



Community Health Needs Assessment 2013

Saint James Hospital

Livingston County

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Executive Summary

The Livingston County Community Health-Needs Assessment (CHNA) is an undertaking by Saint James Hospital to highlight the health needs and well-being of residents in Livingston County.

Through this needs assessment, collaborative community partners have identified numerous health issues impacting individuals and families in the Livingston County region. Several themes are prevalent in this health-needs assessment – the demographic composition of the Livingston County region, the predictors and prevalence of diseases, leading causes of mortality, accessibility to health services and healthy behaviors.

Specifically, team members included representatives from Saint James Hospital, administrators from the County Health Department, and directors from mental health service providers.

Why Focus on the Health Needs of Livingston County?

Results from this study can be used for strategic decision making purposes as they directly relate to the health needs of the community.

The study was designed to assess issues and trends impacting the communities served by the hospital, as well as perceptions of targeted stakeholder groups.

Specifically, this assessment provides a detailed analysis of:

- (1) Livingston County region community health needs using secondary data; and
- (2) An assessment of perceptions and behaviors regarding health-related challenges in the community, including accessibility to needed health care.

Methodology

The community health-needs assessment is divided into three distinct phases.

PHASE I

The collection of existing secondary data to develop a comprehensive health profile and identify strategic inferences.

The CHNA includes detailed analyses of secondary data to assess information regarding the health status of the community. In order to perform these analyses, information was collected from numerous secondary sources, including publically available sources, such as County-based data, as well as private sources of data, such as hospital-specific data. Strategic implications are discussed at the end of each chapter. Specifically, findings from secondary sources of data highlight several critical areas of community needs.

PHASE II

Survey data collection to assess perspectives of key stakeholders, including those with special knowledge. This includes a concerted effort to target the at-risk population in the region.

To collect data in this study, two surveying techniques were used. First, a pilot study was created to test the psychometric properties and statistical validity of the survey instrument. Second, online and paper surveys were employed to gain insight into resident perceptions of the community. To specifically target the at-risk population, surveys were distributed at all homeless shelters and soup kitchens. In sum, a total of 967 residents were surveyed.

PHASE III

A summary of key health-related issues. Using an importance/urgency matrix methodology, health-related needs are prioritized.

The identification and prioritization of the most important health-related issues in the Livingston County region are identified in Phase III. After summarizing all of the issues in the Community Health Needs Assessment, a comprehensive assessment of existing community resources was performed to identify the efficacy to which health-related issues were already being addressed. Approximately 20 organizations that serve the needs of the Livingston County region were identified. Finally a collaborative effort of leaders in the healthcare community used an importance/urgency methodology to identify the most critical issues in the area.

Phase 1: Demographics

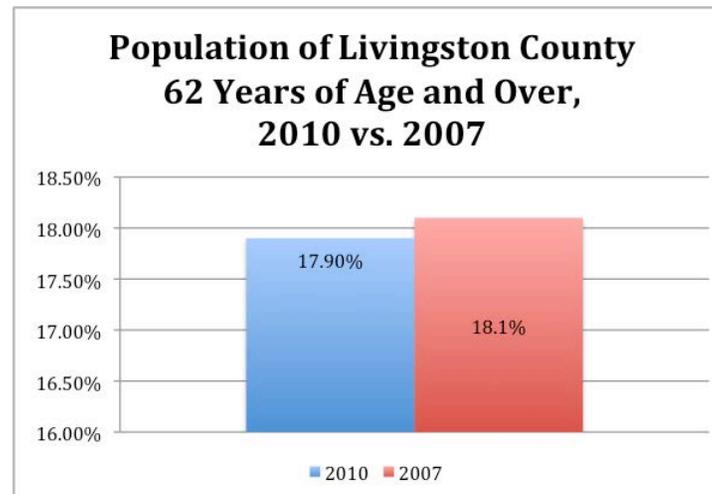
Demographics

including increasing of the elderly population, depression, risky behaviors, and poverty will have significant impact on the health needs of the Livingston County Region

Increasing Elderly Population -

While the 62 and older population has seen a slight decrease between 2007 and 2010, subsets of the Livingston County population have increased during the same time period. National forecasts estimate that individuals over age 65 will increase by one-third by 2022. In Livingston County, the percentage of individuals 55-59, 60-64, and 65-74 years old has increased between 2007 and 2010.

As individuals age and live with disabilities, it greatly impacts the degree of self-sufficiency and medical care required to maintain satisfactory well-being. With the changing demographics resulting from the aging of baby boomers, it is anticipated the Livingston County region will experience an increase in the number of elderly individuals living with the difficulties of disabilities and chronic conditions, such as diabetes, asthma, and heart disease, and obesity will contribute to the growing cost of health care.



Phase 1: Demographics

Risky Behaviors

Data from the Illinois Behavioral Risk Factor Surveillance System (BRFSS) suggests 28.7% of Livingston County residents identify as smokers, compared to 18.8% of residents across the State of Illinois.

22.7% of Livingston County respondents engage in binge drinking versus 17.5% of respondents across the State of Illinois. Both figures exceed the US national 90th percentile benchmark of 8%.

Youth substance usage in Livingston County exceeds the State of Illinois averages for 12th graders for alcohol and tobacco usage in the past 30-days.

Mental Health

Approximately 20% of residents in Livingston County reported they had experienced 1-7 days with poor mental health per month between 2007 and 2009.

While this percentage is lower than the State of Illinois average for the same time frame, this percentage represents an increase compared to Livingston County data collected between 2004 and 2006.



Phase 1: Demographics

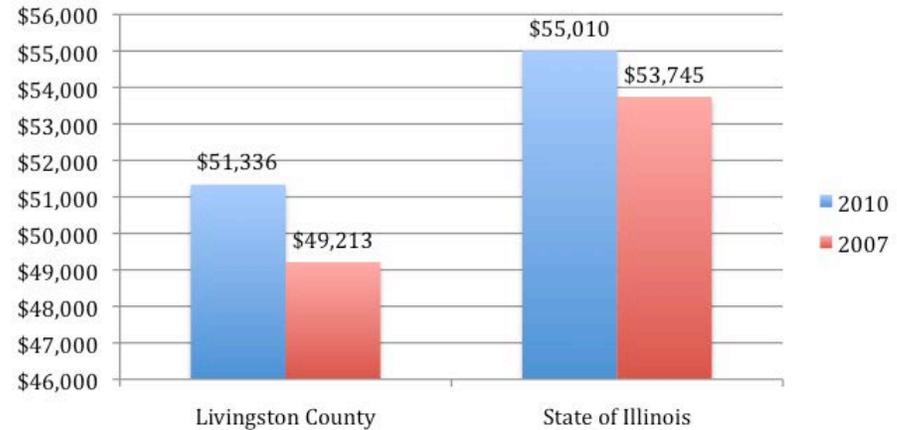
Poverty

The Livingston County region has seen a 12% increase in families living in poverty between 2007 to 2010. Poverty has a significant impact on the development of children and youth.

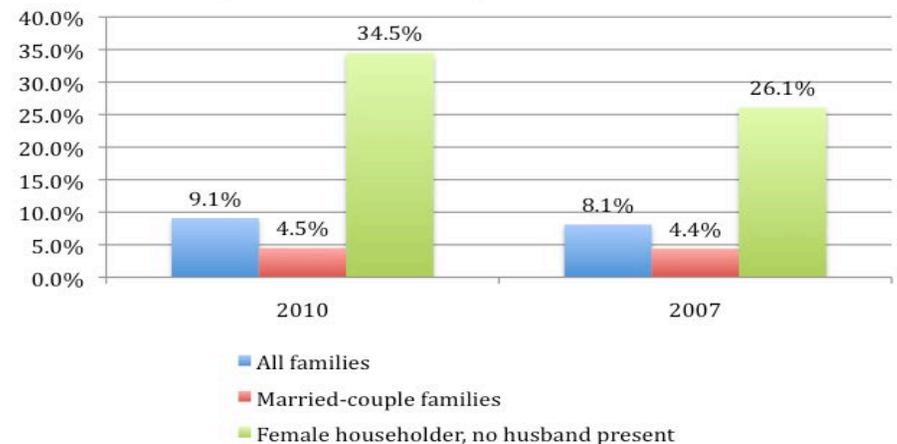
Data from 2010 indicate poverty rates in Livingston County have increased for three categories of families: all families, married-couple families, and families led by single-mothers with no husband present. However, the percentage of Livingston County families led by single-mothers with no husband present is 6% higher than the State of Illinois average (28.5%).

In 2010, the median household income in Livingston County was nearly \$4,000 less than the State of Illinois average.

Median Household Income for Livingston County Region, 2007 vs. 2010



Percentage of Families Living in Poverty in Livingston County Region, 2010 vs. 2007

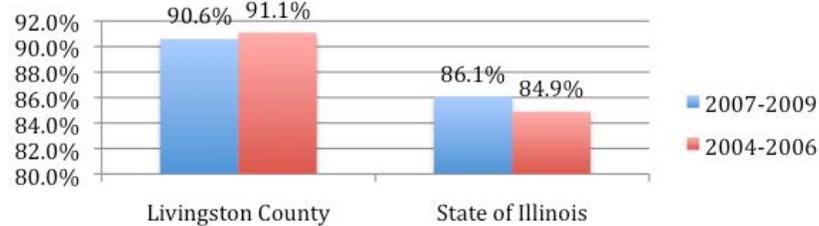


Phase 1: Access to Health Services

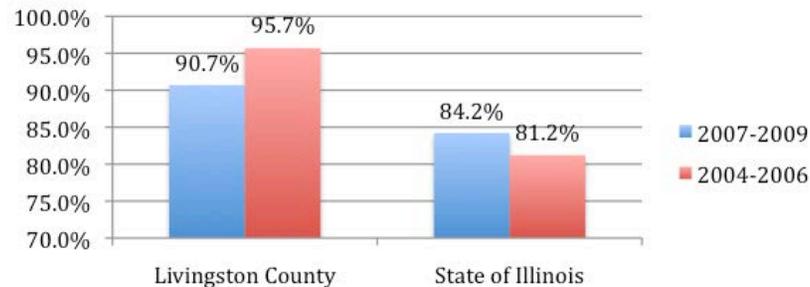
Accessibility to Health Care

The lack of insurance coverage is more prevalent among socioeconomically disadvantaged groups that are often at high risk for disease and illness. Thus, a vicious cycle results where individuals who are at the highest risk for diseases are unable to receive screenings, thus perpetuating a cycle of disease. This is compounded by unhealthy lifestyles.

Percentage of Livingston County Region Respondents with Health Care Coverage, 2004-2006 vs. 2007-2009



Percentage of Livingston County Region Respondents with a Usual Health Care Provider, 2004-2006 vs. 2007-2009



Dental Care: 22.3% of Livingston County residents did not see a dentist in the last year compared only 19.8% of residents across the State of Illinois who did not visit a dentist in the last year.

Research suggests that private health insurance companies cover nearly 1/3 of national health expenditures. Medicare covered approximately 20.2% of national health expenditures in 2010, up nearly 4% since 2000. According to the Illinois BRFSS, 25.9% of Livingston County residents rely on Medicare coverage as their primary insurance coverage. Recent data suggest nearly 91% of Livingston County residents possess medical health care coverage. This percentage is well above the 86% response rate for the State of Illinois.

Phase 1: Predictors of Morbidity and Mortality

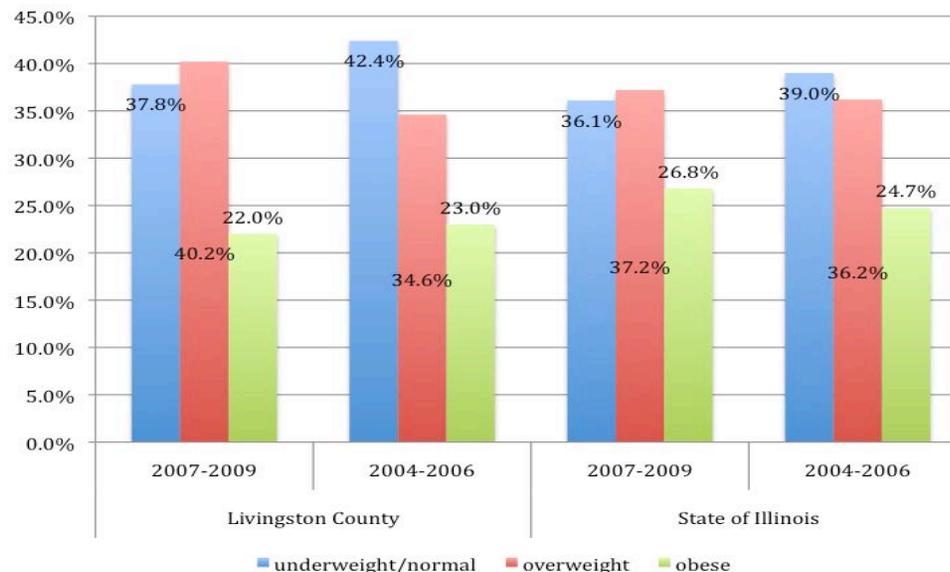
Predictors of Morbidity and Mortality

Research concludes that predictors such as obesity, drug abuse, alcohol abuse and unhealthy habits such as poor diet and lack of exercise dramatically impact incidence of both morbidity and mortality

Obesity - Research strongly suggests that obesity is a significant problem facing youth and adults nationally, in Illinois, and within the Livingston County region. In terms of individuals who are overweight, rates in Livingston County are higher than the state average. Considering Illinois has the 6th highest obesity rate in the United States, this is an important issue. Accordingly, the U.S. Surgeon General characterized obesity as "the fastest-growing, most threatening disease in America today."

Data from 2010 indicate 64% of Illinois adults are obese or overweight, with a disproportionate number of obese or overweight individuals living in rural areas.

Percentage of People Diagnosed as Overweight or Obese in Livingston County and Illinois



Within the Livingston County region, leading indicators suggest obesity is a growing concern.

With regard to nutrition, evidence suggests residents in the Livingston County region are not eating enough fruits and vegetables. Between 2007 and 2009, 84% of Livingston County region residents consumed less than 5 servings of fruits or vegetables per day.

Approximately 24% of Livingston County region residents report that they did not participate in any leisure-time physical activities or exercises during the past month.

Phase 1: Predictors of Morbidity and Mortality

Consequences of Obesity for Children...

According to the Obesity Prevention Initiative from the Illinois General Assembly, 20% of Illinois children are obese. With children, research has linked obesity to numerous chronic diseases including Type II diabetes, hypertension, high blood pressure, and asthma. Adverse physical health side effects of obesity include orthopedic problems with weakened joints and lower bone density. Detrimental mental health side effects include low self-esteem, poor body image, symptoms of depression and suicide ideation. Obesity impacts educational performance as studies suggest that overweight students miss one day of school per month on average and school absenteeism of obese children is six times higher than that of non-obese children.

...and Adults

With adults, obesity has far-reaching consequences. Obesity-related illnesses contribute to worker absenteeism, slow workflow, and high worker compensation rates. A Duke University study on the effects of obesity in the workforce noted 13 times more missed workdays by obese employees than non-obese employees. Nationwide, lack of physical activity and poor nutrition contribute to an estimated 300,000 preventable deaths per year. The financial costs of obesity are staggering, as the estimated annual medical costs attributed to obesity in Illinois for 1998-2000 exceeded \$3.4 billion.



Phase 1: Morbidity and Mortality Issues

Morbidity and Mortality Issues

Several different disease categories have been identified as very important to the community

Heart disease, the leading cause of death in Livingston County is impacted by the following related cardiovascular conditions:

Hypertension – High blood pressure, which is also known as hypertension, is dangerous because it forces the heart to work extra hard to pump blood out to the rest of the body and contributes to the development of the hardening of arteries and heart failure. Data from the Illinois BRFSS suggest a 27% growth in the percentage of Livingston County residents having high cholesterol between 2006 (30.8%) and 2009 (39.1%).

Cardiovascular disease– The number of cases of other cardiovascular diseases at Saint James Hospital from the Livingston County region has increased nearly 27%, however absolute numbers are small.

Dysrhythmia and cardiac arrest – Cases of dysrhythmia and cardiac arrest at Saint James Hospital have decreased by 18.4% between 2009 (38 cases) and 2012 (31 cases) for inpatient admissions. Of particular interest, cases of dysrhythmia and cardiac arrest in individuals age 65 and over have decreased by 11.5% during the same time frame for inpatient admissions.

Heart Failure – There has been a 12% decrease in the number of treated cases of heart failure at Saint James Hospital between 2009 (58 cases) and 2012 (51 cases) for inpatient admissions.

Cases of stroke – Cases of stroke at Saint James Hospital have decreased by 60.8% between 2009 (33 cases) and 2012 (9 cases) for inpatient admissions.

Phase 1: Morbidity and Mortality Issues

Other prevalent issues in the Livingston County Region include:

Asthma – Treated cases of asthma in Livingston County have increased by 81% between 2009 (16 cases) and 2012 (29 cases) for inpatient admissions. According to the Illinois BRFSS, asthma rates in the Livingston County Region are higher than the average rate for the State of Illinois.

Diabetes - Diabetes is the leading cause of kidney failure, adult blindness and amputations and is a leading contributor to strokes and heart attacks. It is estimated that 90-95% of individuals with diabetes have Type II diabetes (previously known as adult-onset diabetes).

Data from the Illinois BRFSS indicate that 10.2% of Livingston County Region residents have diabetes. Compared to data from the State of Illinois, the prevalence of diabetes now exceeds the state average.

Cancer – Cancer is one of the leading causes of death in Livingston County.

Between 2009 and 2012, there were 19 reported cases of inpatient breast cancer at Saint James Hospital. Inpatient cases of breast cancer peaked in 2011 with 8 cases.

Between 2009 and 2012, there were 22 reported cases of inpatient colorectal cancer at Saint James Hospital. Inpatient cases of lung cancer peaked in 2010 with 8 cases.

Overall, *the leading causes of death* in Livingston County include diseases of the heart at 29%, malignant neoplasm at 26%, followed by chronic lower respiratory disease at 6%, cerebrovascular disease at 4%, and nephritis at 3.5%. Compared to State of Illinois averages, deaths attributed to nephritis are significantly higher in Livingston County.

Phase 2: Survey Results

Misperceptions of Community Health Issues

Inconsistencies exist
between people's
perception of health
issues and actual
data

Heart Disease – Residents in Livingston County rate heart disease relatively low compared to actual causes of mortality. Specifically, younger people and individuals with lower incomes tend to have the largest misperceptions regarding the importance of understanding heart disease in the community. While heart disease is the most common cause of mortality in Livingston County, often times, it did not make the top-five perceived health issues for survey respondents.

Diabetes – Residents of Livingston County also rate diabetes relatively low, even though rates in Livingston County are higher than state averages. Data from the Illinois BRFSS indicate that 10.2% of Livingston County residents have diabetes. Compared to data from the State of Illinois, the prevalence of diabetes now exceeds the state average.

Kidney Disease – Residents of Livingston County rate kidney disease very low, despite mortality data indicating nephritis is the 5th leading cause of death in Livingston County. This suggests a misperception between perceived issues with kidney disease and actual deaths resulting from kidney disease.

Phase 2: Survey Results

Perceptions of the Importance of Access to Health Services

Access to health services was the second most important determinant to quality of life (after availability of jobs). *Access to health services* was particularly important among older individuals and individuals of White ethnicity.

Physical Exercise - Younger people and educated people are more likely to engage in physical exercise, while homeless residents are not. Although only 10% of the population engages in exercise at least 5 times a week.

Healthy Eating - Only 7% of the population consumes at least the minimum recommended servings of fruits/vegetables in a day. Those that are more likely to have healthy eating habits include people with more education and higher income.

Decrease Smoking - Smoking is on the decline, however, 35% of Livingston County residents living in poverty smoke 5 or more cigarettes per day

Self-Perceptions of Health -In terms of self-perceptions of physical and mental health, over 91% of the population indicated that they were in average or good physical health. Similar results were found for residents' self-perceptions of mental health.

Healthy Behaviors

Several issues relating to healthy behaviors were identified

Phase 2: Survey Results

Access to Medical Services

Several issues relating to health service access in Livingston County were identified

Choice of Medical Care – Only 54% of people living in deep poverty seek medical services at a clinic or doctor’s office. For this segment of the population, it is very common to seek medical services from an emergency department, or even more concerning is that 9% of this segment of the population will not seek any medical services at all.

Access to Medical Care and Prescription Medications – Over 40% of the population living in deep poverty indicated there was a time in the last year when they were not able to get medical care when needed. The leading causes were lack of insurance and inability to afford a copayment or deductible. Similar results were found for access to prescription medication.

Access to Dental Care – While significant research exists linking dental care to numerous diseases, including heart disease, less than 50% of the aggregate Livingston County population had a checkup in the last year. Specifically, younger respondents, Black ethnicity, less educated people and the homeless were less likely to visit a dentist.

Access to Counseling – Approximately 30% of people living in deep poverty indicated they were not able to get counseling when they needed it over the last 12 months. Leading indicators are younger people, Black ethnicity and homelessness. While affordability and insurance were the leading reasons, fear and embarrassment were also significant.

Access to Information – Across categories, residents of the Livingston County area get most of their medical information from doctors and the next most prevalent is the Internet.

Type of Insurance –The most prevalent type of insurance in Livingston County is private or commercial; however, those living in poverty and Livingston County residents are disproportionately more reliant on Medicaid. Also for those living in poverty, 40% do not have any type of insurance at all.

Phase 3: Prioritization of Community Health-Related Issues

Specific criteria used to identify these issues included:

- (1) magnitude to the community;
- (2) strategic importance to the community;
- (3) existing community resources;
- (4) potential for impact; and
- (5) trends and future forecasts

The collaborative team identified the six most critical health-related issues in the Livingston County region as:

Mental Health

Approximately 20% of residents in Livingston County reported they had experienced 1-7 days with poor mental health per month between 2007 and 2009. For both segments of residents (those experiencing 1-7 days and 8-30 days with poor mental health per month), each was slightly below the state average for the same time frame. Mental health was also rated the second most important health concern in the community for both the aggregate population as well as those living in poverty.

Risky Behaviors - Substance Abuse

Youth substance usage in Livingston County exceeds the State of Illinois averages for 12th graders (alcohol and tobacco usage). There was a 3% increase in the growth rate the percentage of Livingston County residents reporting they were at risk for binge drinking between 2006 (22.0%) and 2009 (22.7%). For comparison, there was a 10% decrease in the growth rate Illinois residents reporting they were at risk for binge drinking between 2006 (19.4%) and 2009 (17.5%). There was an 18% increase the growth rate of Livingston County residents reporting they were current smokers between 2006 (24.3%) and 2009 (28.7%). For comparison, there was an 8% decrease in the growth rate of Illinois residents reporting they were current smokers between 2006 (20.5%) and 2009 (18.8%). Additionally, according to survey respondents, for both Livingston County's aggregate population and those living in poverty, drug and alcohol abuse were perceived as the most prevalent unhealthy behaviors in the community.

Dental

While significant research exists linking dental care to numerous diseases, including heart disease, according to survey results, less than 50% of the aggregate Livingston County population had a checkup in the last year. Moreover, there was growth in the percentage of Livingston County residents reporting their last dental visit was more than 2 years ago between 2006 (21.9%) and 2009 (22.3%). These percentages are higher than State of Illinois averages, where in 2006, 17.2% had not seen a dentist in 2+ years and in 2009, 19.8% had not seen a dentist in 2+ years.

Phase 3: Prioritization of Community Health-Related Issues

Community Misperceptions

Based on results from the survey, respondents incorrectly perceived “diabetes,” “heart disease,” “teen pregnancy,” and “dental” as being relatively less important health concerns to the community. These results conflict with morbidity data that suggest diabetes growth rates in Livingston County are higher than growth rates across the State of Illinois; mortality data that indicates heart disease is the leading cause of death in Livingston County; teen pregnancy rates in Livingston County (11.9%) that exceed the State of Illinois rate (9.6%) for 2009; and the aforementioned dental data suggesting 22.3% of Livingston County residents have not seen a dentist in two or more years.

Obesity

Research strongly suggests that obesity is a significant problem facing youth and adults nationally, as it has been linked to numerous morbidities (e.g., type II diabetes, hypertension, cardiovascular disease, cancer, etc.). There was a 16% growth in the percentage of Livingston County residents reporting they were overweight between 2006 (34.6%) and 2009 (40.2%). For comparison, there was a 9% growth in the percentage of Illinois residents reporting they were overweight between 2006 (24.7%) and 2009 (26.8%). Also note that Illinois is ranked as the sixth worst state in the U.S. in terms of obesity.

Healthy Behaviors

According to the BRFSS, 29.9% of Livingston County residents report that their last routine checkup was more than 1 year ago. This figure is over 10% higher than State of Illinois average (19.2%). Results from survey respondents indicated that there are limited efforts at proactively managing one’s own health. This includes limited exercise, as 68% of Livingston County residents indicated they exercised 2 or less times per week. With regard to eating habits, 71% of Livingston County residents consume less than 2 servings of fruits/vegetables per day. With regard to smoking, 35% of Livingston County residents living in poverty smoke 5 or more cigarettes per day. However, note that 91% of respondents believe they are average or above average in terms of physical health and 95% of respondents believe they are average or above average in terms of mental health.

Collaborative Team and Facilitators

Collaborative Team

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