (includes Family practice and Internal medicine)
- 4 General surgery
- 4 Ophthalmologist
- 4 Cardiology
- 3 Orthopedics
- 3 Urology

- 3 Dermatology
- 3 OB/GYN
- 2 Hospice/palliative care
- 1 Geriatric
- 1 Rheumatology
- 1 Oncology
- 1 Pulmonology
- 1 Neurology
- 1 Gastroenterology
- 1 Anesthesiology/pain
- 1 Ear Nose and Throat
- 1 Oral surgery
- 1 Cosmetic surgery
- 1 Back and Neck
- 1 Pediatric
- 1 Infectious disease

There are 34 dentists and dental clinics, in Madison County. Practice areas include:

- 23 General practice dentistry
- 3 Orthodontics
- 2 Pediatric dentistry
- 2 Family & cosmetic dentistry
- 1 General & family practice, family dentistry
- 1 Periodontics
- 1 Denture & tooth extraction

Health Priority Issues and Strategies

Identified Needs/Overview in Prioritized Order

An Assessment Advisory Committee representative of the entire county worked with Pattie A. Clay Regional Medical Center staff to identify Madison County's major health care needs. This committee represented the health department, public and higher education, policy makers from both cities and the county, police and emergency management, the state human rights commission and an area development council, county extension services, business and industry, area and statewide health nonprofits, and hospital management. Committee members studied the primary data gathered from stakeholder interviews, focus groups and a community wide survey; along with the secondary data, a collection of published statistics; then came together to discuss the issues and set priorities.

The committee began with the needs most frequently identified in gathering primary data via interviews, focus groups and surveys, and they recommended others, more global in nature, for inclusion in the discussion. Health care needs identified for consideration were:

- Specialty physicians
- Mental health counseling
- Emergency Department concerns
- Primary care physicians
- Substance abuse and alcohol counseling
- Obesity
- Dental needs
- Nutritional needs for children
- Uninsured outpatient health care services
- Dietitians
- Preventive health
- Geriatric services
- Long term outpatient disease management

After discussion of these health care needs, each committee member ranked the needs they perceived as the most important in the community. After analysis of these prioritized needs, the group again ranked the needs in terms of magnitude in proportion to the service area, prevalence within the service area and high need among vulnerable

populations. The Advisory Committee ranked a third time considering the community's current capacity to meet the need, the possibility of another entity already meeting the need, and the need's impact on the community and on other health related issues. The final ranking of community health care needs was:

1. Outpatient Disease Management (dental, diseases caused by obesity, geriatrics)
2. Preventive Health (includes dental, obesity and geriatrics)
3. Mental Health Services
4. Services for the Underinsured
5. Substance Abuse Services

Much of the discussion centered on the fact that many individuals are hospitalized unnecessarily with conditions that could have been prevented through education or cured with early treatment. Chronic but manageable disease should be treated on a continuing basis to avoid hospital admission. Preventive health services – additional primary care physicians as well as community health, wellness and fitness education, screenings and outreach – would benefit patients, increase the efficiency of the health care system and conserve health care dollars. It was agreed upon that by definition, both Outpatient Disease Management and Preventive Health would include obesity, dental, and needs of particular importance to senior citizens.

The lack of services for the underinsured was an overarching concern. Health care is available for those who have the money to pay for it, but many who are uninsured or underinsured neglect even free clinics or screenings because they cannot afford the medicine or treatment. Further, if health care were accessible to the uninsured or underinsured, they would need the high priority services already identified – outpatient disease management, preventive health services, and primary care physicians.

Mental Health and Substance Abuse issues are prevalent throughout the county, and the resources to deal with them are scarce. Both services are relegated to the Richmond office of Bluegrass Comprehensive Care, an office of the Bluegrass Regional Mental Health-Mental Retardation Board, which provides mental health, mental retardation and substance abuse services in a 17 county area of Central Kentucky. Responses to primary data collection indicate that waiting periods for appointments are long and appropriate counselors are often inaccessible. Responses also point out that Madison County's health care system is neither adequately treating nor equipped to handle the volume of substance abuse cases present. Richmond is home to a long term treatment facility for women, but there is no similar treatment program for men, nor is there a medically supervised detoxification unit in Madison County.

Priority Health Issues and Processes

Madison County does have resources to address the identified community health priorities, but some are limited and many are not accessible to everyone. Several existing community health resources address more than one priority.

Priorities 1 and 2 – Outpatient Disease Management and Preventive Health

Priorities 1 and 2 are closely related. Preventive Health is critical to successful Outpatient Disease Management, and for Outpatient Disease Management to be effective, it must include education about Preventive Health. The Community Advisory Committee was particularly concerned with the inclusion of oral health, obesity, and the aging population in both priorities. In addition to sharing issues, the two priorities tend to share existing health care facilities and resources, and for these reasons, will be considered together.

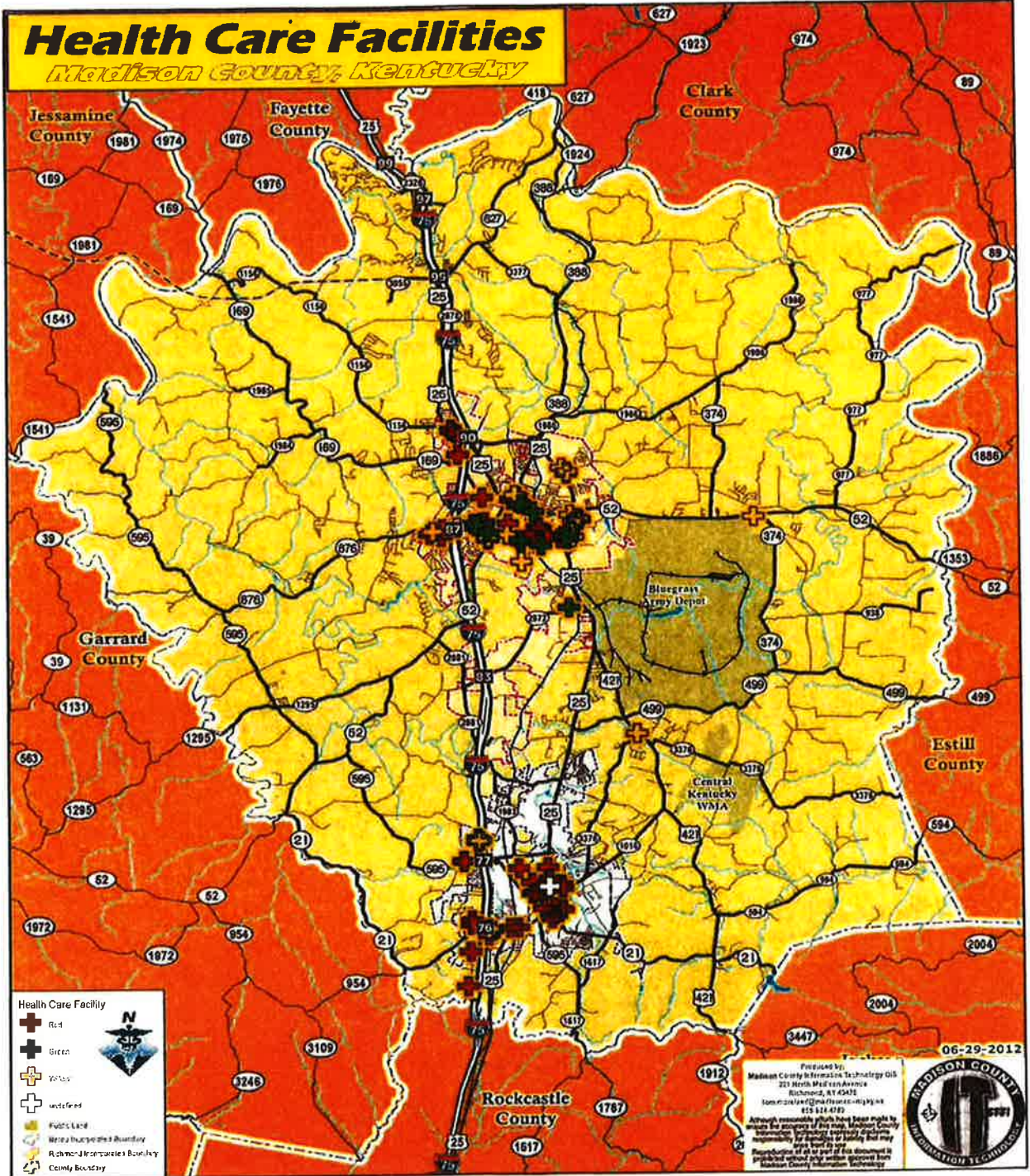
In addition to more than 80 practicing physicians, there are several diagnostic facilities, urgent treatment and public health centers, group practices, home health agencies, long term care facilities and hospitals that would qualify as resources for outpatient disease management. Not all are available on a full time basis and many are inaccessible to the underinsured.

Community Health Care Resources

Diagnostic and Treatment Facilities Advance Imaging and MRI Central Baptist Medical Plaza DCI Dialysis Center Medical Arts Laboratory Occupational Medicine Center Open/MRI Pattie A. Clay Outpatient Laboratory Richmond Open/MRI VA Berea Clinic White House Clinic (2 facilities) Pattie A. Clay Wound Care Clinic Berea College Health Services Berea Health Ministry EKU Student Health Services	Medical Practices & Specialty Clinics Primary Care (38) General Surgery (4) Ophthalmology (4) Cardiology (4) Orthopedics (3) Urology (3) Dermatology (3) Obstetrics/Gynecology (3) Hospice/Palliative Care (2) Geriatric (1) Rheumatology (1) Oncology (1) Pulmonology (1) Neurology (1) Gastroenterology (1) Anesthesiology/Pain (1) Ear, Nose and Throat (1) Oral Surgery (1) Cosmetic Surgery (1) Back and Neck (1) Pediatric (1) Infectious Disease (1)	Long Term Care Berea Health Care Kenwood Rehabilitation Center Madison Health and Rehab Center Telford Terrace The Terrace Nursing & Rehab Center Hospitals Pattie A. Clay Regional Medical Center St. Joseph Hospital Berea Home Health MEPCO Home Health Agency Nurses Registry and Home Health
Urgent Treatment Centers Berea Urgent Care Pattie A. Clay Instant Care Center		
Public Health Madison Co. Health Dept. Clinic (2) Madison Co. Health Dept. Diabetes Ctr.		

Health Care Facilities

Madison County, Kentucky



Access to preventive health services would not only benefit patients, it would help reduce the inappropriate use of hospital Emergency Departments. With increasing frequency, some people in need of medical care, often those without the means to pay, use the Emergency Department as their primary care physician. They are treated for their condition and released, but many do not continue with follow up care or prescribed medications, leading to recurrence of the problem and return trips to the ED. The Madison County Health Department offers health education classes at no cost, and Pattie A. Clay does as well, both at the hospital and out in the community. Other sources of preventive health services and education include:

Berea HealthCare	Madison Health and Rehab Center
Berea Health Ministries	Pattie A. Clay Regional Medical Center
Berea Urgent Care	Pattie A. Clay Instant Care Center
Central Baptist Medical Plaza	Pattie A. Clay Wound Care Clinic
EKU Student Health (for students)	St. Joseph Berea Breast Center
Kenwood Rehabilitation Center	Telford Terrace
Madison Co. Health Department (2)	VA Berea Clinic
Madison Co. Health Dept. Diabetes Center	White House Clinic (2)

Oral health and dental hygiene directly impact overall health and wellness. It was the consensus of the Advisory Committee that oral health must be included in both the Outpatient Disease Management and Preventive Health priorities. Current initiatives to improve oral health in Madison County consist of improving preventive care, improving access and including oral health as part of overall health.

There are 34 dentists and clinics in Madison County. The types of dentistry and number of offices the different dental services are:

General practice dentistry (23)	General and family practice dentistry (1)
Orthodontics (3)	Periodontics (1)
Pediatric dentistry (2)	Denture and tooth extraction (1)
Family and cosmetic dentistry (2)	

Preventive care is coordinated through Madison County Schools' programs aimed at providing children with education and proper dental care techniques. All students entering school are also required to have received a dental exam and screening. Medicaid Managed Care works to improve access for those who cannot afford dental care by providing reimbursements to dentists and dental hygienists.

Many health problems are caused by or exacerbated by obesity. An alarming number of children are affected and the problem among adults is rampant. The Advisory Committee recommended that the services of dietitians be incorporated into both

Outpatient Disease Management and Preventive Health priority area services because of the crippling effect the epidemic is having on the health of the general population and the rising cost of medical care.

WE CAN (Ways to Enhance Children's Activity & Nutrition) is a turnkey, science-based program designed by the National Institutes of Health for parents of 7 to 13 year olds. It provides parents with knowledge, skills and support to help their children stay at a healthy weight, improve food choices, and increase physical activity. Partnering in this project are the Madison County Health Department, Madison County Cooperative Extension, Bluegrass Family Pharmacy and the Telford YMCA. Eastern Kentucky University Student Health Services offers weight management, nutrition and nutritional counseling, and an exercise program for its students. Its Health Education Action Team (HEAT) is a group of peer educators whose mission is to educate fellow students on healthy lifestyle choices. The team concentrates on issues pertinent to college students by organizing events, holding presentations and collaborating with other departments both in and out of class.

The committee also recommended that services for the geriatric populations be integral to Outpatient Disease Management and Preventive Health priority area services. Madison County's residents ages 55 and older make up 22% of its total population. On average, older individuals require more medical attention than younger populations and often their access to care is impacted by mobility and transportation issues and limited incomes. Services currently available for the senior population include the five nursing homes/long term care facilities mentioned previously (Berea Health Care, Kenwood Rehabilitation Center, Madison Health and Rehab Center and Telford Terrace) and the following six retirement communities:

- St. Andrews Retirement Community (2 locations)
- McCready Manor
- Morning Pointe
- Richmond Green Apartments
- Telford Terrace

Priorities 3 and 5 – Mental Health and Substance Abuse Services

While mental health and substance abuse issues are prevalent in Madison County, resources to deal with them are few. Eastern Kentucky University Student Health Services tends to the mental health needs of its students. Counseling programs are available throughout the year and a psychiatrist is available one day a week by appointment. Berea College Student Health Services offers pamphlets and materials on stress management,

alcohol and substance abuse and healthy relationships. Three psychologists and therapists practice in Madison County. Bluegrass Comprehensive Care and two locations of White House Clinic are available to those who need mental health care but cannot afford private therapy.

Richmond is home to Liberty Place Recovery Center for Women, a 100 bed residential long term substance abuse recovery center under the direction of the Kentucky River Foothills Development Council. There is no detoxification unit available, and women must detox elsewhere before they are accepted at Liberty Place. In addition to residents of Madison County, Liberty Place serves women from all 16 counties in Kentucky's 6th Congressional District. It is a well attended, highly successful program. Bluegrass Comprehensive Care offers substance abuse counseling. Bluegrass Alcohol Counseling offers individual and group counseling sessions in Richmond, and there are 27 Alcoholics Anonymous meetings in Richmond and another 3 in Berea. Meetings are available every day of the week and are usually held at noon and 8 p.m. Four Narcotics Anonymous meetings are available.

Pattie A. Clay Regional Medical Center is not properly equipped to provide care to persons requiring either mental health or substance abuse services. The Emergency Department has compiled a directory of services and makes this available to anyone who needs to find help with mental health or substance abuse issues. Pattie A. Clay contracts with The Ridge Behavioral Health System in Lexington. Under the contract, a Ridge Behavioral Health System mobile assessment team would come to Pattie A. Clay to assess a patient's condition and determine the level of care needed.

Priority 4 – Services for the Underinsured

The needs of the underinsured permeated every phase of primary data collection and assessment, every discussion and every committee meeting. Each interview, every focus group, and a large proportion of community surveys reflected the need for service. Responses clearly indicated that in every single area – especially in dentistry – the lack of resources resulted in serious consequences. Health care resources are available in Madison County if the money is there to pay for them, but if an individual is without the resources to pay for care, he is unable to take care of his needs. At present, these Madison County entities offer varying levels of health care services for the underinsured:

Madison County Health Department Clinic (2)
Madison County Health Dept. Diabetes Center
MEPCO Home Health Agency
Hospice Compassionate Care Center (2)
Paint Lick Clinic

Pattie A. Clay Regional Medical Center
St. Joseph Hospital Berea
Berea Health Ministries
HealthNOW! Clinic

Pattie A. Clay Regional Medical Center turns no one in need of medical care away. Our Financial Counselor works with uninsured and underinsured patients to make resources available through several programs. First, patients are assisted in applying to Medicaid and other sources of government funding. If ineligible for federal aid, the counselor helps the patient apply for the Kentucky Hospital Care Program, which enables qualifying individuals to receive care free of charge at Pattie A. Clay for a six month period. If still in need of care at the end of six months, the patient is allowed to reapply. If a patient has no insurance but does not qualify for federal or state aid, Pattie A. Clay offers a Prompt Pay Discount, in which the hospital will forgive 40% of the charges if the patient pays the remaining 60% within 30 days of receiving the statement. The hospital will also provide up to 10 months free from interest to patients working to settle their debts.

Our Social Work Team assists the Financial Counselor by searching for local and close by sources of continued care for uninsured and underinsured patients. The Social Worker also helps the elderly find services and works to find treatment for people who need substance abuse and mental health services but are unable to afford them.

Path Ahead/Next Steps

Implementation Strategy

Priority 1 Outpatient Disease Management

Pattie A. Clay Regional Medical Center plans to meet this health need.

During 2013, Pattie A. Clay Regional Medical Center will develop a model for our Outpatient Disease Management program by concentrating our efforts on creating an outpatient diabetes management program. This will be a collaborative effort with the Madison County Health Department Diabetes Center of Excellence to provide disease management and education for diabetic and pre-diabetic patients.

This initial outpatient disease management program dealing with diabetes will serve as a prototype for other diseases of prominence in Madison County, including but not limited to: Congestive Heart Failure and COPD.

Establishing a Diabetes Center of Excellence in partnership with the Madison County Health Department furthers Pattie A. Clay's mission to provide quality health care by a team of highly-skilled physicians and staff through nurturing, personalized services by addressing the county's very real need to treat and control diabetes and the related diseases it causes. This program will align with Pattie A. Clay's commitment to its strategic priorities of quality patient care, customer relations, physician integration and financial performance.

Strategic Goal

To ensure that residents of Madison and surrounding counties have access to an outpatient disease management program for diabetes and related health issues.

Outcome Objectives and Measurable Indicators

1. By December 31, 2013 Pattie A. Clay Regional Medical Center will develop a public/private partnership with the Madison County Health Department to establish an Outpatient Diabetes Disease Management program.
2. By December 31, 2014 the participants who complete the series of 12 diabetes self management education and training sessions at the Diabetes Center of Excellence will increase by 20%. The baseline is the 124 participants who completed the program in calendar year 2011.

Priority 2 Preventive Health

Pattie A. Clay Regional Medical Center plans to meet this health need.

This priority will be addressed by recruiting additional Primary Care physicians to Madison County and providing the community with a wide variety of preventive health outreach and awareness programs. The need for additional Primary Care physicians was identified by both the primary and secondary data collected during this assessment. Pattie A. Clay Regional Medical Center will recruit additional Primary Care physicians to our service area based upon calculations made using published physician needs assessment models. These physicians will be instrumental in addressing both of the top priorities identified by this needs assessment: outpatient disease management and preventive health.

Through an aggressive community outreach initiative, Pattie A. Clay will focus on educating the people of Madison County on the importance of preventive health and maintaining a relationship with a primary care physician. This approach will combine hospital hosted events, community events and special events and activities designed specifically to increase awareness and understanding of the importance of the annual exams and screenings necessary for a person to take personal responsibility for their health. The outreach will focus on preventable disease, disease management and making health decisions a priority.

Strategic Goal

To ensure that residents of Madison County have access to preventive health care through the primary care strategy outreach plan.

Outcome Objectives and Measurable Indicators

1. By December 31, 2013, Pattie A. Clay Regional Medical Center will recruit a minimum of 2 Primary Care physicians to practice in Madison County.
2. By December 31, 2013, Pattie A. Clay Regional Medical Center will conduct a minimum of 15 free health education and awareness programs, medical health screenings, and fitness activities in Madison County for adults and children.
3. By December 31, 2013, Pattie A. Clay Regional Medical Center will publish a minimum of 12 general and preventive health information articles in the *Richmond Register* newspaper and *Health Beat* magazine.

Primary Care Strategy Community Outreach Plan				
Deliverable/Description	Type (Man/Mktg/ Info)	Target Audience(s)	Delivery Method	DEADLINE
Farmer's Market	Marketing	Community	Blood pressure screening including diabetes education	May-July
City Fest	Marketing	EKU		Sept. 6
EKU Move in day	Marketing	EKU Students	Information on Primary Care Physicians (PCPs) available	August
Prostate Screening	Marketing	Male 50+	Urologist David Shafran will conduct a preventive prostate screening and PSA for men age 50+.	Sept. 24
Baptist Health Launch	Marketing	Community	On site screening and introduction to Primary Care Team	Sept. 7
Paint the Town Pink	Marketing	Community	Breast cancer prevention/early detection	October
Starlight Mile	Marketing	Community	Health/Wellness identify needs and those who are in need of a PCP.	October 19
Second Sunday	Marketing	Community	Promote the need for PCP at County wide event	October 14

Deliverable/ Description	Type (Man/Mktg/ Info)	Target Audience(s)	Delivery Method	DEADLINE
EKU Athletics health fair	Marketing	Community	Establish a mini health fair at the EKU Basketball games to help community members understand the importance of preventive health and maintaining a relationship with a PCP.	February
Take Your Health to Heart	Marketing	Community	Heart health outreach event including diabetes education	February
Dinner with the Dietitians	Marketing	Community	Nutritional counseling and education seminar for community members	March
Diabetes Day – Walk for Wellness	Marketing	Community	A walking event at EKU to educate the community on diabetes and related issues	March
EKU Health Fair	Marketing	EKU Employees	Various screenings and PCP identifying, including diabetes education	March
Madison County Schools Health Fair	Marketing	Teachers/	Various screenings and PCP identification including diabetes education	March

Deliverable/ Description	Type (Man/Mktg/ Info)	Target Audience(s)	Delivery Method	DEADLINE
Madison County Health Fair	Marketing	Community	Various screening and PCP identification including diabetes education	April
Hot Women and Health	Women	Women	Educational Series	January
Hot Women and Health	Women	Women	Educational Series – Diabetes Focus	April
Hot Women and Health	Marketing	Women	Educational Series	October
Skin Cancer Awareness	Marketing	All	Sunscreen giveaway at Paradise Cove	July
Medical Minute	Marketing	All	Monthly health information series in the Health Beat and Richmond Register that educate community members on health topics and speaking with physicians.	Monthly
PAD Screening	Marketing			
Kids' Fest	Marketing	Community	Talk about disease prevention and the importance of having a PCP, including diabetes screening	Sept.

Priority 3 Mental Health Services

Pattie A. Clay Regional Medical Center does not intend to meet this health need.

In order to provide truly effective mental health services, one or more psychiatrists and psychologists as well as additional qualified mental health counselors must be recruited to practice in Madison County. We cannot successfully recruit these mental health professionals until there is a fully equipped inpatient facility in the community for mental health patients.

The Pattie A. Clay Regional Medical Center physical plant is 40 years old. Provisions for psychiatric patients were not made when the hospital was built and as a result, it is not equipped for mental health patients. Major renovation would be required to build and equip a wing to care for psychiatric patients as well as the employment of additional, highly qualified staff.

Psychiatric care is not central to the hospital's core services. At this time, Pattie A. Clay Regional Medical Center does not have the resources or capital to pursue mental health services.

Priority 4 Services for the Underinsured

Pattie A. Clay Regional Medical Center does not intend to meet this health need.

It is more accurate to say that Pattie A. Clay does not intend to expand its efforts to provide services for the underinsured. The hospital is already meeting the need to the fullest extent of its ability and its financial capacity. We are not in a position to increase the level of our collaboration with the health department or neighboring clinics, but we will continue working with them at the same level of commitment.

At present, Pattie A. Clay Regional Medical Center goes to significant lengths to provide for underinsured patients. Our financial counselor helps the uninsured and underinsured to apply for federal or local assistance to cover the cost of being hospitalized. Pattie A. Clay is a disproportionate share hospital and helps patients qualify for free care over a six month period. If the patient needs additional care, our financial counselor assists him or her in extending benefits for another six month period. Pattie A. Clay also offers payment plans that forgive a portion of the charge or eliminate interest charges for those who pay for care without the benefit of insurance or public health programs.

The hospital's Social Services department has recently expanded in size and is actively working to qualify additional staff. The department helps uninsured and underinsured patients find sources of continued care, the elderly find services, and those in need of mental health or substance abuse counseling locate programs to meet their needs.

Pattie A. Clay participates in the public health service's 340B drug pricing program, which requires a covered entity to have a disproportionate share of 11.75% or higher. According to the CMS, Pattie A. Clay's disproportionate share is 26.2%. As a covered entity, we provide indigent patients with the means to secure prescription medications at a reduced cost through one of three area pharmacies.

Because we accept everyone in need of medical care regardless of their ability to pay, our benevolent care runs in the millions each year. In 2011 alone, we provided \$13.3 million in uncompensated care. This accounted for just over 20% of our entire operating expense and was more than double the amount we had provided only six years before.

Priority 5 Substance Abuse Services

Pattie A. Clay Regional Medical Center does not intend to meet this health need.

Provision of substance abuse services for Madison County would require much the same recruitment of professionals, hospital renovation, and capital outlay as that required in order to address mental health services. Critical to the program would be an inpatient detoxification unit. Such a unit would require major renovation including the construction of a wing equipped for inpatient detoxification and treatment. Operation of the unit would require many new staff members fully trained in substance abuse care.

Like psychiatric care, substance abuse treatment is not central to the hospital's core services or strategic plan. At this time, Pattie A. Clay Regional Medical Center does not have the resources or capital to pursue the addition of an inpatient detoxification wing or initiate, fully staff and equip a substance abuse treatment program.

Communication Plan

CHNA Communication Plan					
Deliverable/Description	Type (Man/Mktg/ Info)	Target Audience(s)	Delivery Method	DEADLINE	Responsible
PAC Board Approval	Mandatory	Board		July 24	Todd
Documents Finalized			Sent to BHS	August 1	Larry
Executive Team coaching	Mandatory	Senior Leadership	Coach executive team and board members for their presentations to boards, community group, employee and medical staff	August 13	Jill
Management Staff Meeting	Mandatory	Directors	Face to Face	August 15	Larry
Meeting with Richmond Register			Media Briefing	Sept. 14	Jill
Send press release	Info	Media	News release	Sept 18 10 am	Jill
Send employee memo	Info	Employees	Letter/memo	Sept 18 10 am	Jill
Send Medical Staff memo Send personal letter for home/office delivery describing results and action plan.	Info	MDs	Letter/memo	Sept 18	Jill
Medical Staff Executive Committee	Info	MD Leadership	Invite all MD staff to presentation	Sept. 4	Todd

Deliverable/Description	Type (Man/Mktg/ Info)	Target Audience(s)	Delivery Method	DEADLINE	Responsible
Town Hall Meetings Q&A	Info	Front line staff	Todd Jones, CEO will present the plan.	August 7 7pm August 8 9am, 2pm August 9 7am	Todd/Jill/Joy
Host special community leader luncheon	Marketing	Community Leaders	Todd will give presentation to all key community leaders explaining the CHNA and distributing copies of the CHNA.	August 10	Jill
Upload CHNA to website	Marketing	All		Sept. 18	Jill
Community Civic organizations Tour	Marketing		<ul style="list-style-type: none"> • Richmond Rotary • Bluegrass Rotary • Red Cross • Kiwanis • Exchange Club • Chamber Eggs/Issues • HR Professionals Meeting • BGAD • ECU Retired Faculty Luncheon • Lions Club • PEO • Red Hat Ladies • Madison Co. Breast Cancer Support Group • Business Babes • Retired Teachers Club • Woman's Club 		Jill

Deliverable/Description	Type (Man/Mktg/ Info)	Target Audience(s)	Delivery Method	DEADLINE	Responsible
Point of Service Distribution	Marketing	Community	Copies of the CHNA will be made available at public locations including: public libraries, Health Dept., Hospital, physician offices, pharmacies, ECU, Madison County Schools and other key employers.	Sept. 18	Jill