COMMUNITY HEALTH NEEDS ASSESSMENT

2013

OTTAWA REGIONAL HOSPITAL & HEALTHCARE CENTER

DBA: OSF SAINT ELIZABETH MEDICAL CENTER

LaSalle County

Prepared by: Dr. Laurence G. Weinzimmer and Professor Eric Michel

TABLE OF CONTENTS

EXECUTIVE SUMMARY 10

I. INTRODUCTION 14

II METHODS 19

III. PHASE 1 – COMMUNITY ASSESSMENT 23
Chapter 1. Demographic Profile 24
1.1 Population 24
1.2 Age Distribution 29
1.3 Household/Family 35
1.4 Economic Information 39
1.5 Education 42
1.6 People with Disabilities 47
Demographic Profile: Strategic Implications 49

Chapter 2. Prevention 52
2.1 Accessibility 52
2.2 Wellness 59
Prevention: Strategic Implications 75

Chapter 3. Symptoms/Predictors 77
3.1 Tobacco Use 77
3.2 Drug and Alcohol Abuse 81
3.3 Overweight and Obesity 83
Symptoms/Predictors: Strategic Implications 86

Chapter 4. Diseases/Morbidity 89
4.1 Age Related 89
4.2 Cardiovascular 91
4.3 Respiratory 105
4.4 Cancer 109
4.5 Type 2 Diabetes 121
4.6 Infectious Diseases 123
4.7 Secondary Diagnoses 124
4.8 Injuries 127
Diseases/Morbidity: Strategic Implications 129

Chapter 5. Mortality 131
5.1 Leading Causes of Death 131
Mortality: Strategic Implications 132

IV. PHASE 2 – PRIMARY DATA RESEARCH FOR COMMUNITY HEALTH NEEDS 134
Chapter 6. General Characteristics of Respondents 135
6.1 Age 135
6.2 Race and Ethnicity 136
6.3 Educational Attainment 137
6.4 Income Distribution 138
6.5 Living Arrangements 139
6.6 Household Composition 140
6.7 Employment Status 140
6.8 Gender 141

Chapter 7. Findings and Results Community Perceptions 142
7.1 Health Problems in the Community 142
7.2 Unhealthy Behaviors 147
7.3 Issues with Quality of Life 151
Community Perceptions: Strategic Implications 154

Chapter 8. Accessibility to Health Care 155
8.1 Choice of Medical Care 155
8.2 Frequency of Checkups 158
8.3 Access to Medical Care 160
8.4 Access to Prescription Drugs 164
8.5 Access to Dental Care 166
8.6 Access to Counseling 171
8.7 Access to Information 175
8.8 Personal Physician 176
8.9 Type of Insurance 177
Access to Health Care: Strategic Implications 178

Chapter 9. Health-Related Behaviors 179
9.1 Physical Exercise 179
9.2 Healthy Eating 180
9.3 Smoking 182
9.4 Overall Health 184
Healthy Behaviors: Strategic Implications 186

V. PHASE 3 – PRIORITIZATION OF HEALTH-RELATED ISSUES 187
Chapter 10. Prioritization of Health-Related Issues 187
10.1 Summary of Community Health Issues 187
10.2 Community Resources 188
10.3 Priority of Community Heath-Related Issues 192

VI. APPENDIX 196

LIST OF EXHIBITS

Figure 1. Community Needs Assessment Framework
Table 1.1.1-1. Population of LaSalle County, 2000 and 2010
Table 1.1.1-2. Population of Municipalities in LaSalle County, 2000 and 2010
Table 1.1.2-1. Population Growth and Projections by County
Table 1.1.2-2. Gross Actual and Projected Population Gains for LaSalle County
Table 1.1.2-3. 2000-2010 Population Growth Rate for Municipalities in LaSalle County
Table 1.2-1. Age Distribution of LaSalle County Region Residents, 2010 vs. 2007
Table 1.2-2. Median Age of Residents in LaSalle County Region, 2010 vs. 2007
Table 1.2-3. Population of LaSalle County Under 18 Years of Age, 2010 vs. 2007
Table 1.2-4. Population of LaSalle County 62 Years of Age and Over, 2010 vs. 2007
Table 1.2.2-1. Gender Distribution of LaSalle County Region Residents, 2010 vs. 2007
Table 1.2.3-1. Racial Distribution of LaSalle County Residents, 2010 vs. 2007
Table 1.3-1. Number of Family Households in LaSalle County Region, 2007-2010
Table 1.3.1-1. Family Composition in LaSalle County, 2010 vs. 2007
Table 1.3.3-1. Marital Status of LaSalle County Residents, 2007 vs. 2010
Table 1.3.4-1. Births to Teenage Mothers in LaSalle County Region vs. State of Illinois, 2009 vs. 2006
Table 1.4.1-1. Median Household Income for LaSalle County Region, 2007 vs. 2010
Table 1.4.2-1. Average Annual Unemployment Rate for LaSalle County Region, 2007-2011
Table 1.4.3-1. Percentage of Families Living in Poverty in LaSalle County, 2010 vs. 2007
Table 1.5.1-1. Grade 3 Student Achievement in LaSalle County 2012
Table 1.5.1-2. Grade 8 Student Achievement in LaSalle County 2012
Table 1.5.2-1. Truancy in School Districts of LaSalle County in 2012
Table 1.5.3-1. High School Graduation Rates in LaSalle County, 2009 vs. 2012
Table 1.6.1-1. Percentage of LaSalle County Region Respondents with Days of Physical Health Rated "Not Good" Per Month, 2004-2006 vs. 2007-2009
Table 1.6.1-2. Percentage of LaSalle County Region Respondents with Days of Mental Health Rated "Not Good" Per Month, 2004-2006 vs. 2007-2009
Table 2.1.1-1. Percentage of LaSalle County Region Respondents with Health Care Coverage, 2004-2006 vs. 2007-2009
Table 2.1.1-2. Percentage of LaSalle County Region Respondents with Dental Insurance, 2004-2006 vs. 2007-2009
Table 2.1.1-3. Percentage of LaSalle County Region Respondents with Medicare Coverage, 2007-2009
Table 2.1.2-1. Patients from LaSalle County Area Making ER Visits to Ottawa-Area Hospitals for Cardiovascular and Respiratory by Age, 2009-2012
Table 2.1.2-2. Patients from LaSalle County Area Making ER Visits to Ottawa Area Hospitals for Various Conditions by Age, 2009-2012
Table 2.1.2-3. Percentage of LaSalle County Region Respondents with a Usual Health Care Provider, 2004-2006 vs. 2007-2009
Table 2.1.2-4. Percentage of LaSalle County Region Respondents who have not Visited a Dentist in 2+ Years, 2004-2006 vs. 2007-2009
Table 2.2.1-1. Prevalence of Last Routine Checkup by LaSalle County Residents, 2007-2009
Table 2.2.2-1. Percentage of LaSalle County Region Residents with High Cholesterol
Table 2.2.2-2. Time Since Last Cholesterol Screening by LaSalle County Region Residents

Table 2.2.2-3. Percentage of LaSalle County Region Residents with High Blood Pressure
Table 2.2.2-4. Percentage of LaSalle County Region Residents Over the Age of 40 Who Have Ever Had A Mammogram
Table 2.2.2-5. Time Since Last Mammogram by LaSalle County Region Residents
Table 2.2.2-6 Percentage of LaSalle County Residents Who Have Ever Had A Pap Smear
Table 2.2.2-7. Time Since Last Pap Smear by LaSalle County Region Residents
Table 2.2.3-1. Percentage of LaSalle County Residents Who Obtained A Flu Shot
Table 2.2.3-2. Percentage of LaSalle County Residents Who Obtained A Pneumonia Shot
Table 2.2.4-1. Adherence to Regular and Sustained Physical Activity Guidelines by LaSalle County Region Residents
Table 2.2.4-2. Physical Activity from Work-related Exertion by LaSalle County Region Residents
Table 2.2.4-3. Regular Exercise and Intent to Exercise by LaSalle County Region Residents
Table 2.2.4-4. Percentage of LaSalle County Residents Who Meet Moderate Activity Standard (5x per week for 30 minutes per day)
Table 2.2.4-5. Percentage of LaSalle County Residents Who Meet Vigorous Activity Standard (3x per week for 20 minutes per day)
Table 2.2.4-6. Total Servings of Fruits/Vegetables Consumed by LaSalle County Residents
Table 2.2.5-1. Time Since Last Teeth Cleaning by LaSalle County Region Residents
Table 3.1-1. Smoking Status of Residents in LaSalle County
Table 3.1-2. Reported Age that LaSalle County Region Residents Began Smoking Regularly
Table 3.1-3. Smoking Policy for Work Areas of LaSalle County Region Residents
Table 3.1-4. LaSalle County Region Resident Options Regarding Smoking in Restaurants
Table 3.2-1. Percent of LaSalle County Region Residents at Risk for Acute/Binge Drinking
Table 3.2-2. Reported Substance Abuse Usage of LaSalle County 8th Graders, 2008
Table 3.2-3. Reported Substance Abuse Usage of LaSalle County 12th Graders, 2008
Table 3.3-1. Percentage of People Diagnosed as Overweight or Obese in LaSalle County and Illinois
Table 3.3-2. Percent of LaSalle County Region Residents Advised About Weight
Table 3.3-3. Percent of LaSalle County Region Residents Now Trying to Lose Weight
Table 3.3-4. Percent of LaSalle County Region Residents Now Trying to Maintain Current Weight
Table 4.1.1-1. Percentage of Babies Born Preterm or with Low Birth Weight in LaSalle County, 2009
Table 4.1.2-1. Percentage of Babies Born with Adequate or Better Prenatal Care based on Kotelchuck Index Scores in LaSalle County, 2009
Table 4.2.1-1. Inpatient Hypertension Cases at Ottawa Area Hospitals from LaSalle County Region
Table 4.2.2-1. Inpatient Chest Pain – Noncardiac Cases at Ottawa Area Hospitals from LaSalle County Region
Table 4.2.2-2. Inpatient Carditis Cases at Ottawa Area Hospitals from LaSalle County Region
Table 4.2.2-3. Inpatient Congenital Cardiac Anomaly Cases at Ottawa Area Hospitals From LaSalle County Region
Table 4.2.2-4. Inpatient Arterial Embolism Cases at Ottawa Area Hospitals from LaSalle County Region

Table 4.2.2-5. Inpatient Coronary Atherosclerosis Cases at Ottawa Area Hospitals from LaSalle County Region
Table 4.2.2-6. Inpatient Disease of Venous System Cases at Ottawa Area Hospitals from LaSalle County Region
Table 4.2.2-7. Inpatient Dysrhythmia & Cardiac Arrest Cases at Ottawa Area Hospitals from LaSalle County Region
Table 4.2.2-8. Inpatient Heart Failure Cases at Ottawa Area Hospitals from LaSalle County Region
Table 4.2.2-9. Inpatient Heart Valve Disease Cases at Ottawa Area Hospitals from LaSalle County Region
Table 4.2.2-10. Inpatient Myocardial Infarction Cases at Ottawa Area Hospitals from LaSalle County Region
Table 4.2.2-11. Inpatient Other Cardiovascular Disease Cases at Ottawa Area Hospitals from LaSalle County Region
Table 4.2.2-12 Inpatient Vascular Disease Cases at Ottawa Area Hospitals from LaSalle County Region
Table 4.2.3-1. Inpatient Brain Tumor and Stroke Cases at Ottawa Area Hospitals from LaSalle County Region
Table 4.3.1-1. Inpatient Asthma Cases at Ottawa Area Hospitals from LaSalle County Region
Table 4.3.1-2. Percent of LaSalle County Region Residents who have Asthma
Table 4.3.1-3. Percent of LaSalle County Region Residents with a Child in the Household with Asthma
Table 4.3.2-1. Inpatient Pneumonia Including Aspiration Cases at Ottawa Area Hospitals from LaSalle County Region
Table 4.3.3-1. Inpatient Chronic Obstructive Pulmonary Disease Cases at Ottawa Area Hospitals from LaSalle County Region
Table 4.4-1. Five-Year Average Incidence Counts of Selected Cancers in LaSalle County by Gender, 1990-2009
Table 4.4-2. Top 6 Cancers by Treatment
Table 4.4-3. Cancer by Gender
Table 4.4.1-1. Inpatient Breast Cancer Cases at Ottawa Area Hospitals from LaSalle County Region
Table 4.4.1-2. Inpatient Lung Cancer Cases at Ottawa Area Hospitals from LaSalle County Region
Table 4.4.1-3. Inpatient Prostate Cancer Cases at Ottawa Area Hospitals from LaSalle County Region
Table 4.4.1-4. Inpatient Pancreas Cancer Cases at Ottawa Area Hospitals from LaSalle County Region
Table 4.4.1-5. Inpatient Colorectal Cancer Cases at Ottawa Area Hospitals from LaSalle County Region
Table 4.4.1-6. Inpatient Cervical and Other Female Genital Cancer Including Precancer Cases at Ottawa Area Hospitals from LaSalle County Region
Table 4.4.2-1. Inpatient Leukemias Cases at Ottawa Area Hospitals from LaSalle County Region
Table 4.5-1. Inpatient Type II Cases at Ottawa Area Hospitals from LaSalle County Region
Table 4.5-2. Inpatient Type I Cases at Ottawa Area Hospitals from LaSalle County Region
Table 4.5-3. Percent of LaSalle County Region Residents who have Diabetes

Table 4.6.1-1. Chlamydia Rates per 100,000 Population, 2006-2009
Table 4.6.1-2. Gonorrhea Rates per 100,000 Population, 2006-2009
Table 4.7.1-1. Number of Cases of Top 20 Secondary Diagnoses at LaSalle County Area Hospitals, Inpatient Only, 2012
Table 4.7.1-2. Growth Rates in the Number of Cases of Top 20 Secondary Diagnoses at LaSalle County Area Hospitals, Inpatient Only, 2009-2012
Table 4.8.1-1. Percentage of Deaths Attributed to Suicide in LaSalle County, 2009
Table 4.8.2-1. Three-year Growth Rates for Motor Vehicle Collision Incidents within the LaSalle County Region, 2009 vs. 2006
Table 5.1-1. Top 5 Leading Causes of Death for all Races by County, 2009
Table 6.1. Age Distribution for LaSalle County and Deep Poverty
Table 6.2. Race/Ethnicity Distribution for LaSalle County and Deep Poverty
Table 6.3. Highest Educational Attainment for LaSalle County and Deep Poverty
Table 6.4. Income Distribution for LaSalle County
Table 6.5. Living Arrangement Distribution for LaSalle County and Deep Poverty
Table 6.6. Household Composition for LaSalle County and Deep Poverty
Table 6.8. Gender Composition for LaSalle County and Deep Poverty
Table 7.1.1. LaSalle County Frequencies for Most Important Perceived Health Problems in the Community
Table 7.1.2. Frequencies for Most Important Perceived Health Problems in the Community from Individuals Living in Poverty
Table 7.1.3. Significant Correlations among Most Important Perceived Health Problems in the Community and Demographic Variables
Table 7.2.1. LaSalle County Frequencies for Most Important Perceived Unhealthy Behaviors in the Community
Table 7.2.2. Frequencies for Most Important Perceived Unhealthy Behaviors in the Community from Individuals Living in Poverty
Table 7.2.3. Significant Correlations among Most Important Perceived Unhealthy Behaviors in the Community and Demographic Variables
Table 7.3.1. LaSalle County Frequencies for Most Important Perceived Factors that Impact Quality of Life
Table 7.3.2. Frequencies for Most Important Perceived Factors that Impact Quality of Life from Individuals Living in Poverty
Table 7.3.3. Significant Correlations among Most Important Perceived Factors that Impact Quality of Life and Demographic Variables
Table 8.1.1. LaSalle County Frequencies for Choice of Medical Care
Table 8.1.2. Frequencies for Choice of Medical Care from Individuals Living in Poverty
Table 8.1.3. Significant Correlations among Choice of Health Care and Demographic Variables
Table 8.2.1. LaSalle County Frequencies for Time Since Last Checkup
Table 8.2.2. Frequencies for Time Since Last Checkup from Individuals Living in Poverty
Table 8.2.3. Significant Correlations for Time Since Last Checkup
Table 8.3.1. Frequencies for “Was there a time when you needed medical care but were not able to get it?” for LaSalle County and Individuals Living in Poverty

Table 8.3.2. Significant Correlations for "Was there a time when you needed medical care but were not able to get it?"
Table 8.3.3.1. Frequencies for "Why weren't you able to get medical care?" for LaSalle County
Table 8.3.3.2. Significant Correlations for "Was there a time when you needed medical care but were not able to get it?"
Table 8.4.1. Frequencies for "Was there a time when you needed prescription medicine but were not able to get it?" for LaSalle County and Individuals Living in Poverty
Table 8.4.2. Significant Correlations for "Was there a time in the last year when you needed prescription medication and were unable to get it?"
Table 8.4.3. Frequencies for "Why weren't you able to get prescription medicine?" for LaSalle County
Table 8.4.4. Significant Correlations for Reasons Why Individuals Were Not Able to Obtain Prescription Medication in the Past Year
Table 8.5.1. Frequencies for Time Since Last Dental Checkup for LaSalle County and Individuals Living in Poverty
Table 8.5.2. Significant Correlations for Time Since Last Dental Checkup
Table 8.5.3 Frequencies for "Was there a time when you needed dental care but were not able to get it?" for LaSalle County and Individuals Living in Poverty
Table 8.5.4 Significant Correlations for "In the last year, was there a time when you needed dental care but could not get it?"
Table 8.5.5 Frequencies for "Why weren't you able to get dental care?" for LaSalle County
Table 8.5.6 Significant Correlations for "Why weren't you able to get dental care?"
Table 8.6.1 Frequencies for "Was there a time when you needed counseling but were not able to get it?" for LaSalle County and Individuals Living in Poverty
Table 8.6.2 Significant Correlations for "In the last year, was there a time when you needed counseling but could not get it?"
Table 8.6.3 Frequencies for "Why weren't you able to get counseling?" for LaSalle County
Table 8.6.4 Significant Correlations for Reasons Why Individuals Were Not Able to Obtain Counseling in the Past Year
Table 8.7.1 Frequencies for "Where do you get most of your medical information?" for LaSalle County and Individuals Living in Poverty
Table 8.8.1 Frequencies for "Do you have a personal physician?" for LaSalle County and Individuals Living in Poverty
Table 8.8.2 Significant Correlations among Access to a Personal Physician and Demographic Variables
Table 8.9.1 Frequencies for Insurance Coverage for LaSalle County and Individuals Living in Poverty
Table 9.1.1 Frequencies for "In the last week, how many times did you exercise?" for LaSalle County and Individuals Living in Poverty
Table 9.1.2 Significant Correlations among "In the last week, how many times did you exercise?" and Demographic Variables
Table 9.2.1 Frequencies for "On a typical day, how many servings of fruits and/or vegetables do you eat?" for LaSalle County and Individuals Living in Poverty
Table 9.2.2 Significant Correlations among Number of Servings of Fruits and Vegetables Consumed Daily and Demographic Variables

Table 9.3.1 Frequencies for "On a typical day, how many cigarettes do you smoke?" for LaSalle County and Individuals Living in Poverty
Table 9.3.2 Significant Correlations among Number of Cigarettes Smoked Daily and Demographic Variables
Table 9.4.1 Frequencies for "Overall, my physical health is __" for LaSalle County and Individuals Living in Poverty
Table 9.4.2 Significant Correlations among Overall Physical Health and Demographic Variables
Table 9.4.3 Frequencies for "Overall, my physical health is __" for LaSalle County and Individuals Living in Poverty
Table 9.4.4 Significant Correlations among Overall Mental Health and Demographic Variables
Table 10.2 Relationship between Community Resources and Community Needs
Figure 10.3 Importance/Urgency Matrix for Community Health Needs

EXECUTIVE SUMMARY

The LaSalle County Community Health-Needs Assessment is a collaborative undertaking by Ottawa Regional Hospital & OSF Saint Elizabeth Medical Center to highlight the health needs and well being of residents in LaSalle County. Through this needs assessment, collaborative community partners have identified numerous health issues impacting individuals and families in the LaSalle County region. Several themes are prevalent in this health-needs assessment – the demographic composition of the LaSalle County region, the predictors and prevalence for diseases, leading causes of mortality, accessibility to health services and healthy behaviors.

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 hospitals, as well as perceptions of targeted stakeholder groups. Specifically, this assessment provides a detailed analysis of: (1) LaSalle County area 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.

PHASE I – USE OF SECONDARY DATA TO IDENTIFY NEEDS

Chapters 1-5 include a detailed analysis 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 as well as private sources of data. Strategic implications are discussed at the end of each chapter. Specifically, Phase I of the study highlights several critical areas of community needs:

Demographics – With the changing demographics, forecasts indicate increase in chronic conditions such as diabetes, asthma, and heart disease, and obesity. Three specific demographic trends in the region will have a significant impact on health issues, including:

Elderly Population – Individuals aged 60-64 increased from 3.8% to 5.7% between 2007 and 2010 and individuals aged 65-74 increased from 7.3% to 8.1% between 2007 and 2010. Overall, individuals aged 62 and over increased from 18.3% to 19.6% in LaSalle County.

Poverty – Families living in poverty increased moderately between 2007 (7.9%) and 2010 (9.8%). For 2010, the LaSalle County median household income ($50,206) is slightly less than the State of Illinois median household income ($52,972).

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.

Obesity – Research strongly suggests that obesity is a significant problem facing youth and adults nationally, in Illinois, and within the LaSalle County region. In terms of obesity, the LaSalle County area as a whole is significantly higher than the state average and growing

rapidly. Considering that Illinois has the 6th highest obesity rate in the U.S., this is an important issue.

Risky Behavior-Substance Abuse – Youth substance usage in LaSalle County exceeds the State of Illinois averages for both 8th graders (alcohol, tobacco, and marijuana usage) and 12th graders (alcohol and tobacco usage).

Mental Health -- There was a 38% growth rate in the percentage of LaSalle County residents reporting they felt mentally unhealthy on 1-7 days per month between 2006 (18.3%) and 2009 (25.3%). For comparison, there was a slight decrease in the percentage of Illinois residents reporting they felt mentally unhealthy on 1-7 days per month between 2006 (24.9%) and 2009 (24.8%).

Women's Health – There was an 11% decrease in the percentage of LaSalle County residents reporting they had ever had a pap smear between 2006 (94.5%) and 2009 (84.4%). For comparison, there was only a 1% decrease in the percentage of Illinois residents reporting they had ever had a pap smear between 2006 (92.6%) and 2009 (93.4%). There was a 6% decrease in the percentage of LaSalle County residents reporting they had ever had a clinical breast exam between 2006 (91.9%) and 2009 (86.2%). For comparison, there was a 1% increase in the percentage of Illinois residents reporting they had ever had a clinical breast exam between 2006 (89.3%) and 2009 (89.9%).

Morbidity Issues – Several different diseases have seen significant growth between 2008-2011.

Asthma – While asthma rates are lower in LaSalle County than in the State of Illinois, growth rates for asthma are higher in LaSalle County (9% increase between 2006 and 2009) than in the State of Illinois (2% increase between 2006 and 2009).

Diabetes – There was an increase in the percentage of LaSalle County residents reporting they were informed they had Type II diabetes between 2006 (6.9%) and 2009 (9.1%).

High Cholesterol – There was a significant increase in the percentage of LaSalle County residents reporting they were informed they had high cholesterol between 2006 (28.8%) and 2009 (39.6%).

Cardiovascular Disease – The number of cases of other cardiovascular diseases at Ottawa Area hospitals from the LaSalle County region has increased nearly 20% between 2009 (46 cases) and 2012 (55 cases).

Mortality – The leading causes of death include diseases of the heart, malignant neoplasm and coronary heart disease.

PHASE II – COLLECTION, ANALYSIS AND INTERPRETATION OF PRIMARY DATA

A comprehensive understanding of targeted stakeholders was completed in Chapters 6-9. Specifically, it was important to understand how "at risk" or economically disadvantaged people perceived: (1) relative importance of health issues; (2) relative importance of unhealthy behaviors; (3) access to health care, dental care, counseling and prescription medications. Through this type of research, opportunities were identified for improving how community health needs are addressed; and insights into how perceptions are affected by demographic characteristics. Critical findings include:

Misperceptions of community health issues – inconsistencies exist between people's perception of health issues and actual data.

Based on results from the survey, respondents incorrectly perceived "diabetes," "heart disease," and "dental" as being relatively less important health concerns to the community. These results conflict with morbidity data that suggest diabetes growth rates in LaSalle County are higher than growth rates across the State of Illinois, mortality data that indicates heart disease is the leading cause of death in LaSalle County, and the aforementioned dental data suggesting nearly 22% of LaSalle County residents have not seen a dentist in two or more years.

Perceptions of the importance of access to health services – Access to health services is rated as one of the highest determinants to quality of life across all categories.

Access to Medical Services – Several issues relating to health service access 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 LaSalle 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 LaSalle 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 is private or commercial; however, those living in poverty and LaSalle County residents are disproportionately more reliant on Medicaid. Also for those living in poverty, 40% do not have any type of insurance at all.

Healthy Behaviors – Several issues relating to healthy behaviors were identified.

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 higher educations and more income.

Decrease Smoking – Smoking is on the decline, however, less educated people, men, younger people, Black and Latino residents, less educated respondents and homeless people are still more likely to smoke.

Self-Perceptions of Health – In terms of self-perceptions of physical and mental health, over 90% of the population indicated that they were in average or good physical health. Similar results were found for residents' self-perceptions of mental health.

PHASE III – PRIORITIZATION OF HEALTH-RELATED ISSUES

The identification and prioritization of the most important health-related issues in the LaSalle County region are identified in Chapter 10. After summarizing all of the issues in the Community Health Needs Assessment, a comprehensive analysis of existing community resources was performed to identify the efficacy to which health-related issues were being addressed. Finally, a collaborative team of leaders in the healthcare community used an importance/urgency methodology to identify the most critical issues in the area, including:

- **Mental Health**
- **Risky Behavior-Substance Abuse**
- **Healthy Behavior**
- **Access to Health Services**
- **Community Health Misperceptions**
- **Obesity**
- **Dental**

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.

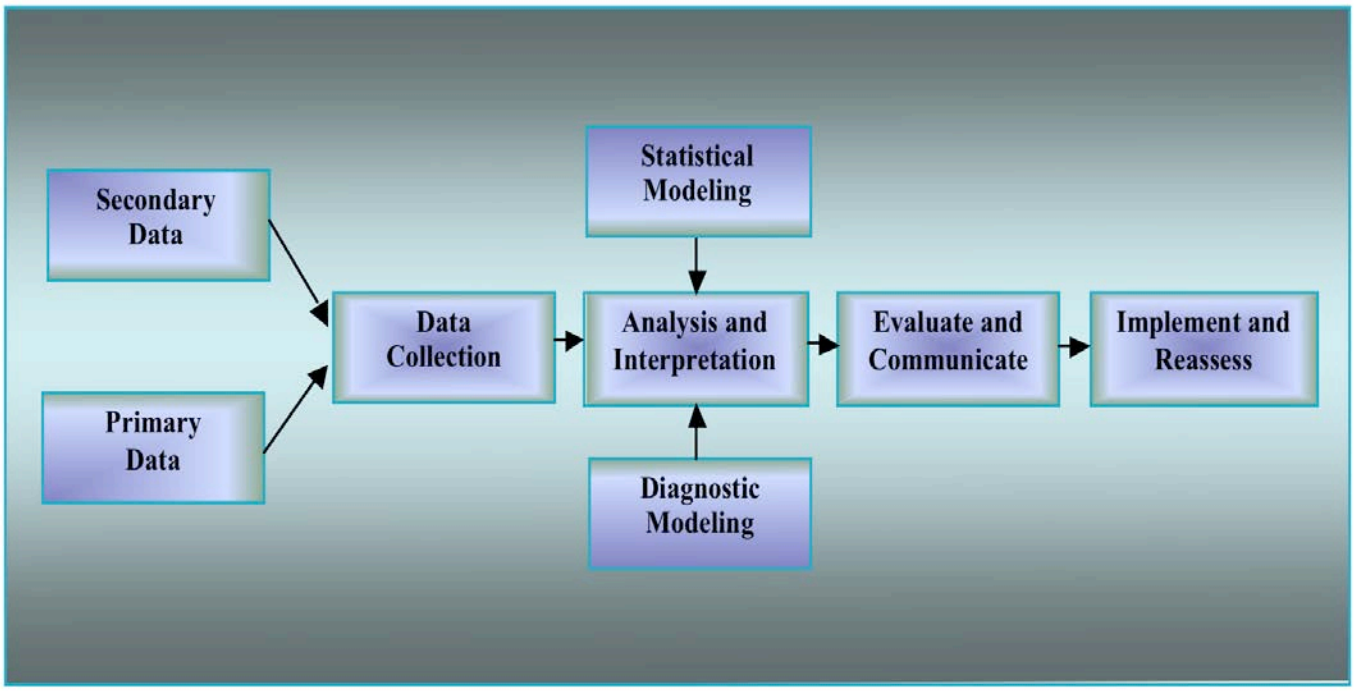
I. INTRODUCTION

Background

The Patient Protection and Affordable Care Act (Affordable Care Act), enacted March 23, 2010 adds new requirements on tax-exempt hospitals to conduct community health-needs assessments and to adopt implementation strategies to meet the community health needs identified through the assessments. This community health-needs assessment (CHNA) takes into account input from specific individuals who represent the broad interest of the community served by OSF Saint Elizabeth Medical Center, including those with special knowledge of or expertise in public health. For this study, a community health-needs assessment is defined as a systematic process involving the community, to identify and analyze community health needs and assets in order to prioritize these needs, and to plan and act upon unmet community health needs. Results from this assessment will be made widely available to the public.

The structure of the CHNA is based on standards used by the Internal Revenue Service to develop Form 990, Schedule H–Hospitals, designated solely for tax-exempt hospitals. The fundamental areas of the community needs assessment are illustrated in Figure 1.

Figure 1. Community Needs Assessment Framework



The community health-needs assessment is divided into three distinct phases. **Phase I** focuses on collection of existing secondary data relating to a comprehensive health profile and drawing strategic inferences. **Phase II** focuses on primary data collection to assess perspectives of key stakeholders, including those with special knowledge of the health community. Primary data collection includes a concerted effort to target the at-risk population in the region. **Phase III** focuses on the prioritization of needs within the community.

Design of the Collaborative Team: Community Engagement, Broad Representation and Special Knowledge

In order to engage the entire community in the CHNA process, a collaborative team of health-professional experts and key community advocates was created. Members for the Collaborative team were carefully selected to ensure representation of the broad interests of the community. Specifically, team members included representatives from OSF Saint Elizabeth Medical Center, administrators from the County Health Department, physicians/administrators from clinics serving the at-risk population and representation from the United Way. Note that numerous partner and agency organizations also participated in this study. Specific discussion of these organizations can be found in the METHODS section. Engagement occurred throughout the entire process, resulting in shared ownership of the assessment. The entire collaborative team met in November of 2012 and in February 2013. Additionally numerous meetings were held between the facilitators and specific individuals during the process.

Specifically, members of the **Collaborative Team** consisted of individuals with special knowledge of and expertise in the health care of the community. Individuals, affiliations, titles and expertise are as follows:

Jenny Barrie has worked at the LaSalle County Health Department for the past 11 years. She divides her time between the Administrative and Environmental Health Divisions. Prior to coming to the Health Department she worked at North Central Behavioral Health Systems as a Prevention Specialist for 2 1/2 years. Jenny received her BS degree in Community Health from Eastern Illinois University.

Quentin Boyle has been a Pastor for 15 years. He went to college for Officer Training. Quentin is a member of the Noon Rotary Club and the Ottawa Ministerial Alliance

Karen Brodbeck, MBA is the Director, Marketing/Community Relations at OSF Saint Elizabeth Medical Center. Karen attended the University of St. Francis where she double majored in Political Science and Mass Communication with a Concentration in Advertising and Public Relations. She went on to attain a Master of Business Administration at Olivet Nazarene University and has been with OSF Saint Elizabeth Medical Center since 2007. Her work has been honored by the Illinois Society for Healthcare Marketing & Public Relations. Karen is a member of Ottawa Noon Rotary and chairs the Professional Division of the United Way Campaign Cabinet. She is on the Board of Directors for the Ottawa Area Chamber of Commerce & Industry where she currently serves as Treasurer. Karen also serves on the executive board for ONYX (Ottawa Network of Young eXecs) and is a member of St. Columba Church.

Judy Christiansen, RN, MS. Judy is currently the COO at OSF Saint Elizabeth Medical Center. She has worked at this hospital for 40 years in a variety of positions. Judy has been involved in several community related organizations such as Board member of the United Way of Eastern LaSalle County, treasurer of Health Center of Eastern LaSalle County, Sunrise Rotary and the Zonta Club of Ottawa.

Peg Kramer-Graves is a graduate from Silver Cross Hospital School of Nursing and went on to get a Bachelors in Nursing and then earned a Master's degree in Nursing Administration from Aurora University. She was employed at Silver Cross and retired as Vice-President of Nursing in 1996. She was President of Saint Elizabeth Auxiliary for nine years. She is currently the Vice-Chairperson of The Health Center of Eastern LaSalle County. Peg is also on the board of directors for the Ottawa Visitors Center, Illinois Valley Symphony Guild, and Saint Elizabeth's Foundation. She is owner/CEO of Cardinal Sleep Disorders Center of America and Kramer Enterprises, LTD., a Durable Medical Equipment Company.

Dave McClure is the Executive Director of Youth Service Bureau of Illinois Valley. Previously Dave served as Administrative Manager and Youth Worker. He has served the Youth Service Bureau and countless other organizations in the community since 1978.

Dr. Don Morehead graduated from Northwestern University Medical School, had 5 years of surgical residency and practiced surgery at the Ottawa Regional Medical Center for 44 years. He served on the OSF Saint Elizabeth Medical Center Foundation Board for 14 years, served on the Board for the Ottawa Township High School, served on the CHO Foundation Board and is now Chair of the Health Center of Eastern LaSalle County - a free medical center for uninsured patients.

Shelli Ocepek, Executive Director of United Way of Eastern LaSalle County, has 25 years in non-profit administration and 21 years with United Way. She has served on numerous Boards, including Easter Seals, the Ottawa Township High School Foundation, and United Way of Illinois. She currently Chairs the LaSalle County Emergency Food and Shelter Board, is fiscal officer for LaSalle County's Long Term Recovery Committee, and serves on Friendship House Human Rights Committee.

Paula Swank, RHIA, is the COO at Ottawa Regional Medical Center. Paula holds a Bachelor's Degree in Health Information Management from Illinois State University. She has been with Ottawa Regional Medical Center, a part of OSF HealthCare, for 22 years. Paula recently oversaw the development of Express Care, a walk in, immediate care facility. She has also been involved with two electronic health record endeavors.

Laurel Svoboda graduated from Illinois Valley Community College with an Associate in Applied Sciences, thus earning her registered nurse license. She is the Nursing and Scheduling Manager at Ottawa Regional Medical Center. She has been with ORMC for 4 years and started as a primary nurse with one of the family practitioners. As a primary nurse, Laurel was able to assess needs of each one of their patients and provide them educational materials and referrals to agencies that would provide assistance.

Dawn Trompeter has an MBA Degree, with an emphasis in healthcare management, from Lewis University. She is the CFO of OSF Saint Elizabeth Medical Center and has 21 years of experience in healthcare. She is a Board member and Treasurer of Illinois River Area Chamber of Commerce and Youth Service Bureau of Illinois Valley. Dawn is also of a member of the Healthcare Financial Management Association.

Nancy Tuftie is the Director of Social Services at OSF Saint Elizabeth Medical Center. Nancy received a Bachelor of Science degree in Sociology in 1974 at Illinois State University. She completed her Masters in Social Work/Health Care at University of Illinois at Champaign/Urban. Nancy has over 36 years of experience providing Social Work, including group home work with emotionally disturbed adolescents, a counselor at the workshop for developmentally disabled adults, and a Hospital Employee Assistance Program, facilitator. Additionally she served on the committee that developed current OSF Saint Elizabeth Medical Center Hospice, was a consultant to the local nursing facility, Crisis Intervention, Facilitator of Adult Grief Support Group, and currently provides supervision to the Social Services Department. Here she provides assessments, being a negotiator, communicator, and a collaborator with other departments and outside agencies to ensure individuals and families regain or improve independence. She has also become an Advanced Care Planning Facilitator along with her department and 7 other hospital staff, and serves as co-chair of the OSF Saint Elizabeth Medical Center Ethics Committee. She is honored to serve on the OSF Healthcare System Ethics Committee.

In addition to collaborative team members, the following **facilitators** managed the process and prepared the Community Health Needs Assessment. Their qualifications and expertise are as follows:

Michelle A. Carrothers (Coordinator) is currently the Director of Debt Management and Revenue Cycle for OSF Healthcare System, a position she has served in since 2002. Michelle has over 27 years of health care experience. Michelle obtained both a Bachelor of Science Degree and Masters of Business Administration Degree from Bradley University in Peoria, IL. She attained her CPA in 1984 and has earned her FHFMA certification in 2011. Currently, she serves on the Revenue Cycle Key Performance Indicator Task Force and the National Advisory Council for HFMA National. Michelle chaired the Illinois Hospital Association Medicaid Cost Work Group and was a member of the IHA task force that developed the statewide Community Benefit Report that is submitted to the Attorney General's Office.

Dawn Irion (Coordinator) is the Community Benefits Coordinator at OSF Healthcare System. She has worked for OSF Healthcare system since 2004 and has helped coordinate the submission of the Community Benefit Attorney General report since 2008. She has coordinated and gathered information used in filing IRS Form 990 Schedule H since 2009 and is a member of Healthcare Financial Management Association.

Eric J. Michel (Research Associate) MBA, is a faculty member in Leadership at Christopher Newport University in Newport News, VA. Previously, he served on the

faculty of the Foster College of Business at Bradley University in Peoria, IL. Professor Michel has coauthored over a dozen papers on leadership and organizational strategy for presentations at national conferences and for publication in academic journals. He serves as a consultant to not-for-profit and healthcare organizations in the areas of executive development and community assessment.

Dr. Laurence G. Weinzimmer (Principal Investigator) Ph.D. is the Caterpillar Inc. Professor of Strategic Management in the Foster College of Business at Bradley University in Peoria, IL. An internationally recognized thought leader in organizational strategy and leadership, he is a sought-after consultant to numerous *Fortune 100* companies and not-for-profit organizations. Dr. Weinzimmer has authored over 100 academic papers and four books, including two national best sellers. His work appears in 15 languages, and he has been widely honored for his research accomplishments by many prestigious organizations, including the Academy of Management. Dr. Weinzimmer has served as principle investigator for numerous community assessments, including the United Way, Economic Development Council and numerous hospitals.

Definition of the Community

In order to determine the geographic boundaries for OSF/Saint Elizabeth Medical Center analyses were completed to identify what percentage of inpatient and outpatient activity was represented from LaSalle County. Data show that LaSalle County represents 89.4% of all patients for the hospital.

In terms of patient categories for this CHNA, in addition to defining the community by geographic boundaries, this study will target the at-risk populations as an area of potential opportunity to improve the health of this population.

Purpose of the Community Health-Needs Assessment

In the initial meeting, the collaborative committee identified the purpose of this study. Specifically**,** this study has been designed to provide necessary information to health-care organizations, including hospitals, clinics and the health departments, in order to create strategic plans in program design, access and delivery. Results of this study will act as the platform to allow health-care organizations to orchestrate limited resources to improve management of high-priority challenges. By working together, the hospitals, clinics and health departments will use this CHNA to help improve the quality of health care in the defined community. When feasible, data are assessed longitudinally to assess changes and patterns and benchmarked with state averages.

II. METHODS

To complete the comprehensive community health-needs assessment, multiple sources were examined. Secondary statistical data were used for the first phase of the project. Additionally, based on a sample of 659 survey respondents from LaSalle County, phase two focused on assessing perceptions of the community health issues, unhealthy behaviors, issues with quality of life, healthy behaviors and access to health care. Data were collected to assess the importance of specific issues, as well as access to health care.

Phase I. Secondary Data for Community Health Needs Assessment

We first used existing secondary statistical data to develop an overall assessment of the health-related issues in the community. Note that several tables were aggregated from numerous data sources. For example, educational report-card tables were compiled by collecting information from numerous individual school report cards and combining aggregated data into these tables.

Five chapters were completed based on assessment of secondary data. Each chapter contains numerous categories. Within each category, there are specific sections, including definitions, importance of categories, data and interpretations. At the end of each chapter there is a section on the key strategic implications that can be drawn from the data.

Note that most of the data used for this phase was acquired via publically available data sets. However, for specific sections of Chapter 2 and the majority of Chapter 4, the most recent data available were from 2009. Given a purpose of this assessment is to measure subsequent improvements to community health over time, using data that are three years old is not sufficient. Therefore we used COMPdata from 2008-2012 for all of our disease categories. This required manual aggregation of data from the hospitals serving the LaSalle County area.

Based on several retreats, a separate OSF Collaborative Team identified six primary categories of diseases, including: age related, cardiovascular, respiratory, cancer, type 2 diabetes and infections. We also identified secondary causes of diseases as well as intentional and unintentional injuries. In order to define each disease category, we used modified definitions developed by Sg2. Sg2 specializes in consulting for health care organizations. Their team of experts includes MDs, PhDs, RNs and health care leaders with extensive strategic, operational, clinical, academic, technological and financial experience.

Phase II. Primary Data Collection

This section describes the research methods used to collect, code, verify and analyze primary data. Three specific areas include the research design used for this study: survey design, data collection and data integrity.

A. Survey Instrument Design

Initially, all surveys used in previous health-needs assessments in the U.S. that we were able to identify were assessed to identify common themes and approaches to collecting community health-needs data. In all, 15 surveys were identified. By leveraging best practices from these surveys, we created our own pilot survey. To ensure that all critical areas were being addressed, the entire OSF collaborative team was involved in survey design/approval through

several fact-finding sessions. Specifically, for the community health need assessment, five specific areas were included:

Ratings of health problems in the community – to assess the importance of various community health concerns. Survey items included areas assessing topics such as cancer, diabetes and obesity. In all, there were 20 choices provided for survey respondents.

Ratings of unhealthy behaviors in the community – to assess the importance of various unhealthy behaviors. Survey items included areas assessing topics such as violence, drug abuse and smoking. In all, there were 14 choices provided for survey respondents.

Ratings of issues with quality of life – to assess the importance of various issues relating to quality of life in the community. Survey items included areas assessing topics such as access to health care, safer neighborhoods and effective public transportation. In all, there were nine choices provided for survey respondents.

Accessibility to health care – to assess the degree to which residents could have access to health care when needed. Survey items included areas assessing topics such as access to medical, dental and mental care, as well as access to prescription drugs.

Healthy behaviors – to assess the degree to which residents exhibited healthy behaviors. The survey focused on areas such as exercise, healthy eating habits and smoking.

Finally, demographic information was collected to assess background information necessary to segment markets in terms of the five categories discussed above.

After the initial survey was designed, a pilot study was created to test the psychometric properties and statistical validity of the survey instrument. The pilot study was conducted at the Heartland Community Health Clinic's three facilities. The Heartland Clinic was chosen as it serves the at-risk population and also has a facility that serves a large percentage of the Hispanic population. A total of 130 surveys were collected. Results from the pilot survey revealed specific items to be included/excluded in the final survey instrument. Selection criteria for the final survey included validity, reliability and frequency measures based on responses from the pilot sample. Note that these surveys were not included in the final sample. A copy of the final survey is included in Appendix 1.

B. Sample Size

In order to identify our potential population, we first identified the percentage of the LaSalle County population that was living in poverty. Specifically, we multiplied the population of the county by its respective poverty rate to identify the minimum sample size to study the at-risk population. Poverty rate for LaSalle County was 10.8 percent. The populations used for the calculation was 113,518, yielding a total of 12,260 residents living in poverty in the LaSalle County area.

We assumed a normal approximation to the hypergeometric given the targeted sample size.

$n = (Nz^2pq)/(E^2 (N-1) + z^2 pq$

where:

n = the required sample size

N = the population size

pq = population proportions (set at .05)

z = the value that specified the confidence interval (use 95% CI)

E =desired accuracy of sample proportions (set at +/- .05)

For the total LaSalle County area, the minimum sample size for those living in poverty was 373. Note that for *aggregated* analyses, an additional 270 random surveys were needed from those not living in poverty in order to identify and analyze general perspectives.

In order to satisfy sampling requirements for both those living in poverty as well as aggregate perspectives, the data collection effort for this CHNA yielded a total of 659 usable responses. This met the threshold of the desired confidence interval. Final results for data collection yielded a total of 374 respondents living in poverty for this CHNA and data for the total aggregate population yielded a total of 659 usable responses. This met the threshold of the desired 95% confidence interval. Specifically, these numbers met the 99% confidence interval threshold for the aggregate population.

C. Data Collection

To collect data in this study, two techniques were used. First, an online version of the survey was created. Second, a paper version of the survey was distributed. In order to be sensitive to the needs of respondents, surveys stressed assurance of confidentiality and anonymity

The partner organizations for the aggregate population in LaSalle County were the Ottawa Sunrise Rotary, the Ottawa Noon Rotary, the Chamber of Commerce, RCIA (adult faith formation class), the Youth Service Bureau, and Illinois Valley Community College. These organizations were chosen given their wide exposure to different segments of the LaSalle County populations. Additionally, surveys were distributed at Walmart, ads were placed to the web-based survey in the local newspaper and a representative from Saint Elizabeth's Medical Center had a radio interview.

To specifically target the at-risk population, surveys were distributed at all homeless shelters and soup kitchens. Specific partner organizations included Step-by-Step Child Care Center, PADS Homeless Shelter, Ottawa Food Pantry, the local United Way and the Salvation Army. Note that since we specifically targeted the at-risk population as part of the data collection effort, this became a stratified sample, as we did not specifically target other groups based on their socio-economic status. However, when using convenience-sampling techniques,

we made a concerted effort to assure randomness in order to mitigate potential bias in the sample.

D. Data Integrity

Comprehensive analyses were performed to verify the integrity of the data for this research. Without proper validation of the raw data, any interpretation of results could be inaccurate and misleading if used for decision making. Therefore, several tests were performed to ensure that the data were valid. These tests were performed before any analyses were undertaken. Data were checked for coding accuracy, using descriptive frequency statistics to verify that all data items were coded correctly. This was followed by analyses of means and standard deviations and comparison of primary data statistics to existing secondary data. Additionally, for regression models, residual analyses were performed to ensure that the data met assumptions of the underlying models. Specifically, residuals were analyzed to make sure (1) the data were normally distributed, (2) no patterns existed among residuals (e.g., heteroscedasticity) and (3) no significant outliers biased the outputs.

E. Analytic Techniques

In order to ensure statistical validity, we used several different analytic techniques to assess data. Specifically, frequencies and descriptive statistics were used for identifying patterns in residents' rating of various health concerns. Additionally appropriate statistical techniques were used for identification of existing relationships between perceptions, behaviors and demographic data. Specifically, we used Pearson correlations, x^2 tests and tetrachoric correlations when appropriate, given characteristics of the specific data being analyzed.

PHASE I – SECONDARY DATA RESEARCH FOR COMMUNITY HEALTH NEEDS

In this section of the community health needs assessment, there are five chapters that assess different aspects of the general community as well as specific health-related issues. All of the information in this section is taken from secondary data sources. As described in the METHODS section, some data sources are publically available and other data sources are comprised of aggregated hospital data from 2012.

The chapters are as follows:

CHAPTER 1. DEMOGRAPHIC PROFILE

CHAPTER 2. PREVENTION

CHAPTER 3. SYMPTOMS/PREDICTORS

CHAPTER 4. DISEASES/MORBIDITY

CHAPTER 5. MORTALITY

CHAPTER 1. DEMOGRAPHIC PROFILE

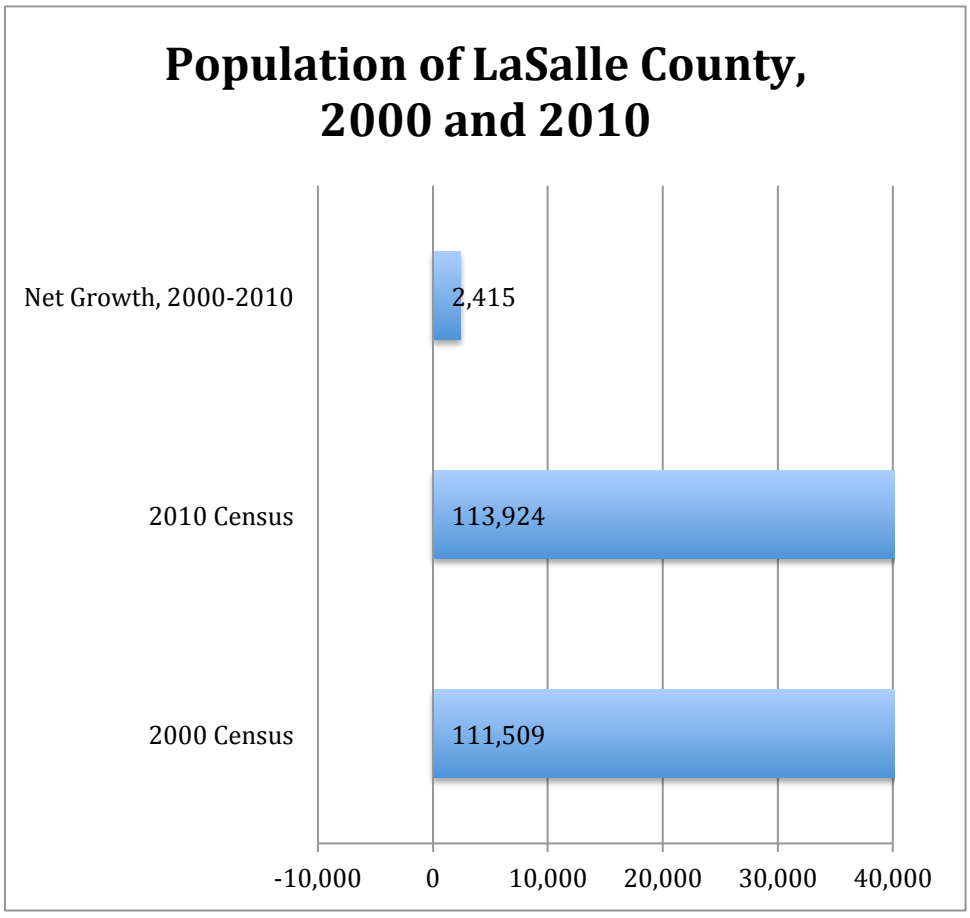
1.1 Population

Importance of the measure: Population data characterizes the individuals residing within the jurisdictional boundaries LaSalle County. Population data provides an overview of population growth trends and builds a foundation for additional analysis of these data.

1.1.1 Population by Municipality

The 2010 census of LaSalle County indicated a population of 111,509 residents. Compared to the 2000 census of the LaSalle County population, the 2010 census of the LaSalle County population shows an increase of 2,415 residents. The vast majority of these residents relocating to LaSalle County in the last decade reside in Ottawa (461) or Peru (460).

Table 1.1.1-1 Population of LaSalle County, 2000 and 2010



Source: 2010 US Census; 2000 US Census

Table 1.1.1-2 Population of Municipalities in LaSalle County, 2000 and 2010

County/Municipality	2000 Census	2010 Census	Net Growth, 2000-2010
LaSalle County	111,509	113,924	2,415
Cedar Point village	262	277	15
Dalzell village (part)	0	0	0
Dana village	171	159	-12
Dayton CDP	X	537	N/A
Earlville city	1,778	1,701	-77
Grand Ridge village	546	560	14
Kangley village	287	251	-36
Lake Holiday CDP	X	4,761	N/A
LaSalle city	9,796	9,609	-187
Leland village	970	977	7
Leonore village	110	130	20
Lostant village	486	498	12
Marseilles city	4,655	5,094	439
Mendota city	7,272	7,372	100
Millington village (part)	172	420	248
Naplate village	523	496	-27
North Utica village	977	1,352	375
Oglesby city	3,647	3,791	144
Ottawa city	18,307	18,768	461
Peru city	9,835	10,295	460
Ransom village	409	384	-25
Rutland village	354	318	-36
Seneca village (part)	2,053	2,365	312
Sheridan village	2,411	2,137	-274
Somonauk village (part)	105	258	153

Streator city (part)	13,948	13,609	-339
Tonica village	685	768	83
Troy Grove village	305	250	-55
Wenona city (part)	X	8	N/A

Source: 2010 US Census; 2000 US Census

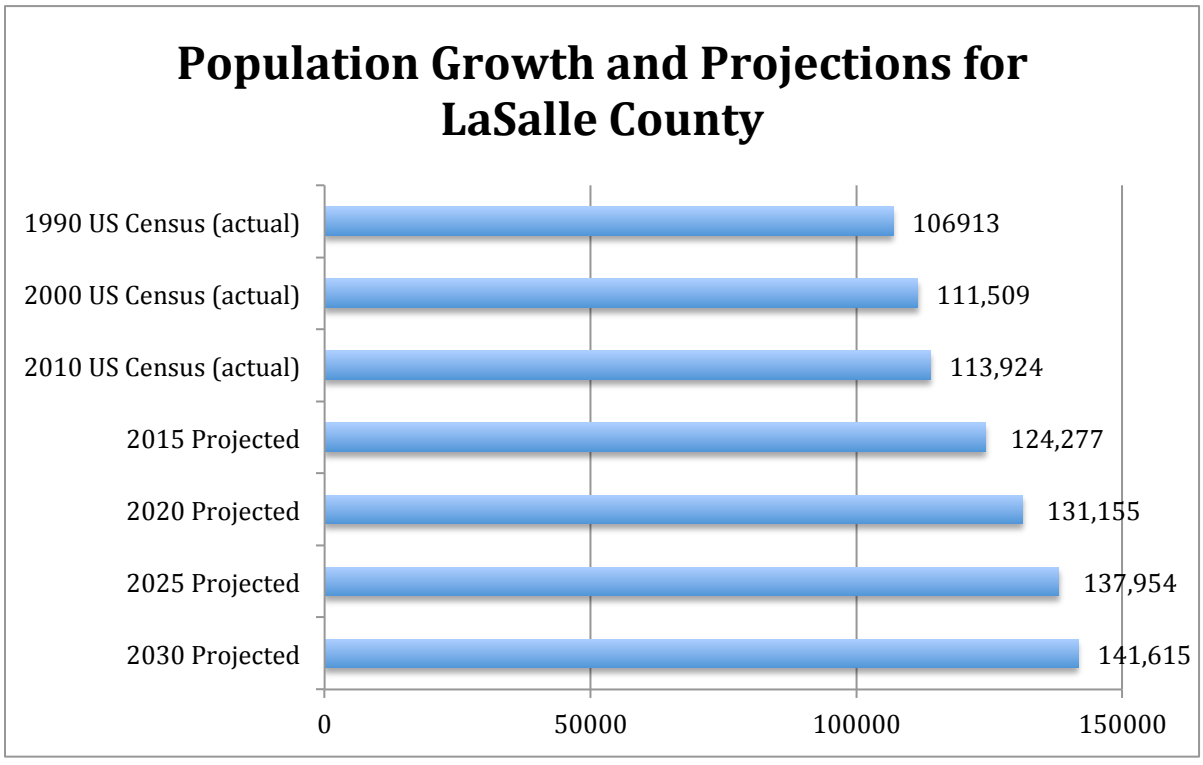
1.1.2 Growth Rates

Data from the last three censuses (1990, 2000, 2010) indicate positive population growth for LaSalle County. Data also suggest that LaSalle County has reversed the negative population growth experienced in the 1980s.

With regard to LaSalle County, ten municipalities experienced negative population growth between 2000 and 2010 and six municipalities experienced double-digit positive growth between 2000 and 2010.

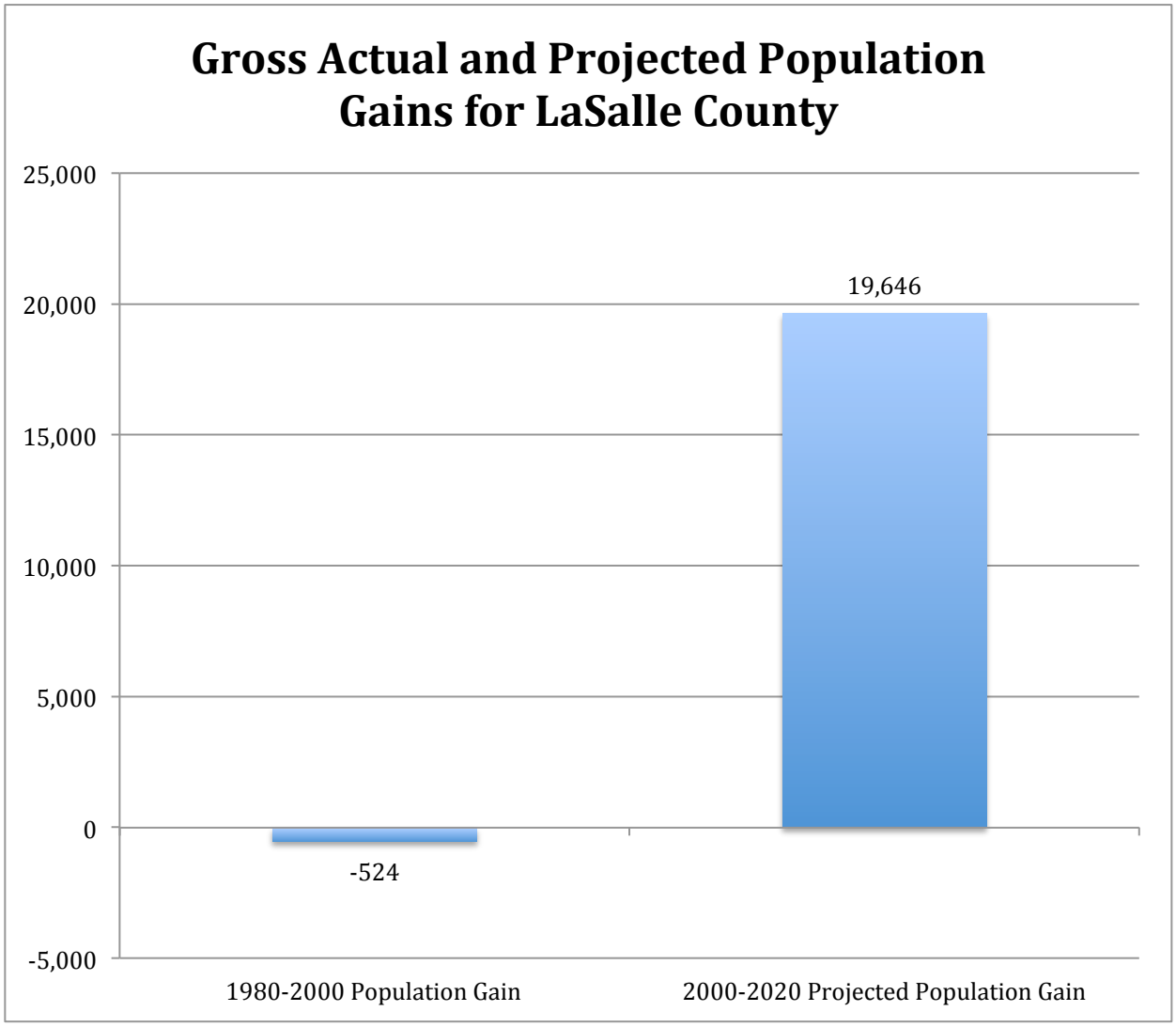
With regard to population projections for the next twenty years (2010 to 2030), LaSalle County is expected to maintain positive population growth through 2030.

Table 1.1.2-1 Population Growth and Projections by County



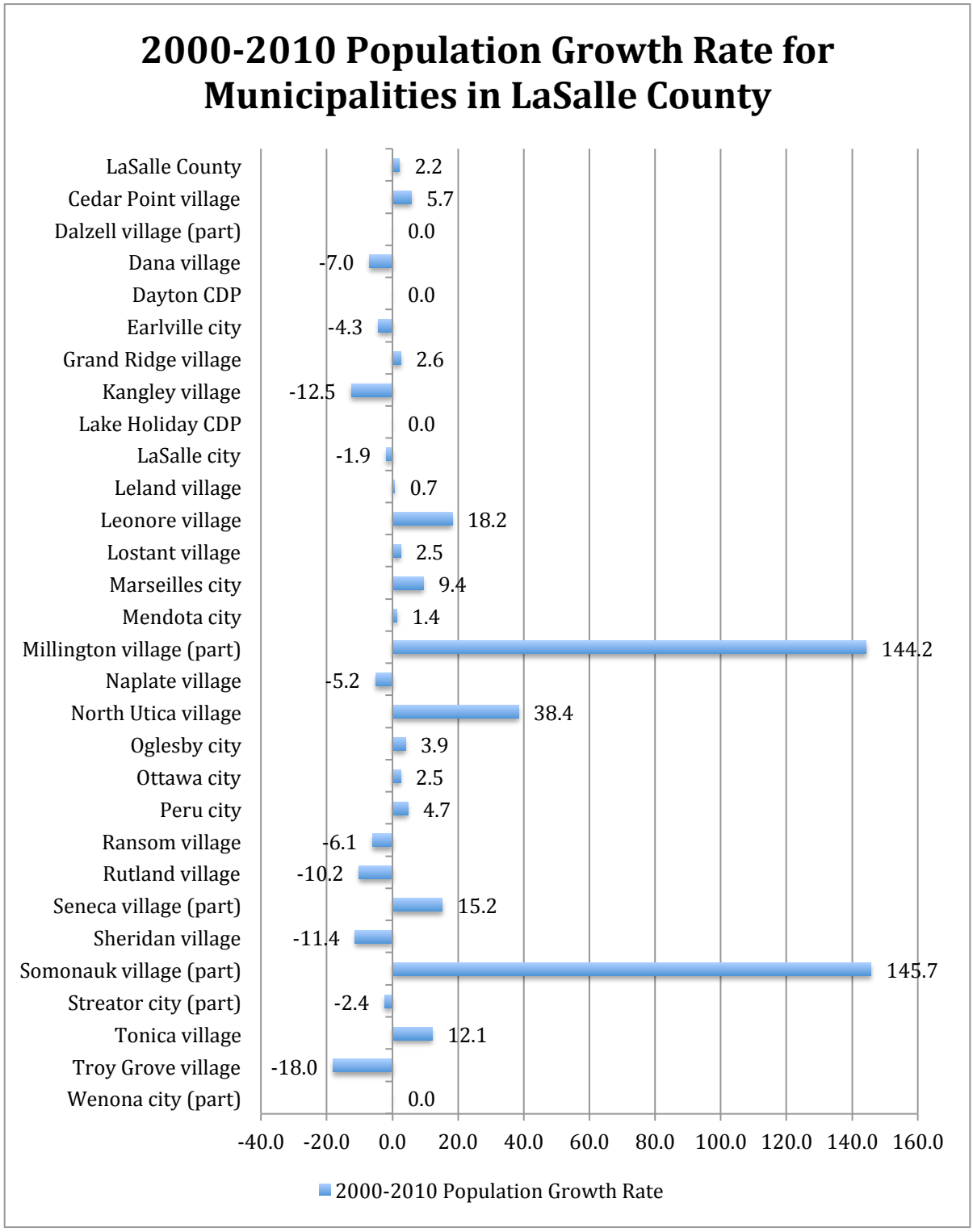
Source: 1990, 2000, & 2010 US Census;
Illinois Department of Commerce & Economic Opportunity

Table 1.1.2-2 Gross Actual and Projected Population Gains for LaSalle County



Source: 1990, 2000, & 2010 US Census;
Illinois Department of Commerce & Economic Opportunity

Table 1.1.2-3 2000-2010 Population Growth Rate for Municipalities in LaSalle County



Source: 2010 US Census; 2000 US Census

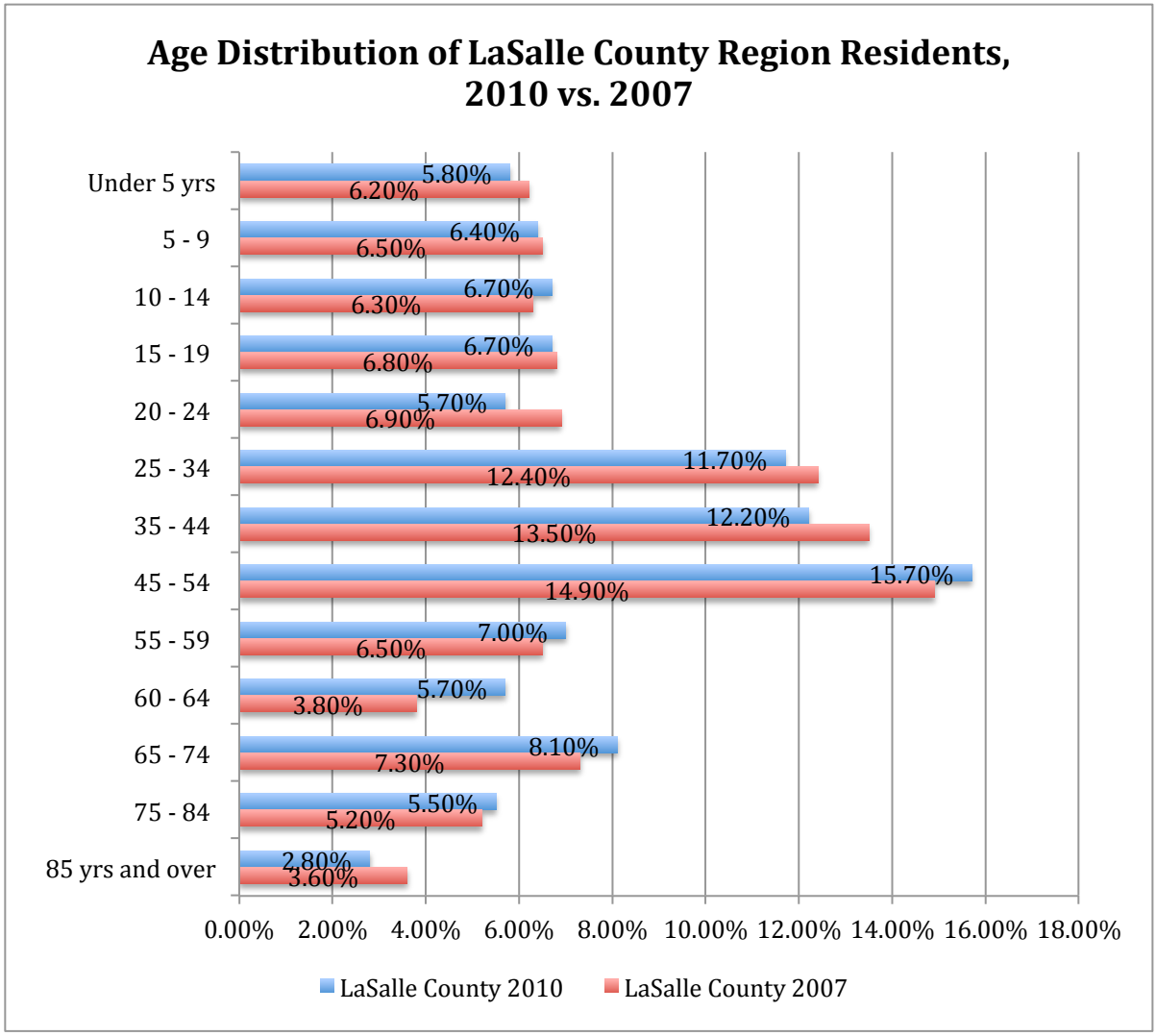
1.2 Age, Gender and Race Distribution

Importance of the measure: Population data broken down by age groups, gender, and race provides a foundation to analyze the issues and trends that impact demographic factors including economic growth and the distribution of health care services. Understanding the cultural diversity of communities is essential when considering health care infrastructure and service delivery systems.

1.2.1 Age

As indicated in Table 1.2-1, individuals 60 to 84 years of age is the age group experiencing the strongest growth in the LaSalle County Region between 2007 and 2010, as this population increased from 16.3% of the population in 2007 to 19.3% of the population in 2010.

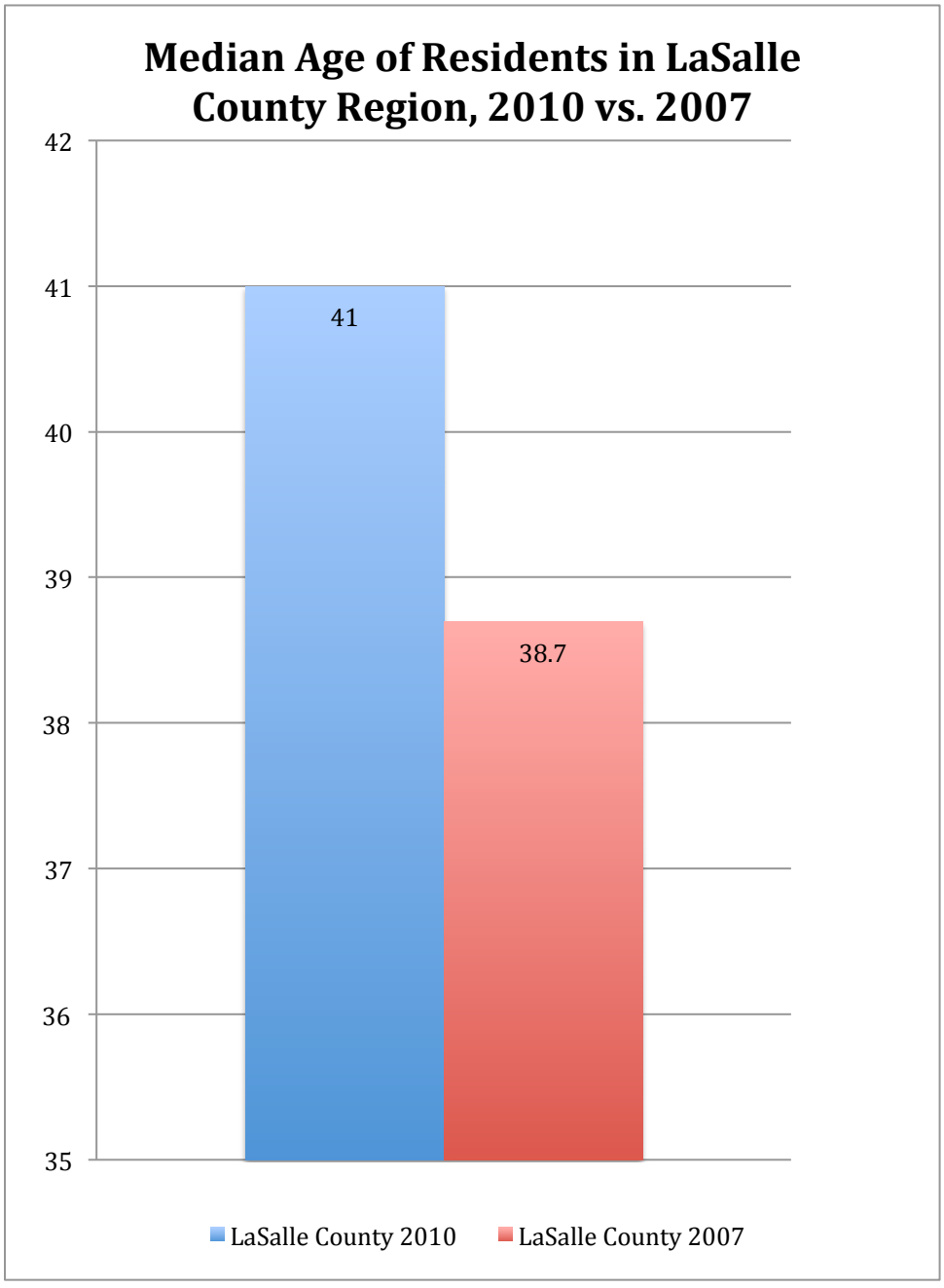
Table 1.2-1 Age Distribution of LaSalle County Region Residents, 2010 vs. 2007



Source: 2010 US Census; 2007 American Community Survey

With the increase in the population of older individuals in LaSalle County, the median age of residents has also increased. The median age of residents in LaSalle County in 2010 was 41.0 compared to 38.7 in 2007.

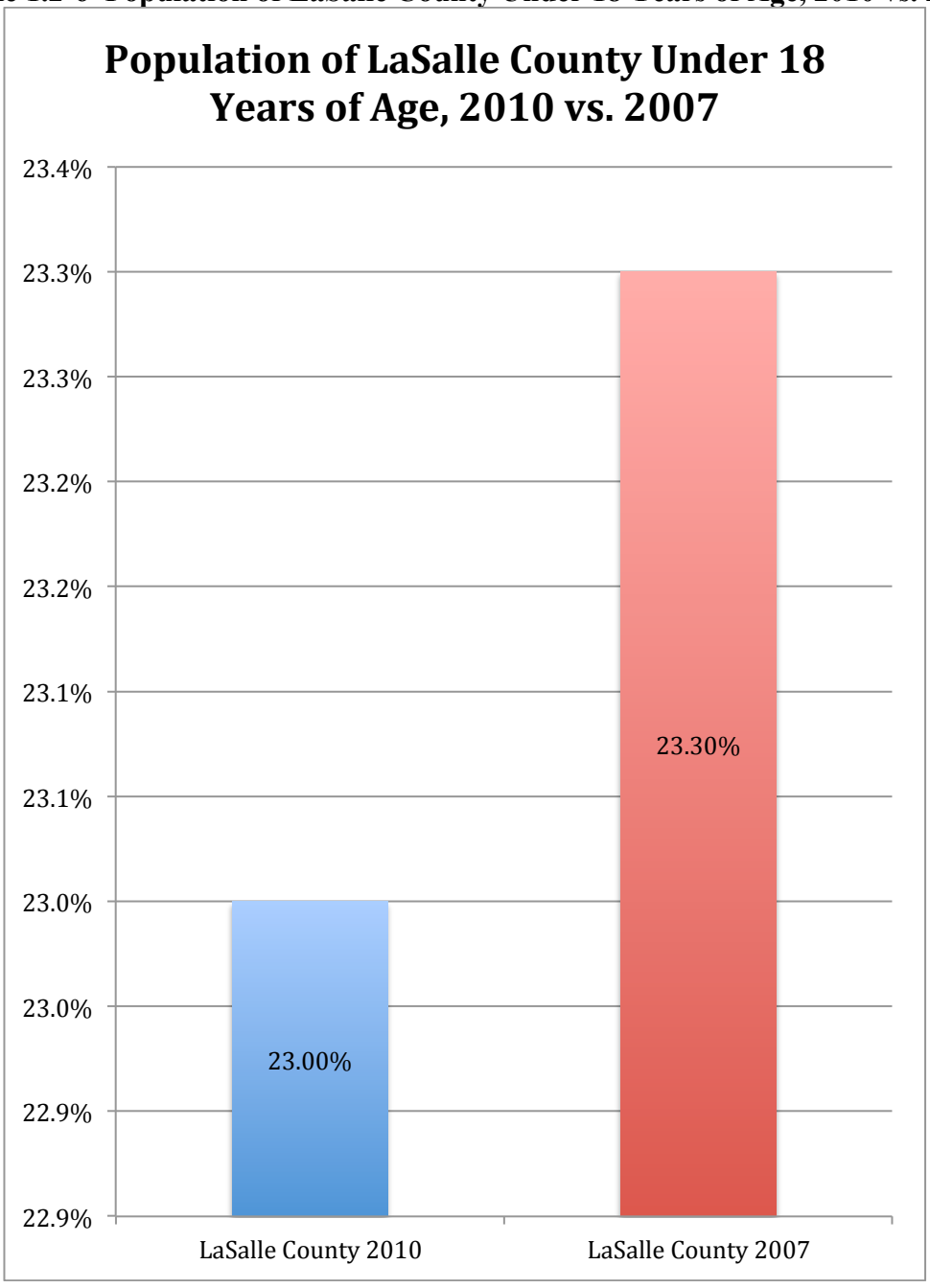
Table 1.2-2 Median Age of Residents in LaSalle County Region, 2010 vs. 2007



Source: 2010 US Census; 2007 American Community Survey

Data from 2010 suggest a decrease in the populations of youths and older adults. In LaSalle County, the under 18 population decreased slightly from 23.3% to 23.0%.

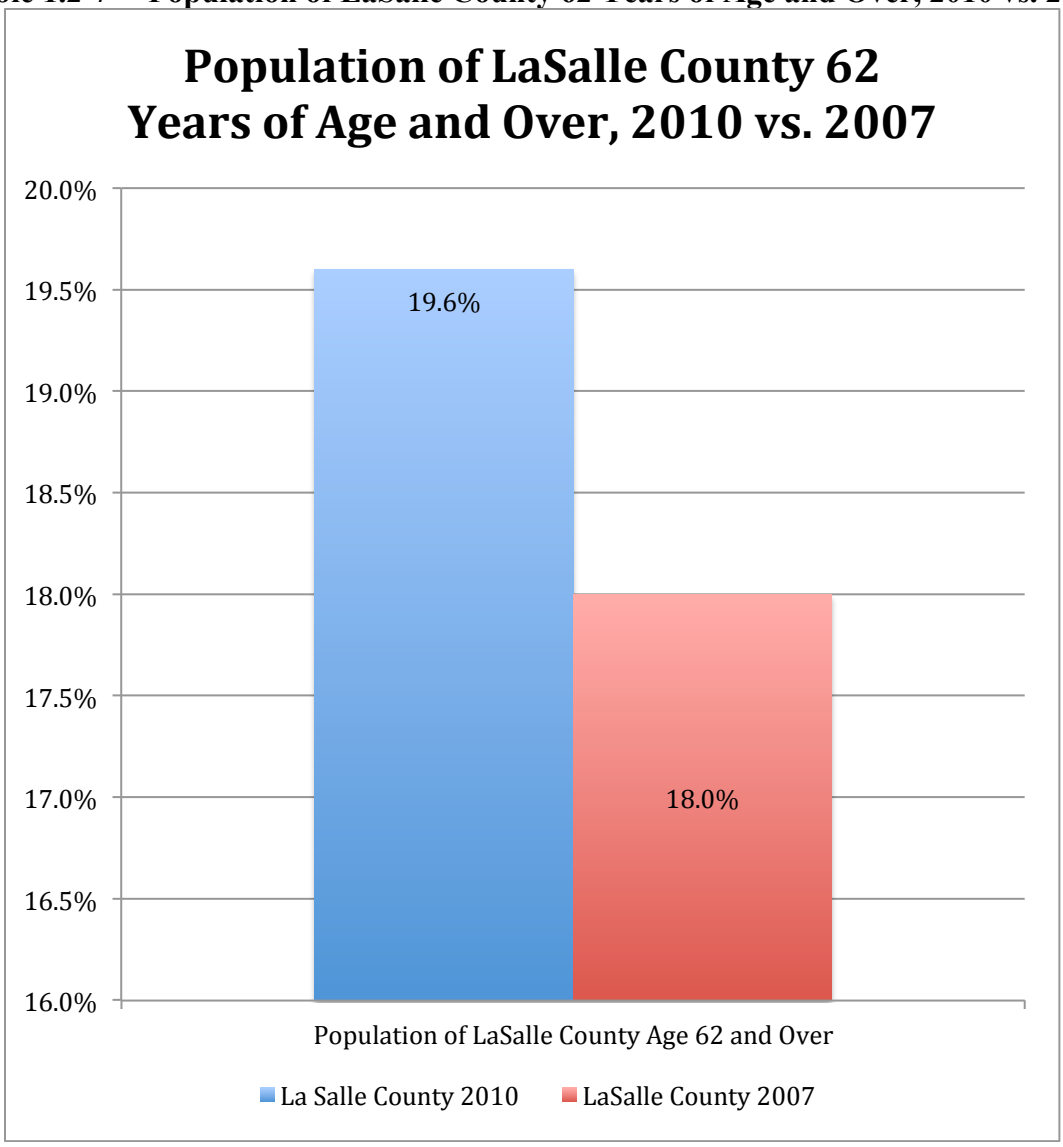
Table 1.2-6 Population of LaSalle County Under 18 Years of Age, 2010 vs. 2007



Source: 2010 US Census; 2007 American Community Survey

The national trend concerning the aging of the baby-boomer population is reflected in the 2010 data for the LaSalle County Region. Between 2007 and 2010, the percentage of older adults, age 62 and over, has increased in from 18.0% of the population in 2007 to 19.6% of the population in 2010.

Table 1.2-7 Population of LaSalle County 62 Years of Age and Over, 2010 vs. 2007

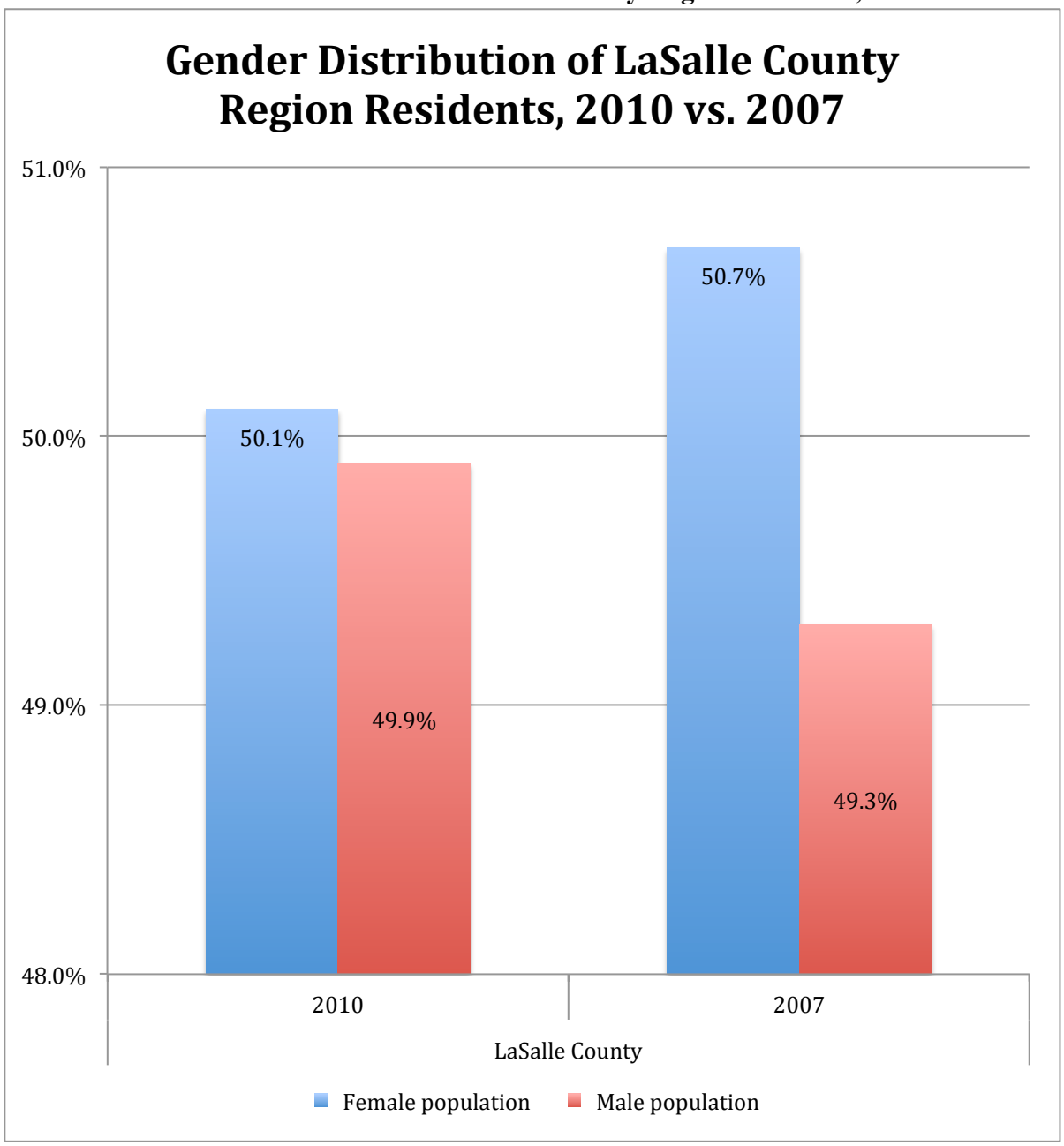


Source: 2010 US Census; 2007 American Community Survey

1.2.2 Gender

The gender distribution of the LaSalle County Region residents has remained relatively consistent between 2007 and 2010. Data indicates that there are more women than men.

Table 1.2.2-1 Gender Distribution of LaSalle County Region Residents, 2010 vs. 2007

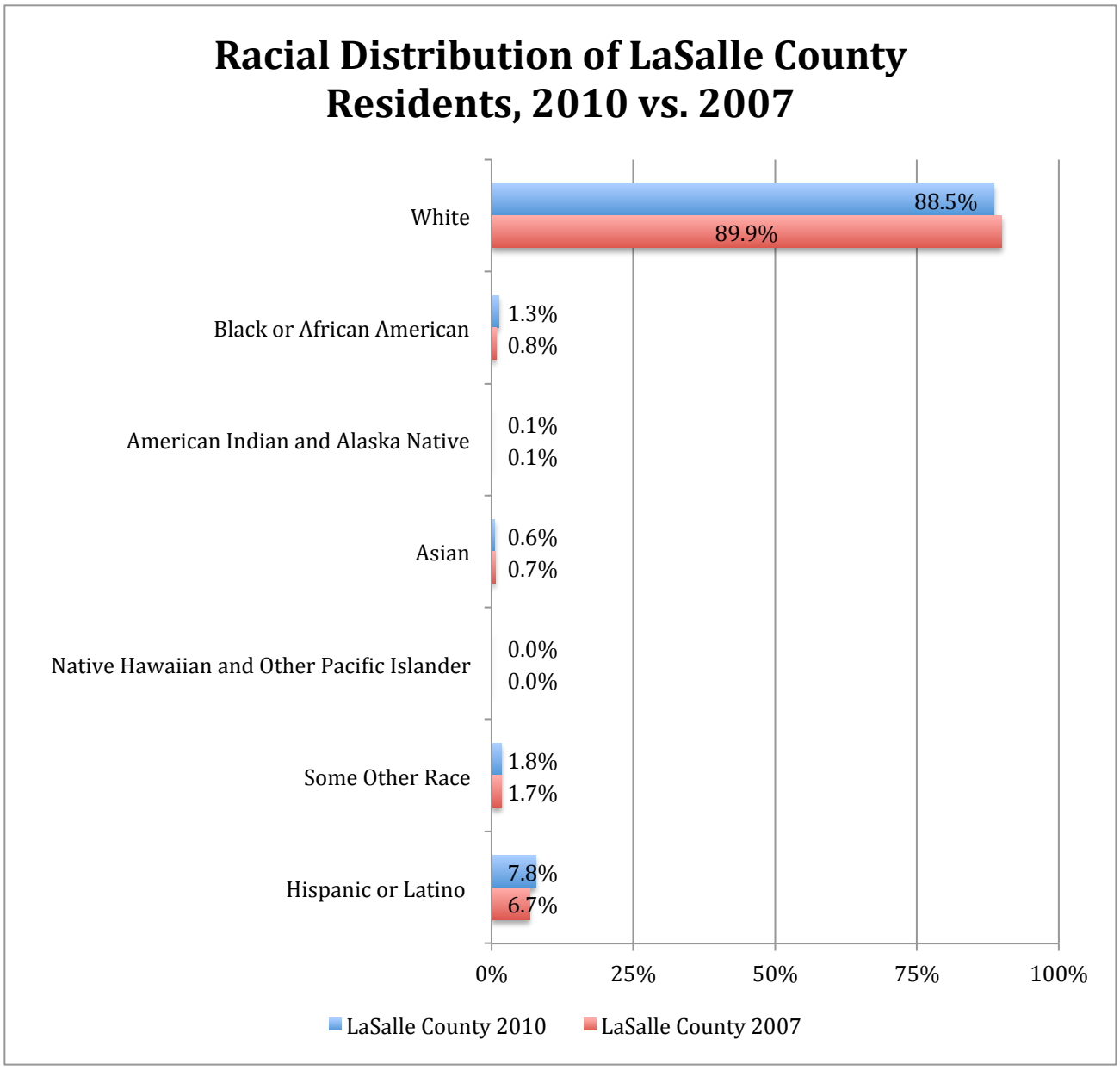


Source: 2010 US Census; 2007 American Community Survey

1.2.3 Race

With regard to race and ethnic background, the LaSalle County Region is largely homogenous, yet in recent years is becoming more diverse. Data from 2010 suggest that Whites comprise upwards of 90% of the population in LaSalle County. However, the non-White population of the LaSalle County Region has been slowly increasing since 2007, with individuals identifying with Hispanic ethnicity comprising nearly 8% of the population.

Table 1.2.3-1 Racial Distribution of LaSalle County Residents, 2010 vs. 2007



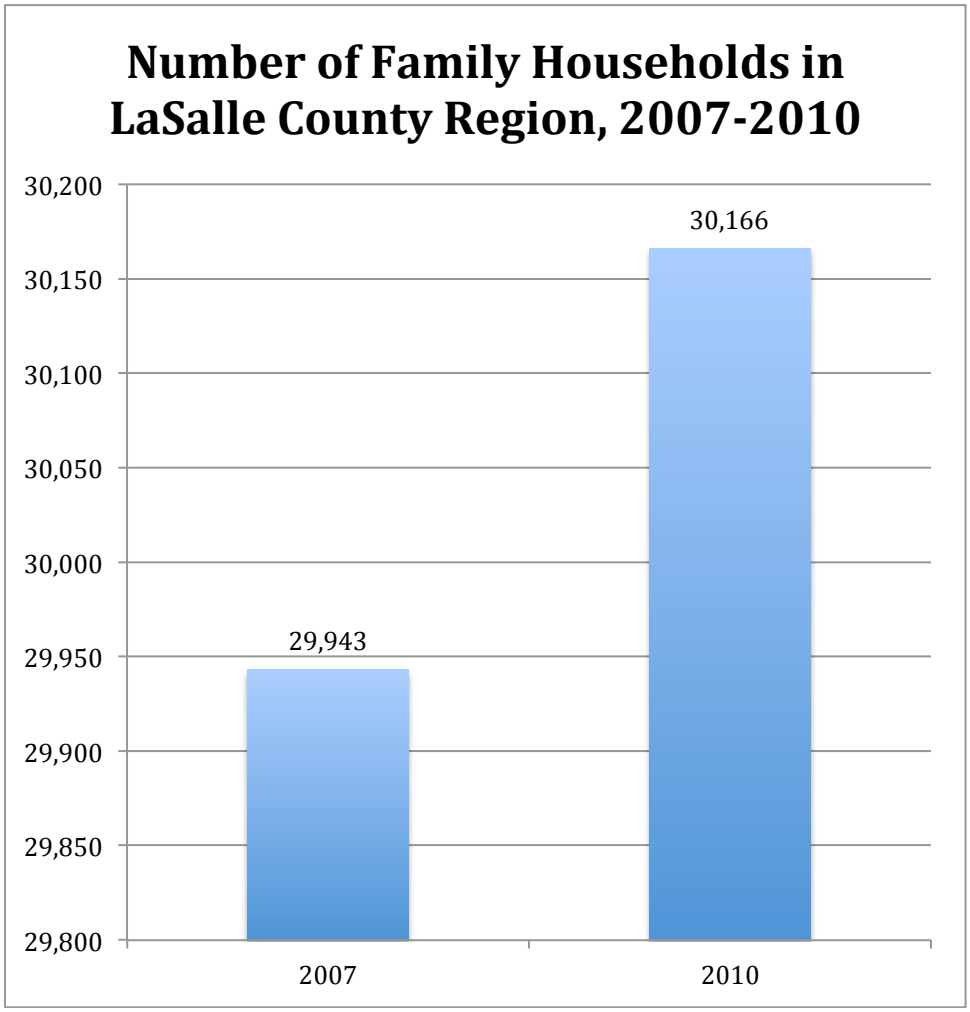
Source: 2010 US Census; 2007 American Community Survey

1.3 Household/family

Importance of the measure: Families are the backbone of society in LaSalle County, as they dramatically impact the health and development of children and provide support and well-being for older adults.

As indicated in Table 1.3-1, the number of family households within LaSalle County has continued to increase between 2007 and 2010.

Table 1.3-1 Number of Family Households in LaSalle County Region, 2007-2010

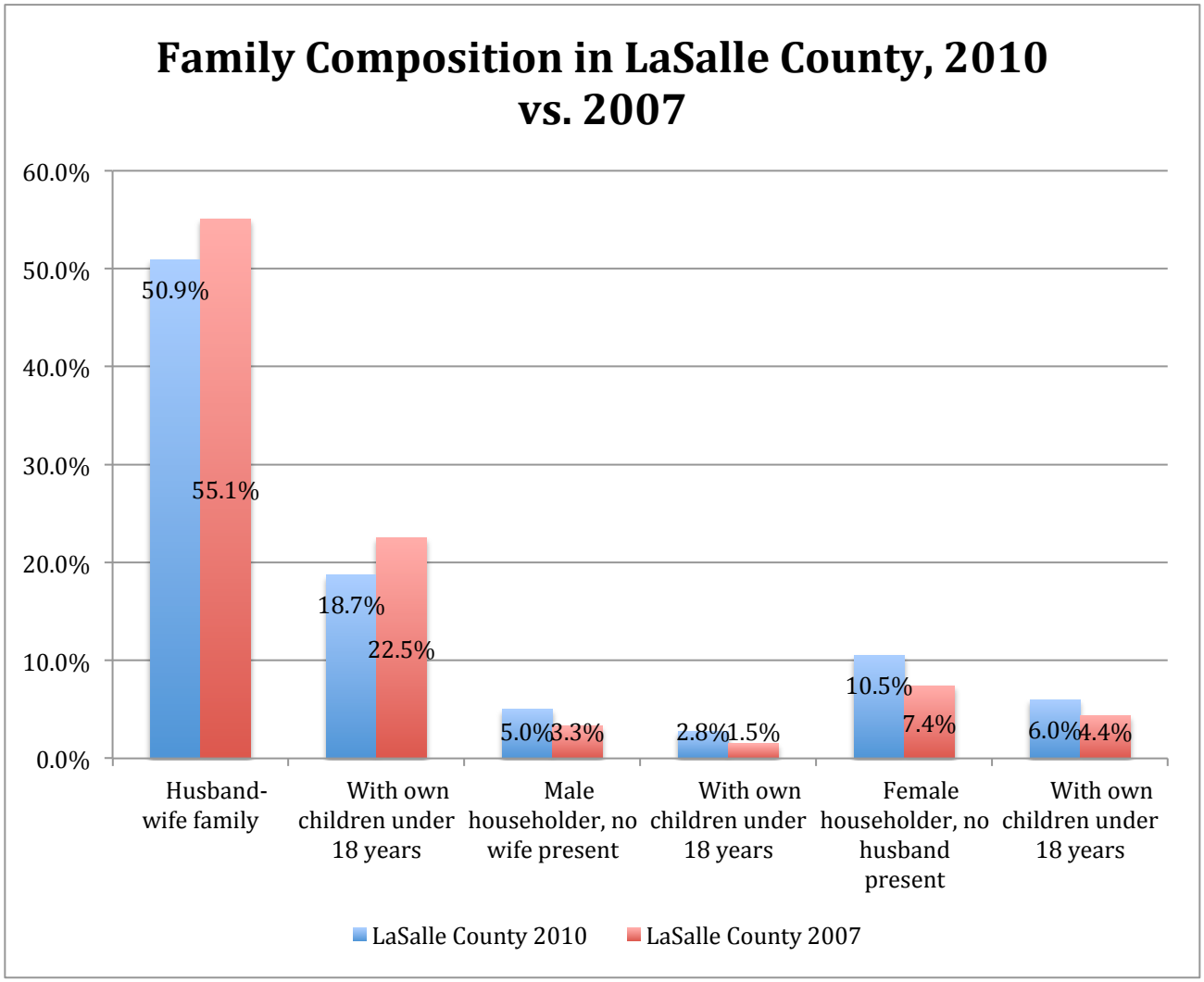


Source: 2010 US Census; 2007 American Community Survey

1.3.1 /1.3.2 Single and Related Family

In LaSalle County, data from 2010 suggest a 1.7% increase from 2007 in the number of male households with no wife present. Between 2007 and 2010, the percentage of husband-wife families decreased in LaSalle County by 4.2%. When children under the age of 18 are considered, there has been an increase in the percentage of children living in a family comprised of a female householder only, with no husband present from 7.4% in 2007 to 10.5% in 2010.

Table 1.3.1-1 Family Composition in LaSalle County, 2010 vs. 2007

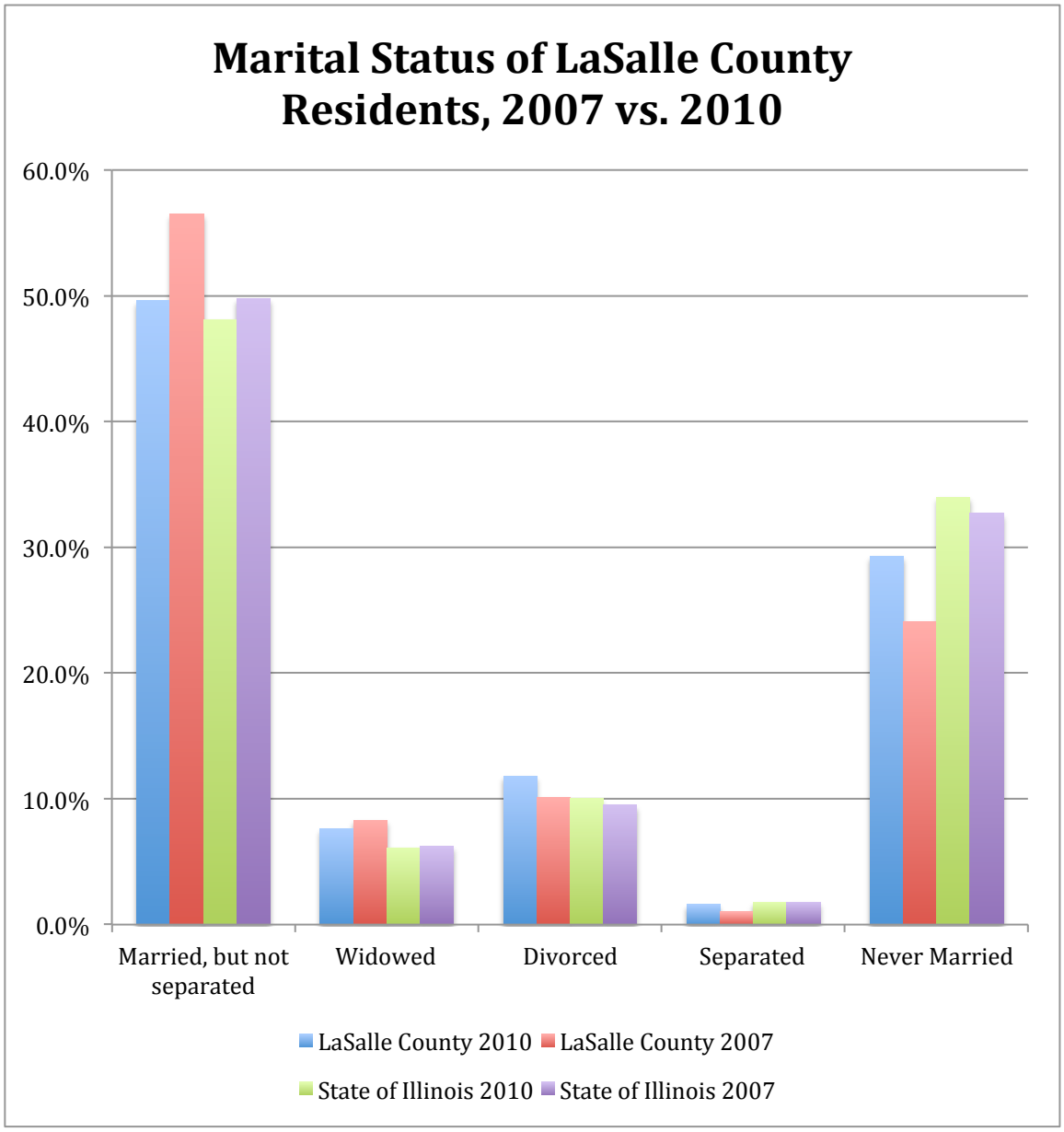


Source: 2010 US Census; 2007 American Community Survey

1.3.3 Marital status

Between 2007 and 2010, LaSalle County experienced a negative growth rate in the percentage of residents who are married but not separated and positive growth in the percentage of residents who were divorced and never married.

Table 1.3.3-1 Marital Status of LaSalle County Residents, 2007 vs. 2010

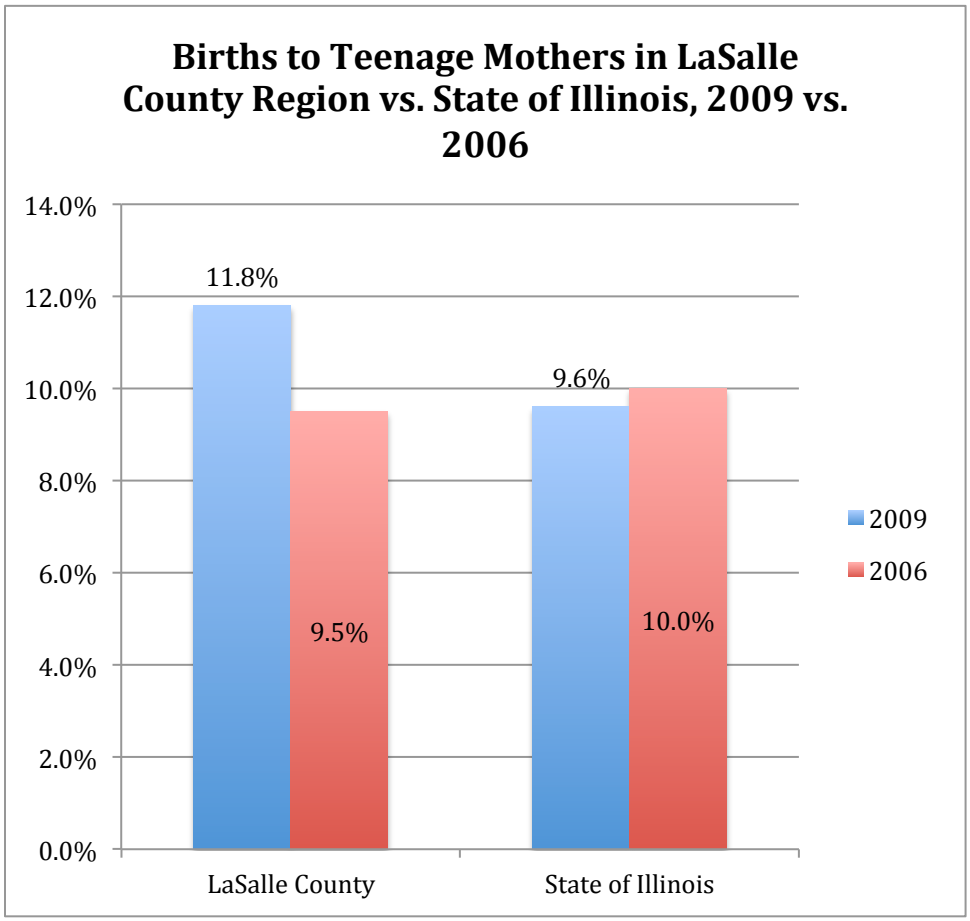


Source: 2010 US Census; 2007 American Community Survey

1.3.4 Early Sexual Activity Leading to Births from Teenage Mothers

With regard to teenage birth rates, LaSalle County has a higher teen birth rate than the State of Illinois and between 2006 and 2009, LaSalle County saw a net increase in teenage births while the State of Illinois saw a decrease during the same time frame.

Table 1.3.4-1: Births to Teenage Mothers in LaSalle County Region vs. State of Illinois, 2009 vs. 2006



Source: Illinois Department of Public Health

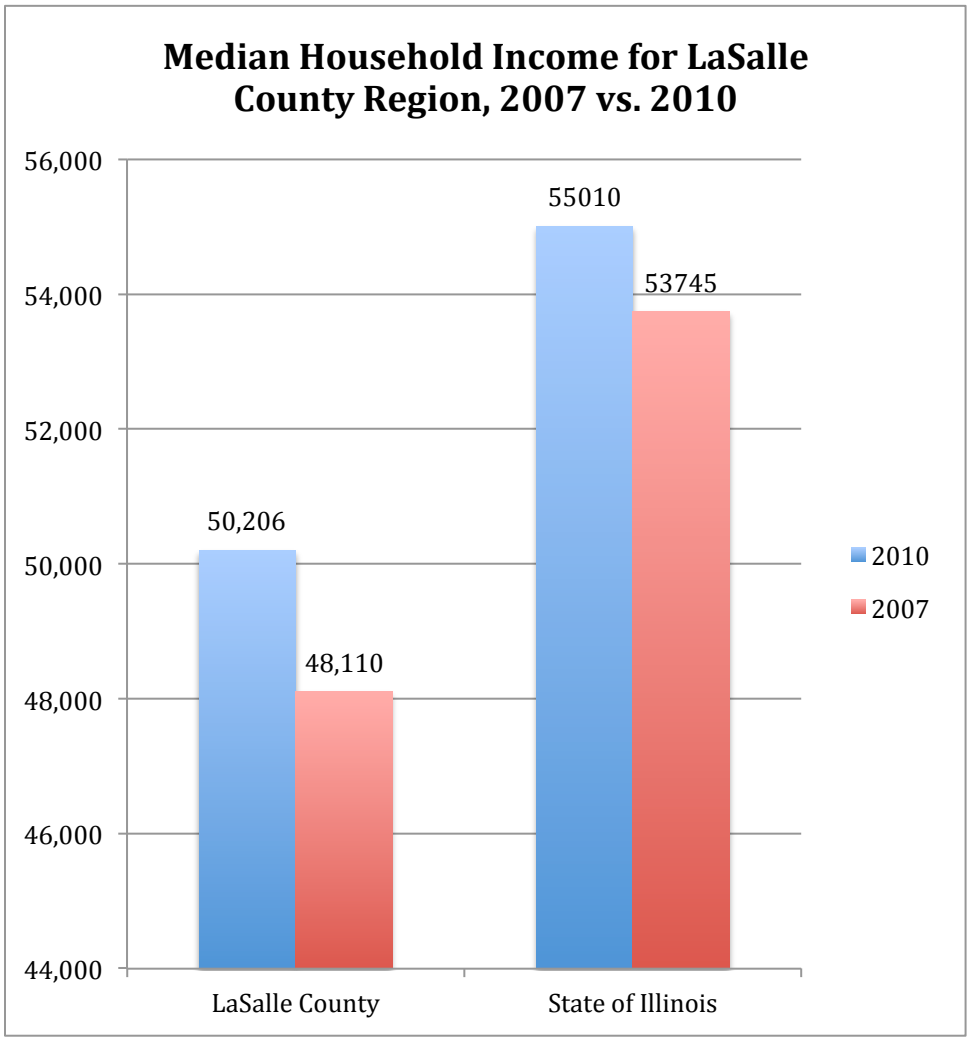
1.4 Economic information

Importance of the measure: Median income divides households into two segments with one half of households earning more than the median income and the other half earning less. Because median income is not significantly impacted by unusually high or low-income values, it is considered to be a more reliable indicator than average income. To live in poverty means to not have enough income to meet one's basic needs. Accordingly, poverty is associated with numerous chronic social, health, education, and employment conditions.

1.4.1 Median income level

For 2007 and 2010, the median household income in La Salle County lagged behind the State of Illinois median household income.

Table 1.4.1-1: Median Household Income for La Salle County Region, 2007 vs. 2010

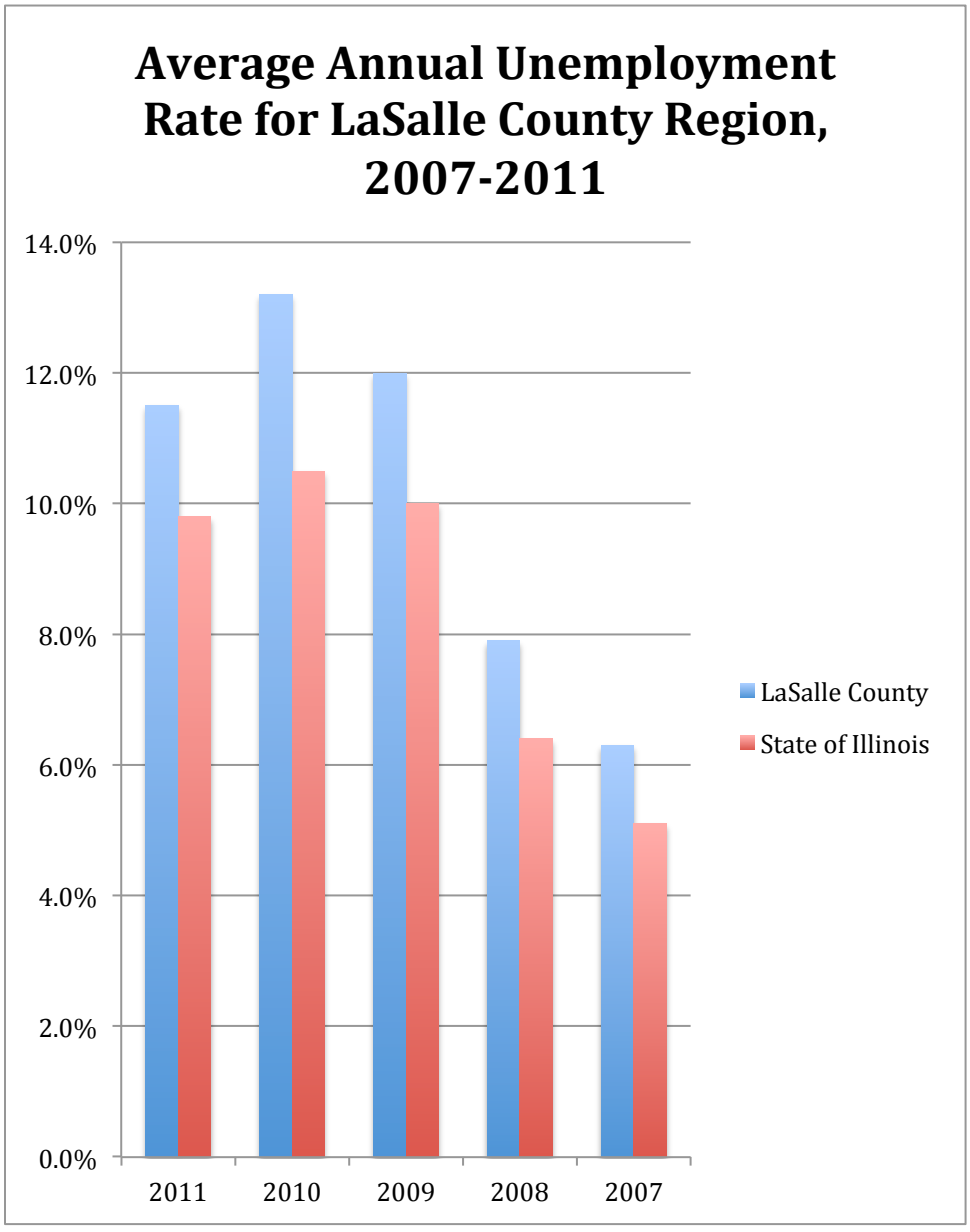


Source: 2007 & 2010 American Community Survey

1.4.2 Unemployment

The LaSalle County Region unemployment rate is higher than the State of Illinois unemployment rate. Between 2007 and 2010, the unemployment steadily increased from 6.3% in 2007 to a peak of 13.2% in 2010. Data from 2011 suggests the unemployment rate in LaSalle County was 11.5% compared to the overall State of Illinois unemployment rate of 9.8%.

Table 1.4.2-1: Average Annual Unemployment Rate for LaSalle County Region, 2007-2011

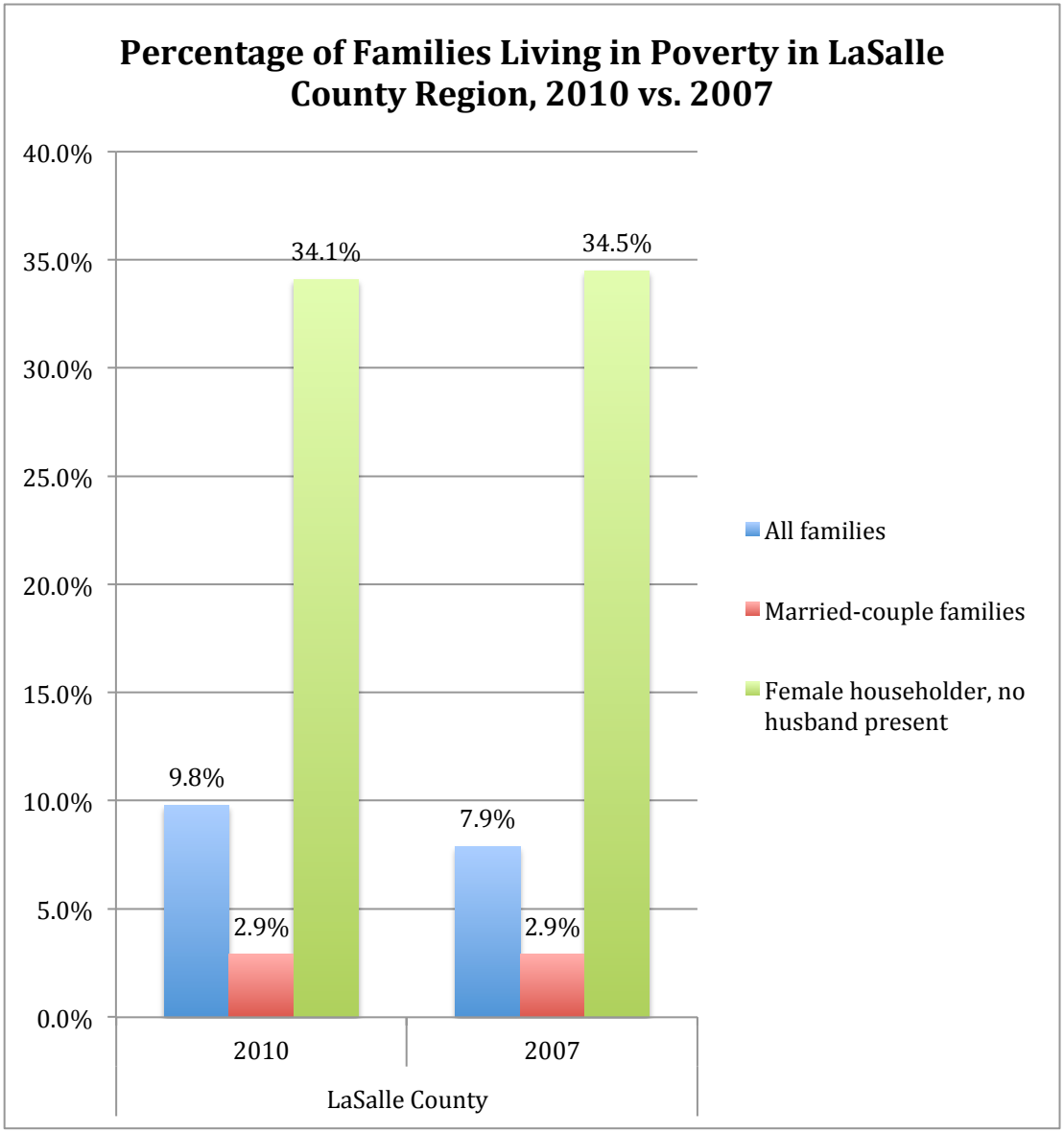


Source: Bureau of Labor Statistics

1.4.3 Families in poverty

Poverty has a significant impact on the development of children and youth. Poverty rates are significantly higher for single-mother led households compared to married-couple families and all families. In LaSalle County, the percentage of all families living in poverty increased between 2007 and 2010.

Table 1.4.3-1: Percentage of Families Living in Poverty in LaSalle County, 2010 vs. 2007



Source: 2010 and 2007 American Community Survey

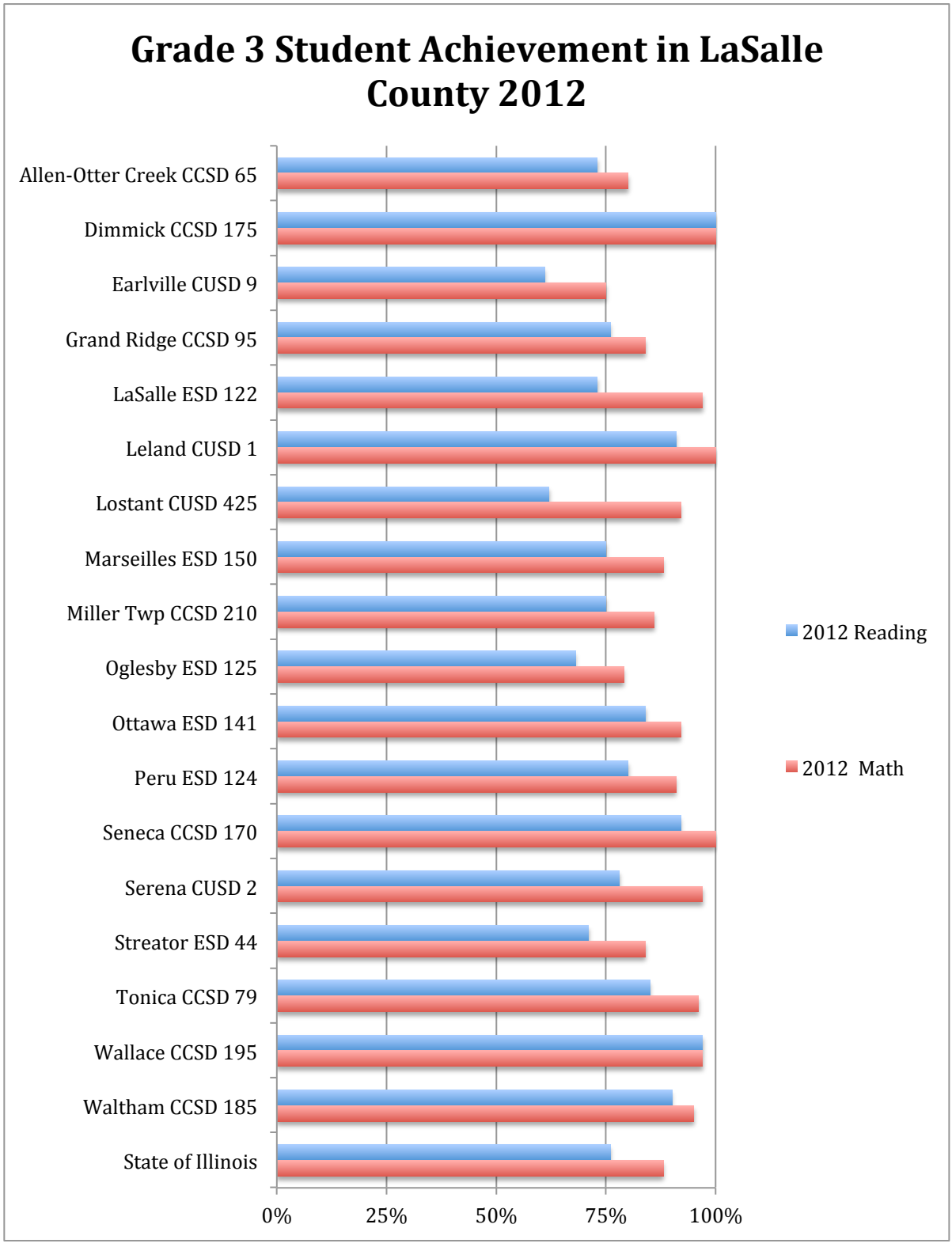
1.5 Education

Importance of the measure: According to the National Center for Educational Statistics, "the better educated a person is, the more likely that person is to report being in 'excellent' or 'very good' health, regardless of income" (NCES, 2005). Educational attainment and reading/math scores are well researched, with findings strongly related to an individual's propensity to earn a higher salary, gain better employment, and foster multifaceted success in life. As such, research suggests that the higher the level of educational attainment and the more successful children are in school, the better one's heath will be and the greater likelihood of one selecting healthy lifestyle choices.

1.5.1 3rd/8th grade reading and math

In 2012, approximately half of the school districts in LaSalle County had higher averages than the State of Illinois averages. However, six districts (Allen-Otter Creek, Earlville, Grand Ridge, Miller Twp, Oglesby, and Streator) scored lower than the State of Illinois 3rd grade math average and eight districts (Allen-Otter Creek, Earlville, LaSalle, Lostant, Marseilles, Miller Twp, Oglesby, and Streator) scored lower than the State of Illinois 3rd grade reading average.

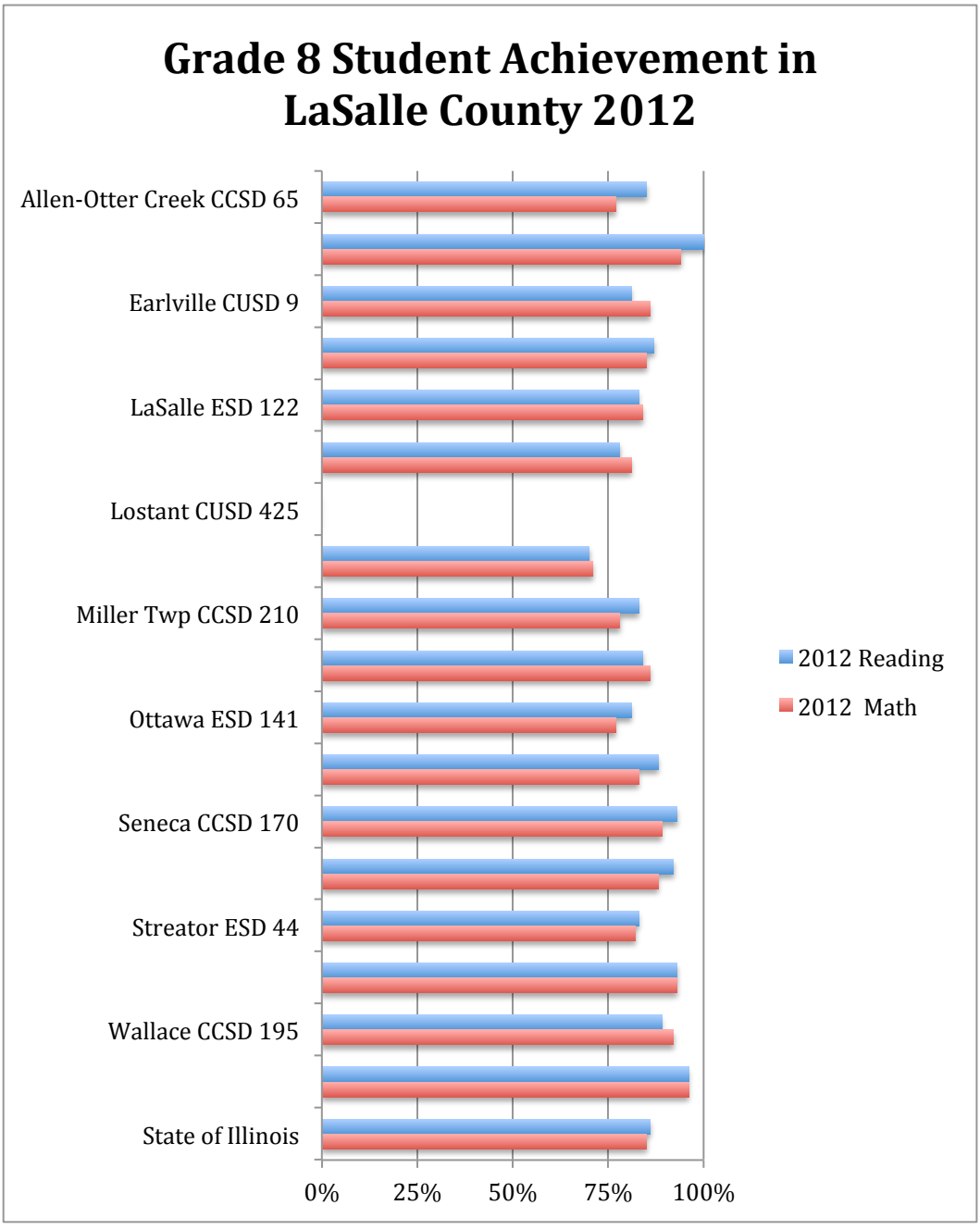
Table 1.5.1-1 Grade 3 Student Achievement in LaSalle County 2012



Source: Illinois State Board of Education, School Year 2012 District Report Card Summary

Similar to the 3rd grade scores, approximately half of the school districts in LaSalle County had higher averages than the State of Illinois averages. However, eight districts (Allen-Otter Creek, LaSalle, Leland, Marseilles, Miller Twp, Ottawa, Peru, and Streator) scored lower than the State of Illinois 3rd grade math average and nine districts (Allen-Otter Creek, Earlville, LaSalle, Leland, Marseilles, Miller Twp, Oglesby, Ottawa, and Streator) scored lower than the State of Illinois 3rd grade reading average.

Table 1.5.1-2 Grade 8 Student Achievement in LaSalle County 2012

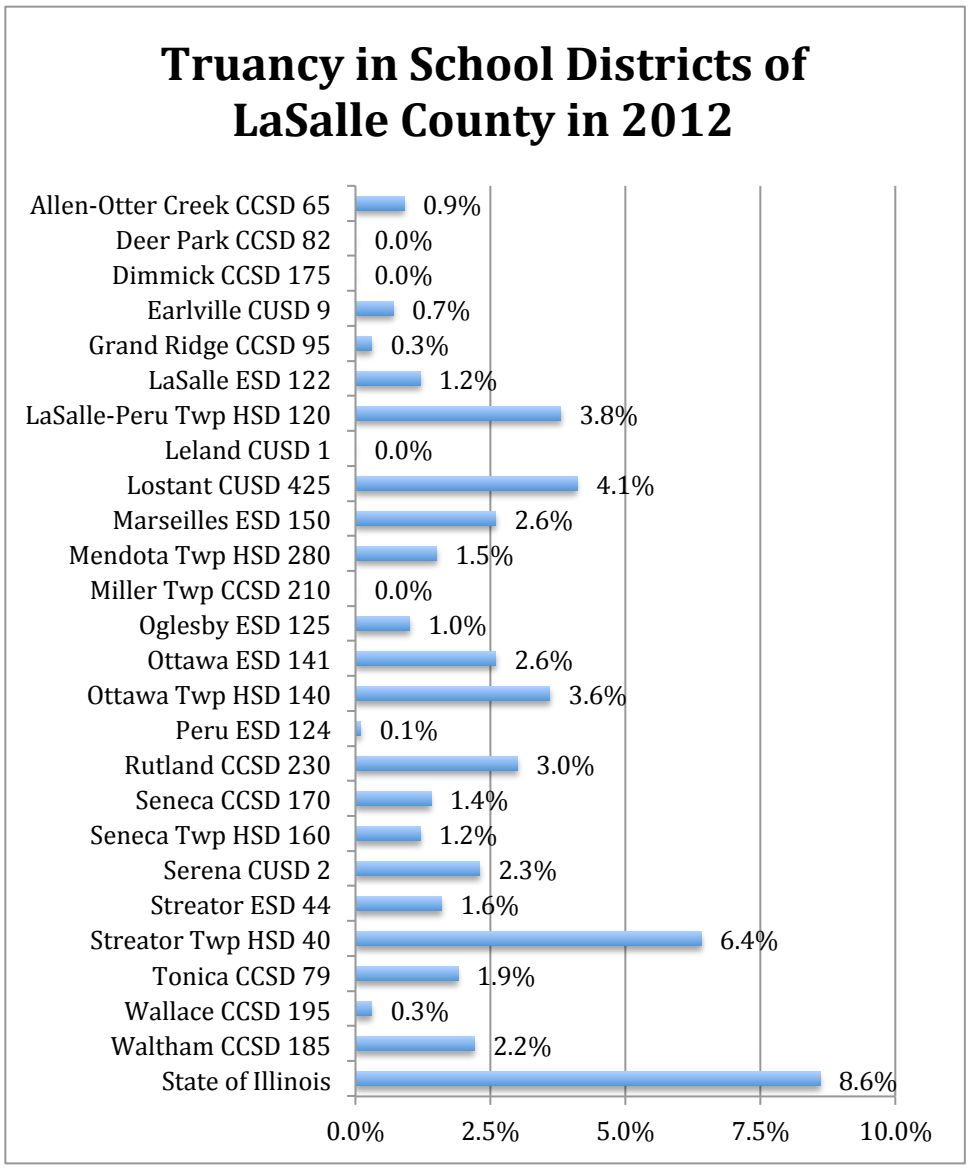


Source: Illinois State Board of Education, School Year 2010 District Report Card Summary

1.5.2 Truancy

Chronic truancy is a major challenge to the academic progress of children and young adults. The causes of truancy vary considerably for young children; however, truancy of middle- and high-school students is more likely a result of the inappropriate behavior and decisions of individual students. Primary school truancy often results from decisions and actions of the parents or caregivers of the children rather than the students. Zero school districts in LaSalle County exceed the State of Illinois average truancy rate for 2012.

Table 1.5.2-1 Truancy in School Districts of LaSalle County in 2012

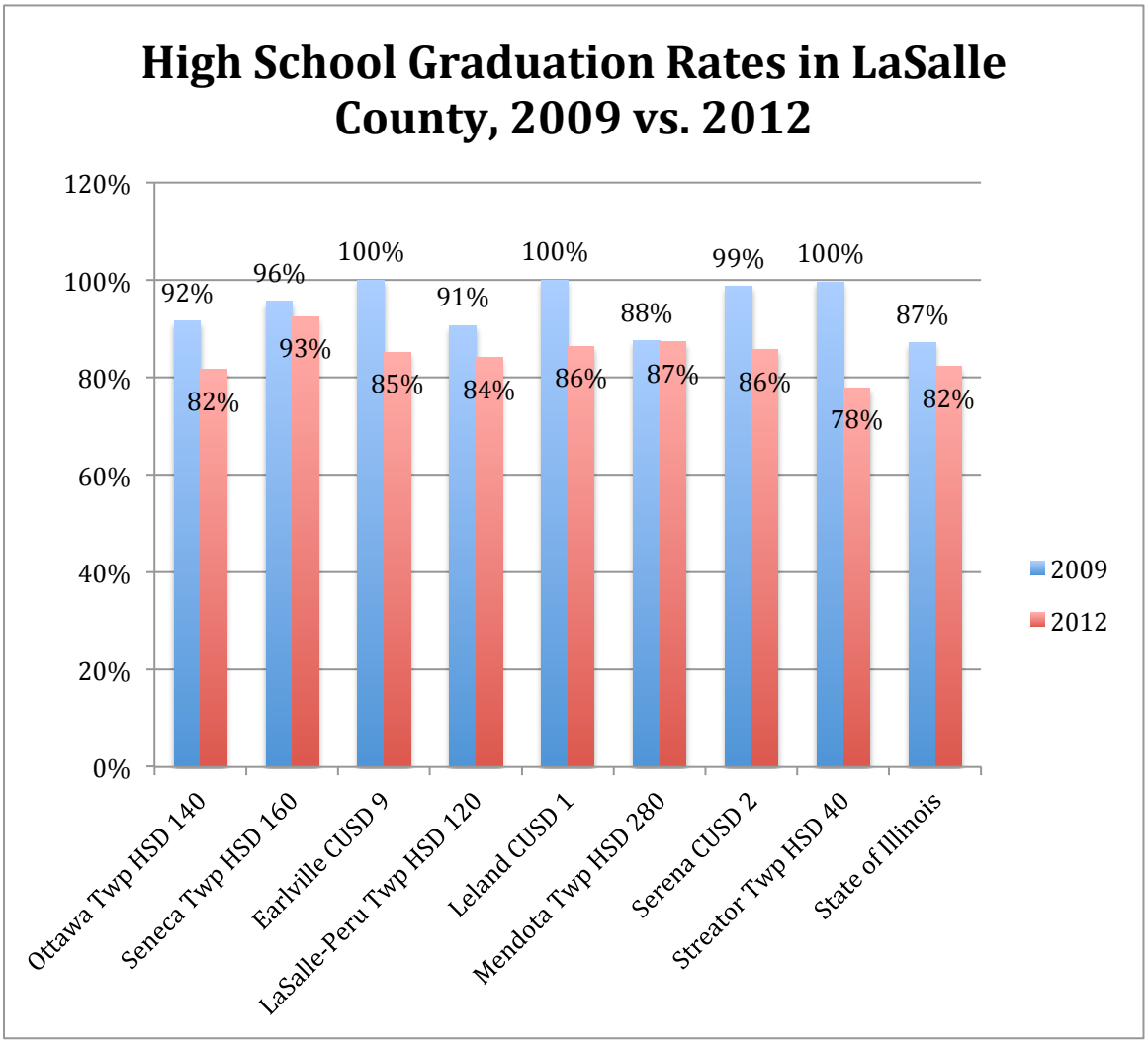


Source: Illinois State Board of Education, School Year 2012 District Report Card Summary

1.5.3 High School graduation rates

High school graduation rates in 2009 and 2012 in LaSalle County are above the state average (which is 87% and 82% for years 2009 and 2012, respectively), with the exception of the Streator Twp HSD 40 school district. Whereas the State of Illinois average dropped 5% between 2009 and 2012, six of the eight LaSalle County school districts greatly exceeded this amount including Ottawa Twp HSD 140 (-10%), Earlville CUSD 9 (-15%), LaSalle-Peru Twp HSD 120 (-7%), Leland CUSD 1 (-14%), Serena CUSD 2 (-13%), and Streator Twp HSD 40 (-22%).

Table 1.5.3-1 High School Graduation Rates in LaSalle County, 2009 vs. 2012



Source: Illinois State Board of Education, School Year 2009 & 2012 District Report Card Summary

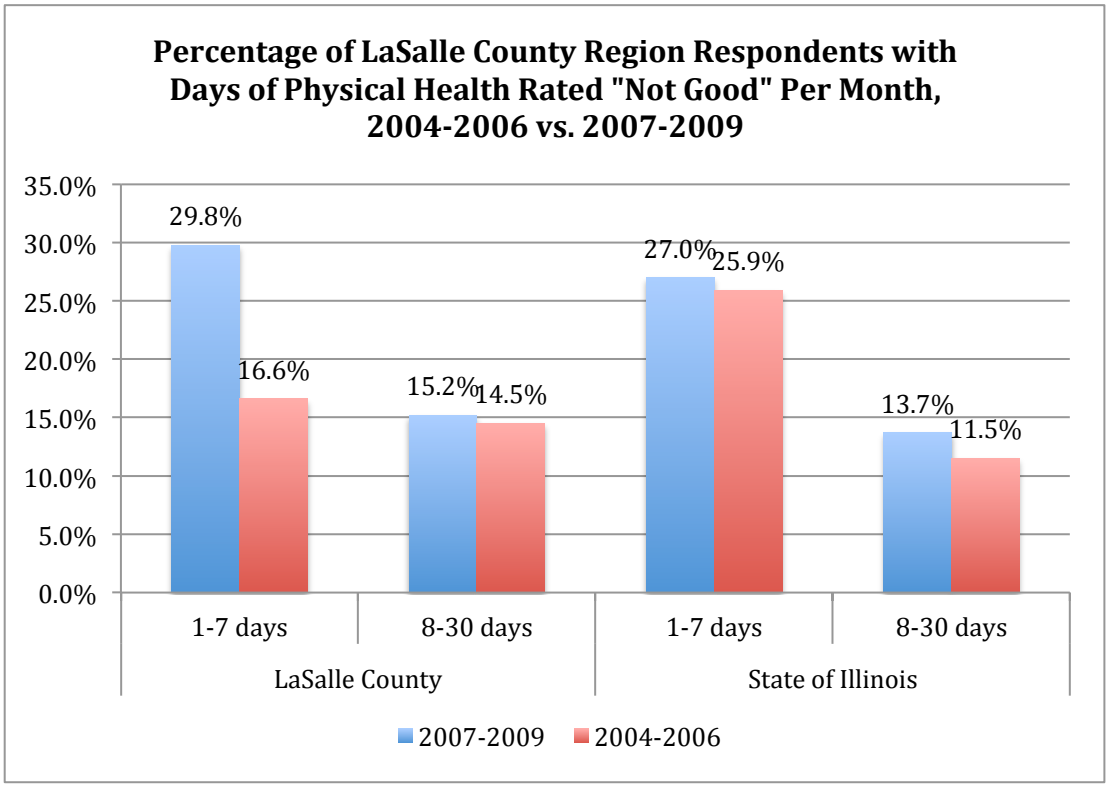
1.6 People with Disabilities

Importance of the measure: According to the US Census Bureau, a disability can be a long-lasting physical, mental or emotional condition. This condition can make it difficult for a person to do activities such as walking, climbing stairs, dressing, bathing, learning, or remembering. This condition can also impede a person from being independent, from being able to go outside the home alone or to work at a job or business. This condition can also impact a person's ability to achieve an education and can influence a person's ability to access appropriate health care.

1.6.1 Physical

Approximately 30% of residents in LaSalle County reported they had experienced 1-7 days with poor physical health per month between 2007 and 2009. These percentages are greater than the State of Illinois average for the same time frame. With regard to residents experiencing 8-30 days with poor physical health per month, LaSalle County residents were slightly above below the state average for the same time frame.

Table 1.6.1-1 Percentage of LaSalle County Region Respondents with Days of Physical Health Rated "Not Good" Per Month, 2004-2006 vs. 2007-2009

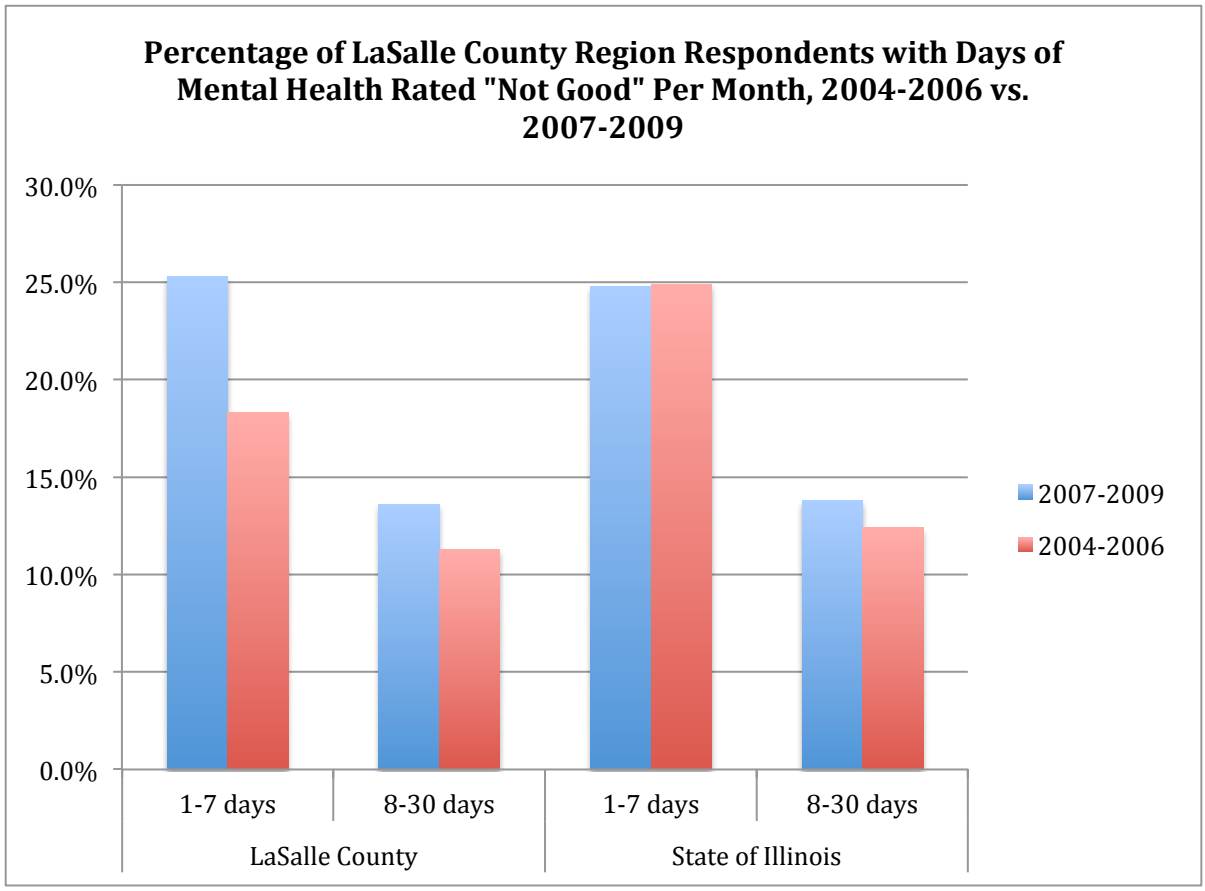


Source: Illinois Behavioral Risk Factor Surveillance System

1.6.2 Mental

Approximately 25% of residents in LaSalle County reported they had experienced 1-7 days with poor mental health per month between 2007 and 2009. These percentages are greater than the State of Illinois average for the same time frame. With regard to residents experiencing 8-30 days with poor mental health per month, residents were slightly below the state average for the same time frame.

Table 1.6.1-2 Percentage of LaSalle County Region Respondents with Days of Mental Health Rated "Not Good" Per Month, 2004-2006 vs. 2007-2009



Source: Illinois Behavioral Risk Factor Surveillance System

Demographic Profile: Strategic Implications

Changing demographics and health care:

Recent data in May 2012 from the Kaiser Family Foundation[1] and Congressional Budget Office[2] suggest that the number of individuals 65 years and older in the United States will increase by one-third between 2012 and 2022. With the changing demographics, it is anticipated an increase in chronic conditions such as diabetes, asthma, and heart disease, and obesity will contribute to the growing cost of health care[3]. In addition, advances in medical technology and medicine may enable individuals to live longer, thus requiring extensive medical care.

These national trends are prevalent in the State of Illinois and LaSalle County Region as seen in Chapter 1. Of particular note, the population of individuals 60-84 years of age increased by nearly 3% in LaSalle County 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 LaSalle County Region will experience an increase in the number of elderly individuals living with disabilities and chronic conditions.

Educational attainment and health care:

For over two decades, empirical research strongly suggests a positive relationship between education and health[4,5,6,7] (Adams, 2002; House et. al, 1990; Ross & Wu, 1995; Sander, 1999). The predominant way education impacts better health is through enhancing the decision-making capabilities of an individual. In this way, when an individual is better educated, he or she tends to have a better understanding of symptoms, be better equipped to explain symptoms to a doctor, and make better choices with regard to individual health inputs. Accordingly, more effective treatments and positive outcomes result later in life.

A symbiotic relationship exists between health and education. Consider that healthier children miss fewer days of school and are more "ready to learn." Success in school begins prior to kindergarten as new research on cognitive development shows the importance of health, nutrition, and intellectual stimulation during the first years of life. To be prepared to learn in kindergarten, children need pre-literacy skills. They must also be able to make and keep friends, develop positive relationships with adults, and feel a sense of opportunity and excitement for the world around them. As their child's first teacher, much of this responsibility falls upon parents.

Research tells us the most reliable predictor of educational success for children is whether they are reading at grade level by the end of 3rd grade. Note that according to data presented in Chapter 1, while most school districts are above the State of Illinois averages, certain school districts (e.g., Allen-Otter Creek, Earlville, LaSalle, Leland, Marseilles, Miller Twp, Oglesby, Ottawa, and Streator) scored lower than the State of Illinois 3rd grade reading average.

According to research, a child from a low-income family who completes algebra has virtually the same chance of going to college as a child from an upper-income family who passes the course. Thus, it is not about the math, it's about learning to problem solve.

Economic well-being and health care:

Educational attainment also impacts economic well-being. Research suggests that the more education obtained by individuals, the better jobs these individuals earn[8]. Better jobs yield greater earning and benefits, including health insurance. Furthermore, if educated individuals are unemployed, research suggests that these individuals are unemployed for shorter durations than less educated individuals[9]. For many individuals, insurance coverage is a primary consideration when evaluating whether or not to seek medical treatment. Using health care appropriately, instead of the ER in non-emergencies, is better for patients and lowers cost of health care to society. Accordingly, the uninsured are less likely to access preventive care or seek early treatment of illness and therefore may miss more time at work. Similarly, it is difficult to hold a job when a person is not healthy.

Unemployment leads to poverty and has far-reaching impacts within society. Poverty disproportionately impacts families and children. Note that between 2007 and 2010, families living in poverty in LaSalle County have increased almost 2%. These considerations are compounded by the fact that over 35% of single mothers in LaSalle County are living in a state of poverty. Additionally, early sexual activity can contribute to child poverty. The rates for births to teenage mothers in LaSalle County are still significantly higher than the State average.

Endnotes for Chapter 1

[1] Kaiser Family Foundation, "Health Care Costs: Key Information on Health Care Costs and Their Impact," May 2012.

[2] Congressional Budget Office, *CBO's 2011 Long-Term Budget Outlook*, June 2011, p.ix, http://www.cbo.gov/ftpdocs/122xx/doc12212/06-21-Long-Term_Budget_Outlook.pdf

[3] Kaiser Family Foundation, "Health Care Costs: Key Information on Health Care Costs and Their Impact," May 2012.

[4] Adams, S.J. (2002). Educational attainment and health: Evidence from a sample of older adults. *Education Economics*, 10(1), 97-109.

[5] House, J., Kessler, R., Herzog, A., Mero, R., Kinney, A. & Breslow, M. (1990). Age, socioeconomic status, and health. *The Milbank Quarterly*, 68, 383-411.

[6] Ross, C. & Wu, C. (1995). The links between education and health. *American Sociological Review*, 60, 719-745.

[7] Sander, W. (1999). Cognitive ability, schooling, and the demand for alcohol by young adults, *Education Economics*, 7, 53-66.

[8] Willis, R. (1986). Wage determinants: a survey and reinterpretation of human capital earnings functions. In: Ashenfelter, O. & Layard, R. (Eds). *Handbook of Labor Economics*, Volume I (Amsterdam, North-Holland Publishing Company).

[9] Moen, E. (1999). Education, ranking, and competition for jobs. *Journal of Labor Economics*, 17, 694-723.

CHAPTER 2. PREVENTION

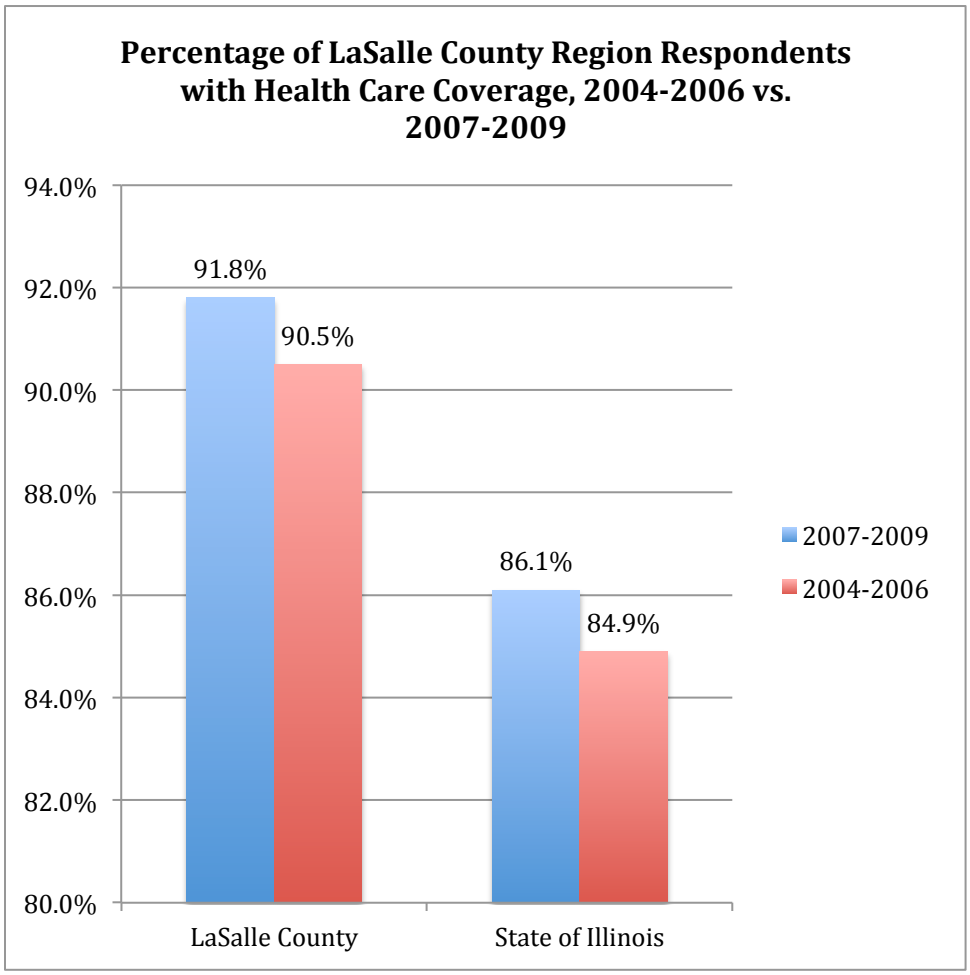
2.1 Accessibility

Importance of the measure: It is critical for health care services to be accessible to the constituencies who will take advantage of its benefits. Therefore, accessibility to health care must address both the financial costs associated with health care and the supply and demand of medical services.

2.1.1 Insurance Coverage

With regard to medical insurance coverage, data gathered from the Illinois Behavioral Risk Factor Surveillance System suggest that residents in the LaSalle County Region possess health care coverage at a higher percentage than the State of Illinois average.

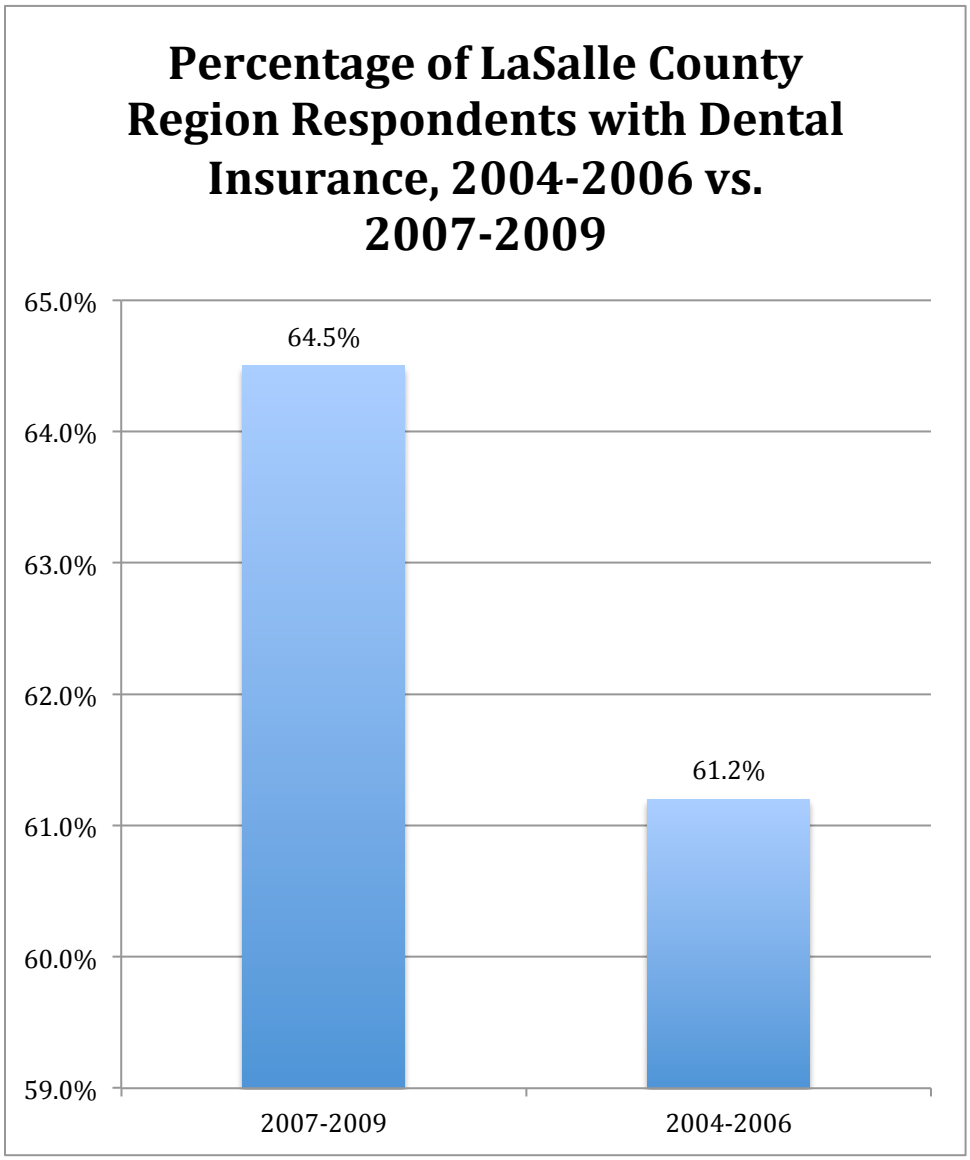
Table 2.1.1-1 Percentage of LaSalle County Region Respondents with Health Care Coverage, 2004-2006 vs. 2007-2009



Source: Illinois Behavioral Risk Factor Surveillance System

With regard to dental insurance, the most recent data from the Illinois BRFSS indicate 64.5% of LaSalle County residents possessed dental insurance coverage in 2007-2009 compared to 61.2% of LaSalle County residents in 2004-2006.

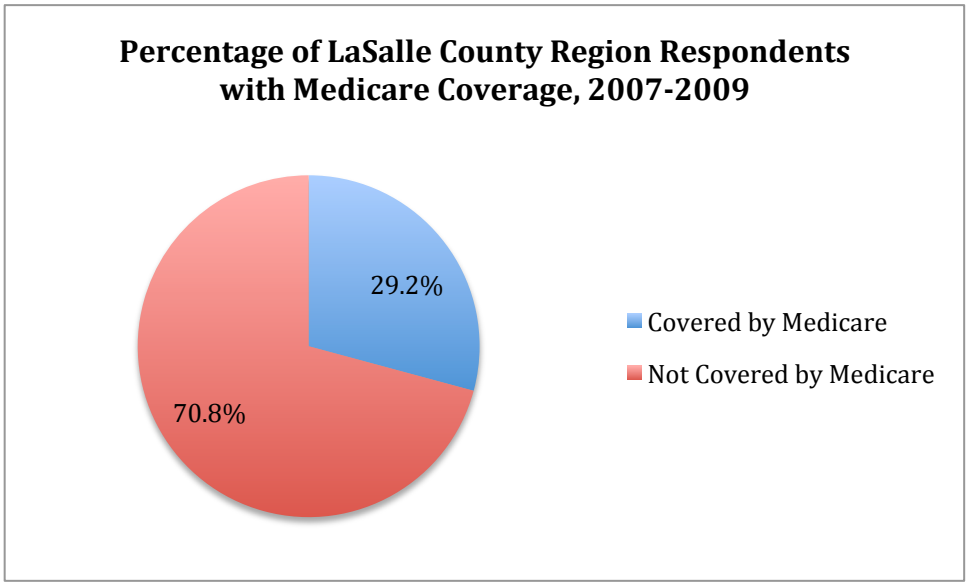
Table 2.1.1-2 Percentage of LaSalle County Region Respondents with Dental Insurance, 2004-2006 vs. 2007-2009



Source: Illinois Behavioral Risk Factor Surveillance System

With regard to Medicare Coverage, 29% of LaSalle County residents received Medicare coverage between 2007 and 2009.

Table 2.1.1-3 Percentage of LaSalle County Region Respondents with Medicare Coverage, 2007-2009



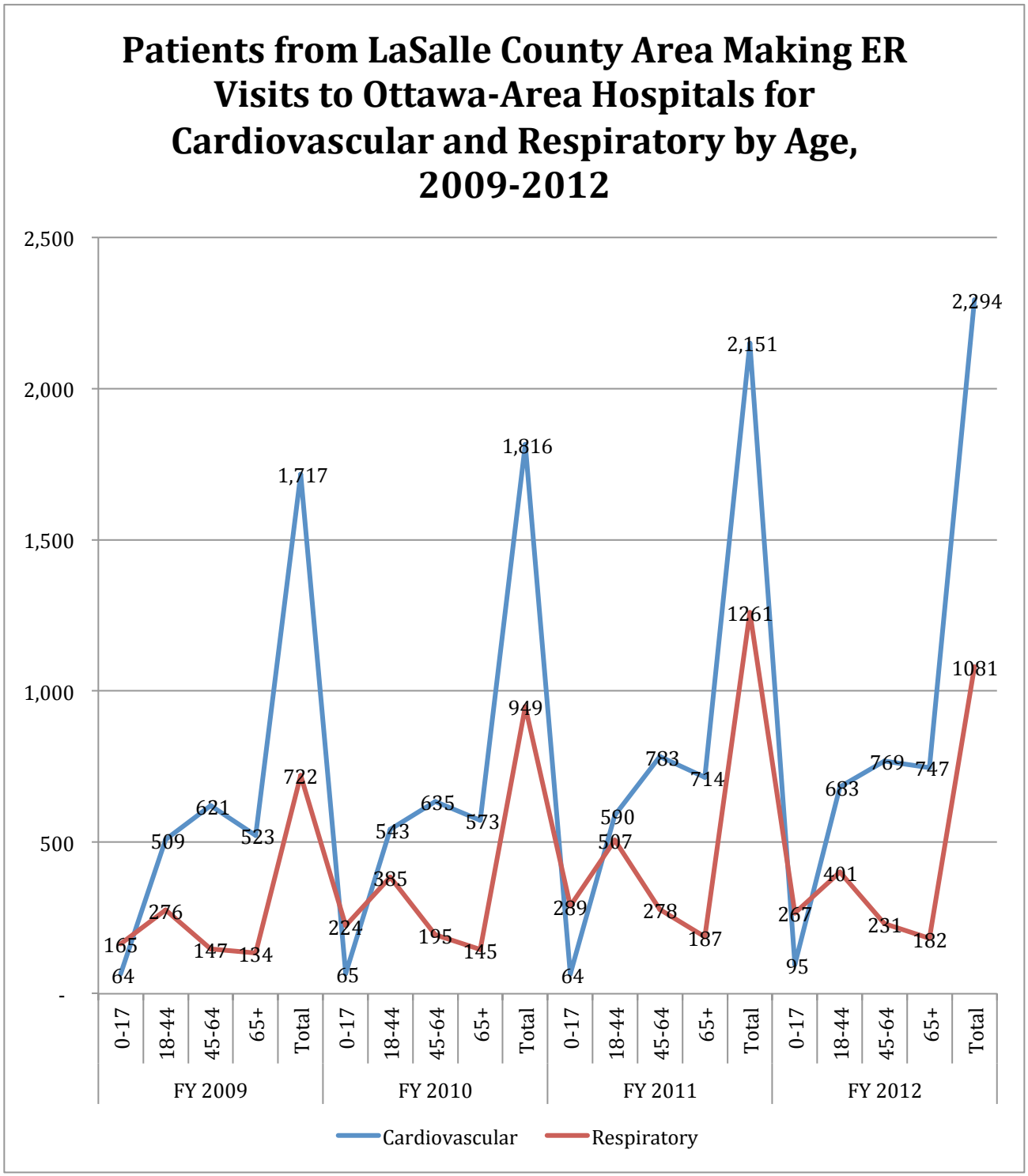
Source: Illinois Behavioral Risk Factor Surveillance System

2.1.2 Access and utilization

Physician capacity can be measured using various metrics. One commonly utilized method is to evaluate what percentage of individuals have a usual health care provider. A usual health care provider signifies that these individuals are more likely to partake in wellness check-ups and less likely to utilize emergency room visits as their primary health care service.

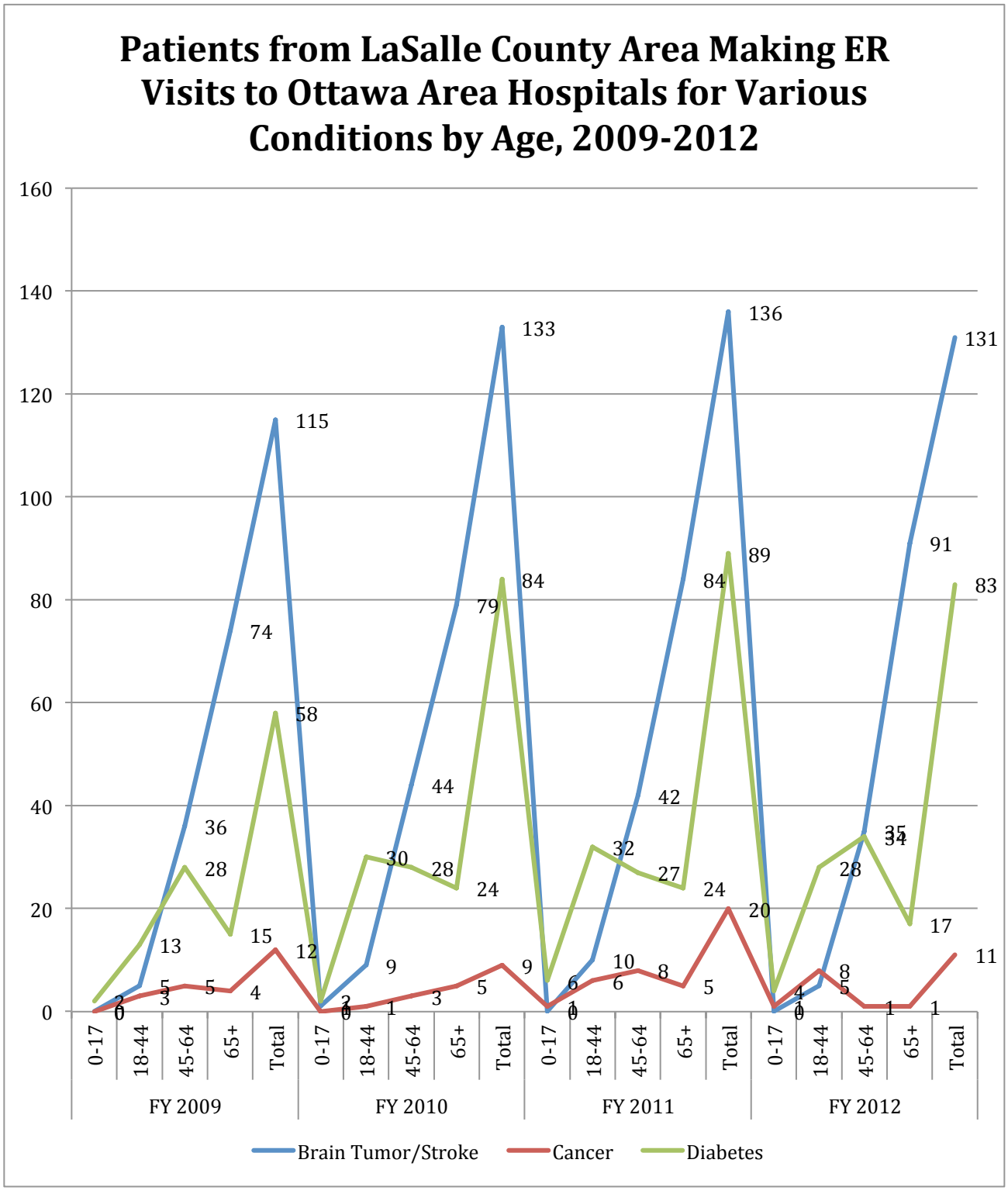
Tables 2.1.2-1 and 2.1.2-2 reflect the number of emergency room visits by condition. Of particular note, the number of emergency room visits for cardiovascular conditions has increased for the Ottawa-area hospitals (defined as OSF/Saint Elizabeth Medical Center, St. Mary's Hospital, and Illinois Valley Community Hospital) by 34% between 2009 and 2012. The number of emergency room visits for respiratory conditions, including, asthma, has increased by 50% during the same time frame. Emergency room visits attributed to cancer have decreased from a high of 20 in 2010 to 11 in 2012. Over the same time frame, emergency room visits attributed to diabetes (+43%) and brain tumor/stroke (+14%) have increased. Note however that as of 2010, Prompt Care was no longer counted as ER visits. It now falls under physician office visits. This may impact year-to-year changes, so growth rates should be interpreted with caution.

Table 2.1.2-1 Patients from LaSalle County Area Making ER Visits to Ottawa-Area Hospitals for Cardiovascular and Respiratory by Age, 2009-2012



Source: COMPData 2012

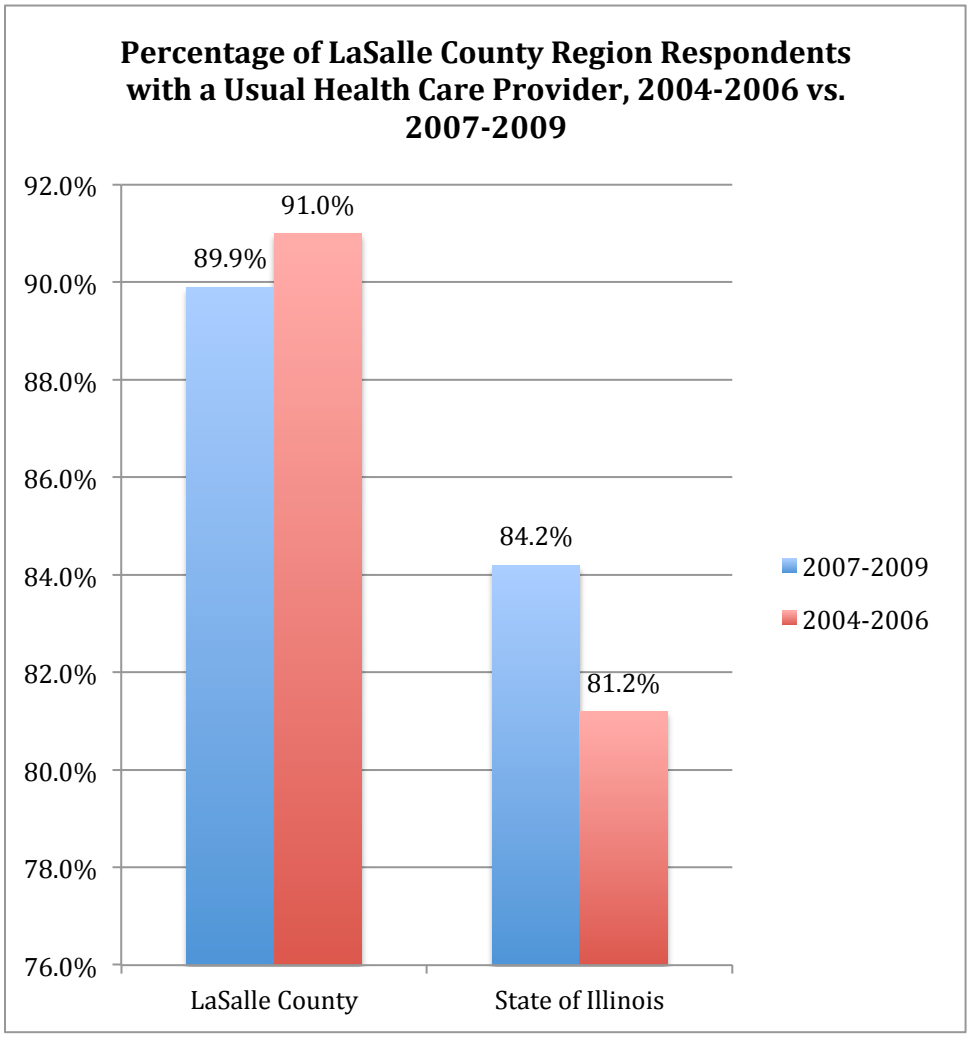
Table 2.1.2-2 Patients from LaSalle County Area Making ER Visits to Ottawa Area Hospitals for Various Conditions by Age, 2009-2012



Source: COMPData 2012

In the LaSalle County Region, the most recent data indicate approximately 90% of residents utilize a regular health care provider. Between 2004-2006 and 2007-2009, the percentage of residents in LaSalle County reporting a usual health care provider decreased by -1.1%. On the contrary, the percentage of State of Illinois residents increased by 3.0% during the same time frame.

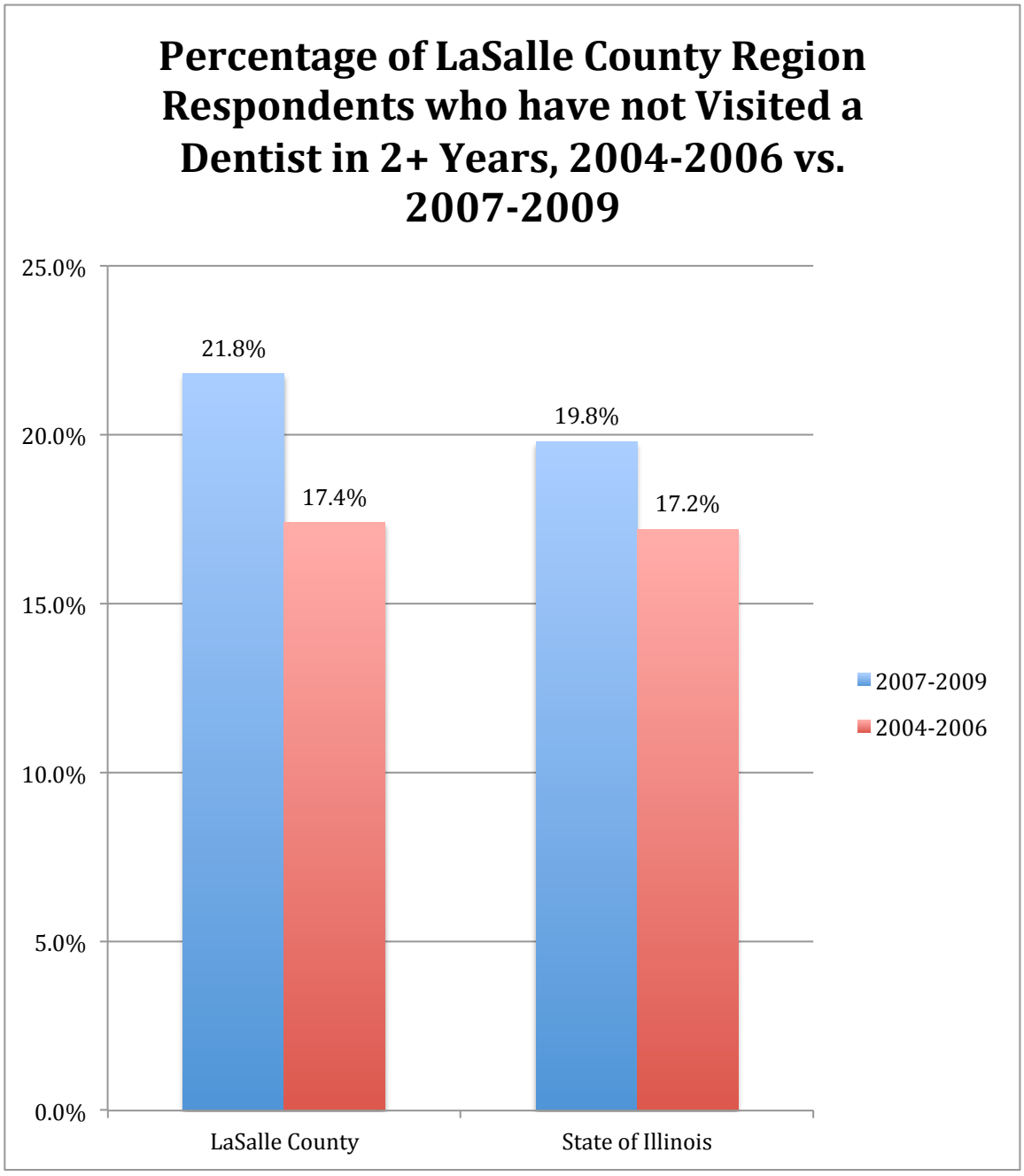
Table 2.1.2-3 Percentage of LaSalle County Region Respondents with a Usual Health Care Provider, 2004-2006 vs. 2007-2009



Source: Illinois Behavioral Risk Factor Surveillance System

Another metric to gain insight into the capacity of physicians is the percentage of residents who have not visited physicians within two years. With regard to the capacity of dentists in the LaSalle County lags significantly behind the State of Illinois average for 2007-2009. Furthermore, LaSalle County denoted negative growth in the percentage of respondents who have not visited a dentist in two or more years.

Table 2.1.2-4 Percentage of LaSalle County Region Respondents who have not Visited a Dentist in 2+ Years, 2004-2006 vs. 2007-2009



Source: Illinois Behavioral Risk Factor Surveillance System

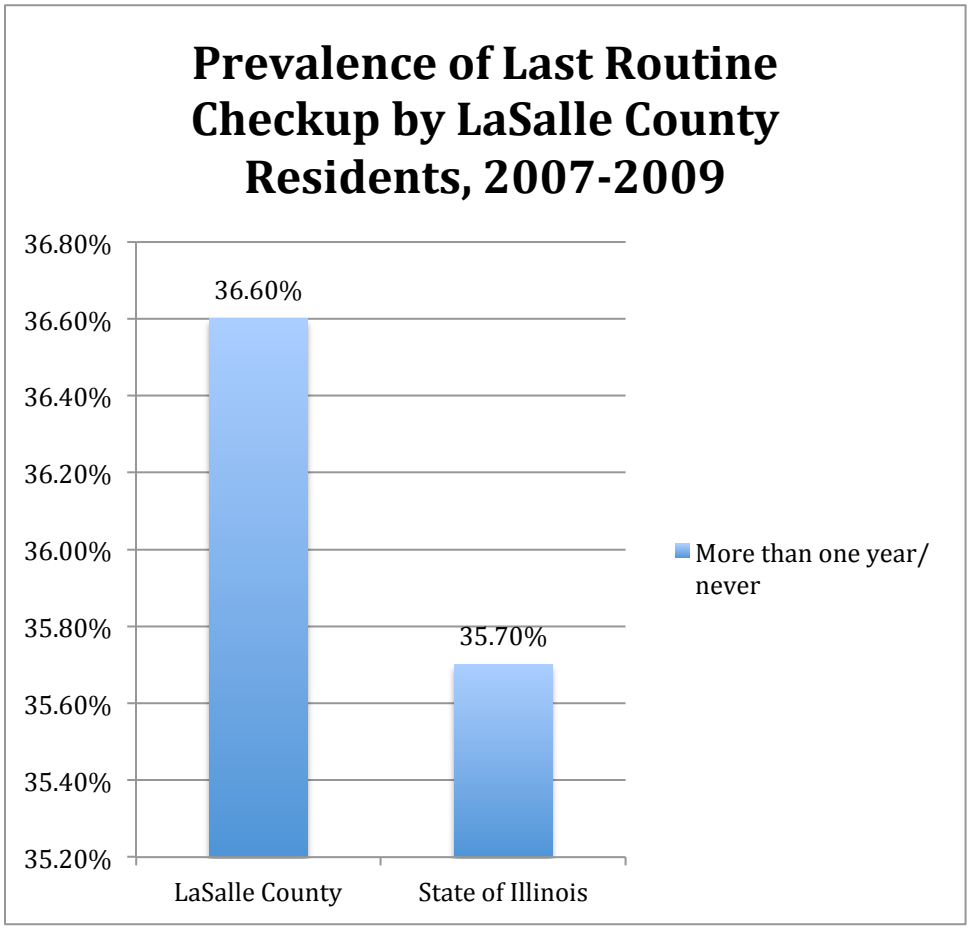
2.2 Wellness

Importance of the measure: Preventative health care measures, including scheduling routine well-visits, engaging in a healthy lifestyle, and undertaking screenings for diseases, are essential to combating morbidity and mortality and help reduce health care costs.

2.2.1 Check up

Numerous health problems can be minimized when detected early. Therefore regularly scheduled routine checkups can be very important. According to the latest data from the Illinois BRFSS, approximately 64% of residents in the LaSalle County Region report having had a routine checkup within the last year. In addition, 36.6% of LaSalle County residents report that it has been more than one year since their last check-up or they have never had one. This statistic is worse than the State of Illinois average.

Table 2.2.1-1: Prevalence of Last Routine Checkup by LaSalle County Residents, 2007-2009



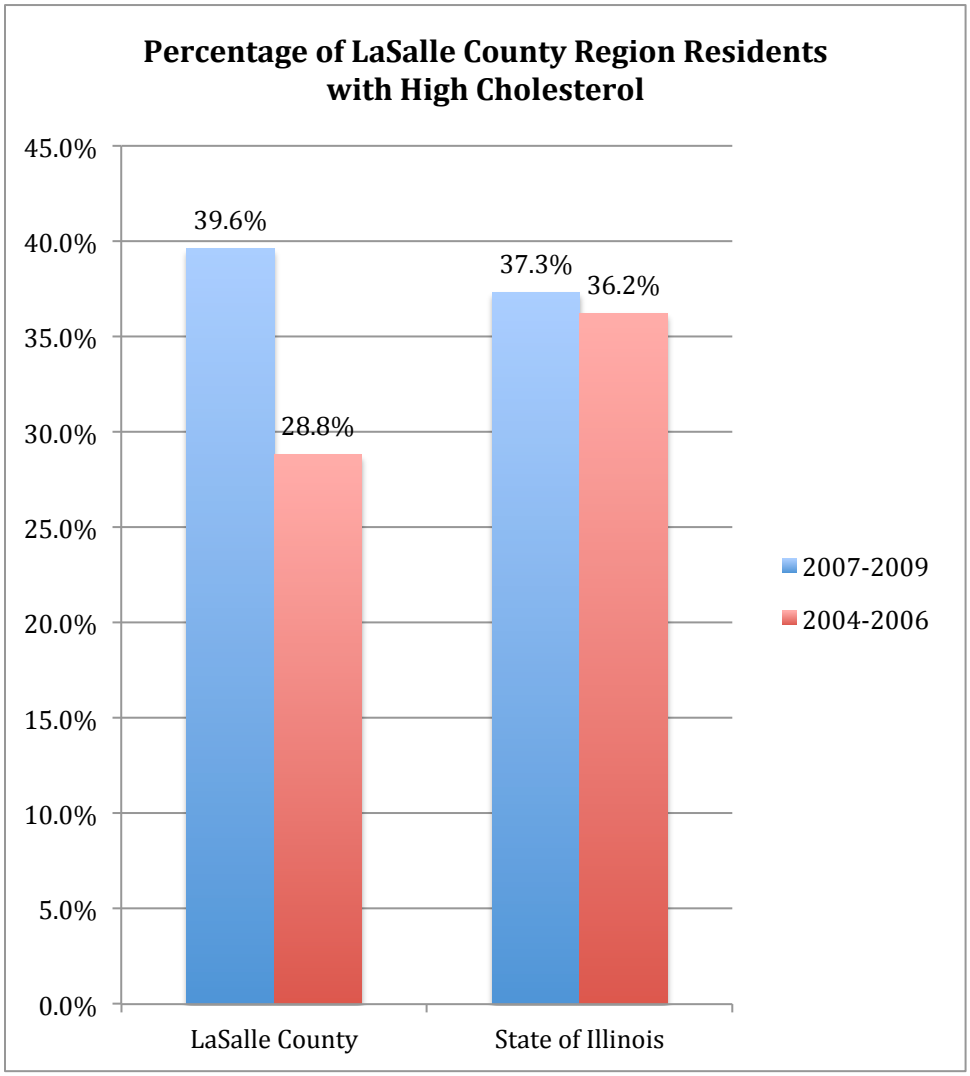
Source: Illinois Behavioral Risk Factor Surveillance System

2.2.2 Early detection

Residents in the LaSalle County Region report varying prevalence of high cholesterol. The percentage of residents who report they have high cholesterol is higher in LaSalle County (39.6%) than the State of Illinois average of 37.3%. However, the growth rate from 2004-2006 to 2007-2009 for the State of Illinois was 1.2%. The growth rate in the percentage of residents reporting high blood pressure increased in LaSalle County for the same time frame was 37.5%, considerably higher than the state average.

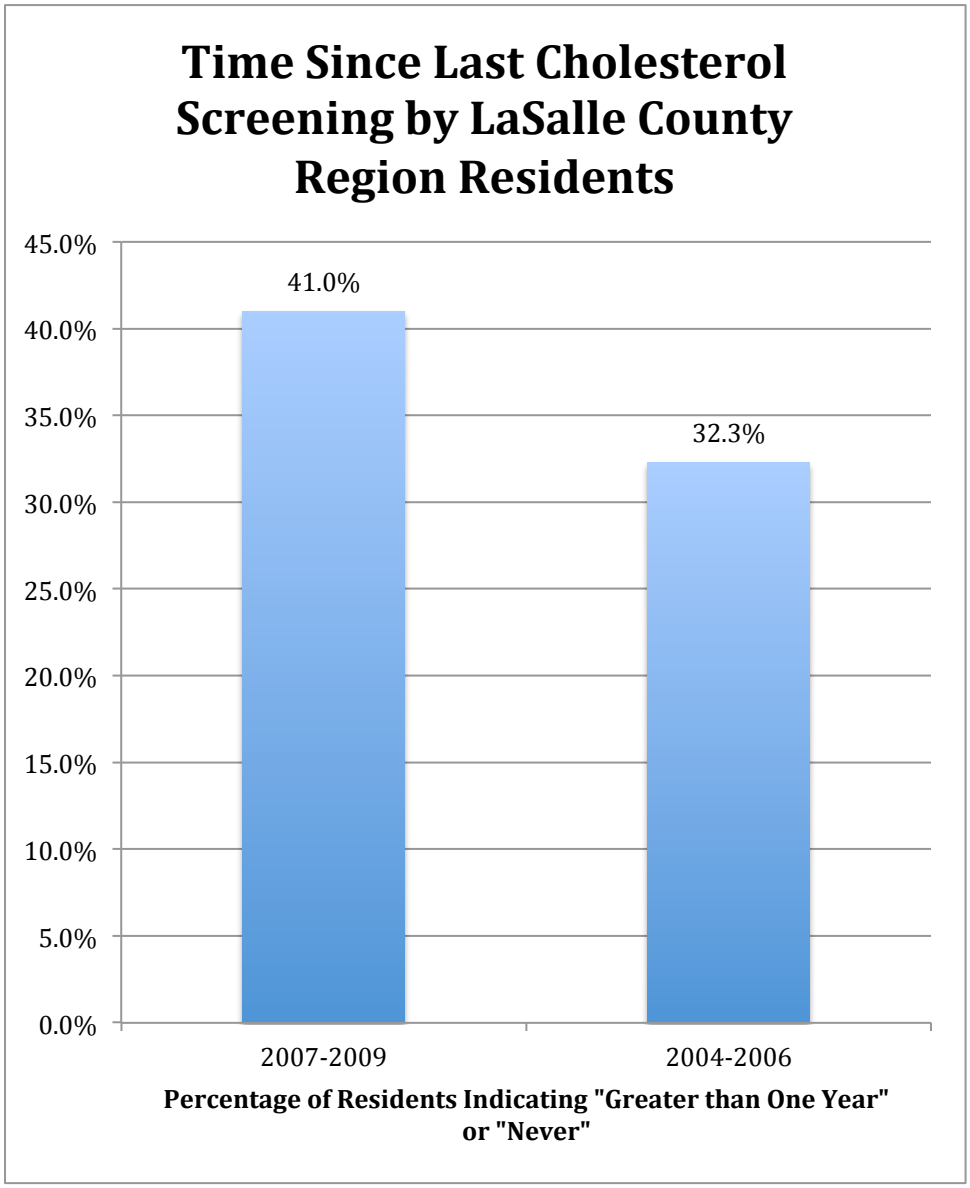
In addition, approximately 60% of residents in the LaSalle County Region report having had a cholesterol screening within the last year. These data for 2007-2009 are lower than the State of Illinois average of 68.4%.

Table 2.2.2-1: Percentage of LaSalle County Region Residents with High Cholesterol



Source: Illinois Behavioral Risk Factor Surveillance System

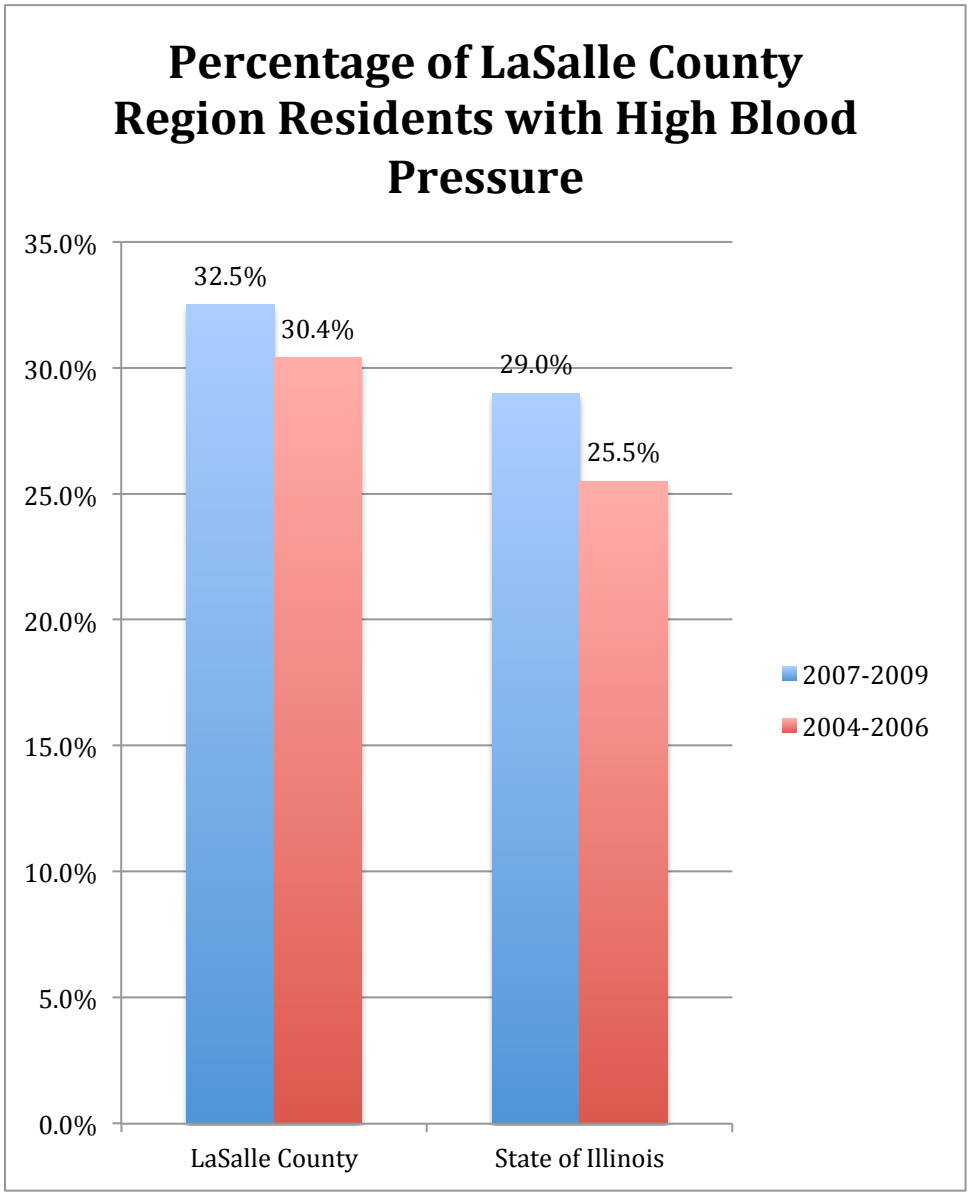
Table 2.2.2-2: Time Since Last Cholesterol Screening by LaSalle County Region Residents



Source: Illinois Behavioral Risk Factor Surveillance System

With regard to high blood pressure, the residents in LaSalle County report a higher percentage of individuals with high blood pressure than residents in the State of Illinois as a whole for 2007-2009 and 2004-2006.

Table 2.2.2-3: Percentage of LaSalle County Region Residents with High Blood Pressure

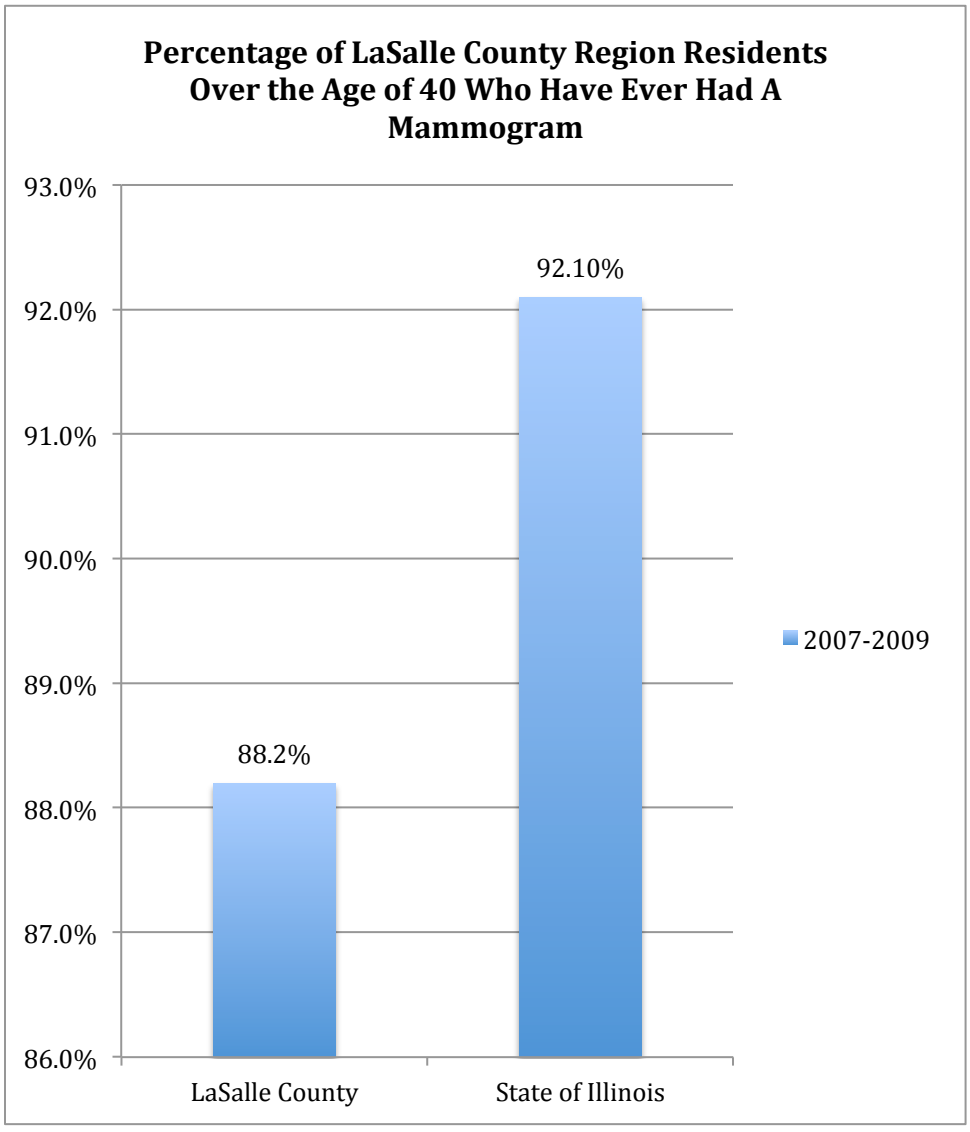


Source: Illinois Behavioral Risk Factor Surveillance System

Mammograms and PSA tests help to screen individuals for breast and prostate cancers. With regard to mammograms, 88.2% of individuals over the age of 40 in LaSalle County report that they have had a mammogram at some point in their life. These data are significantly lower that the State of Illinois average of 92.1%.

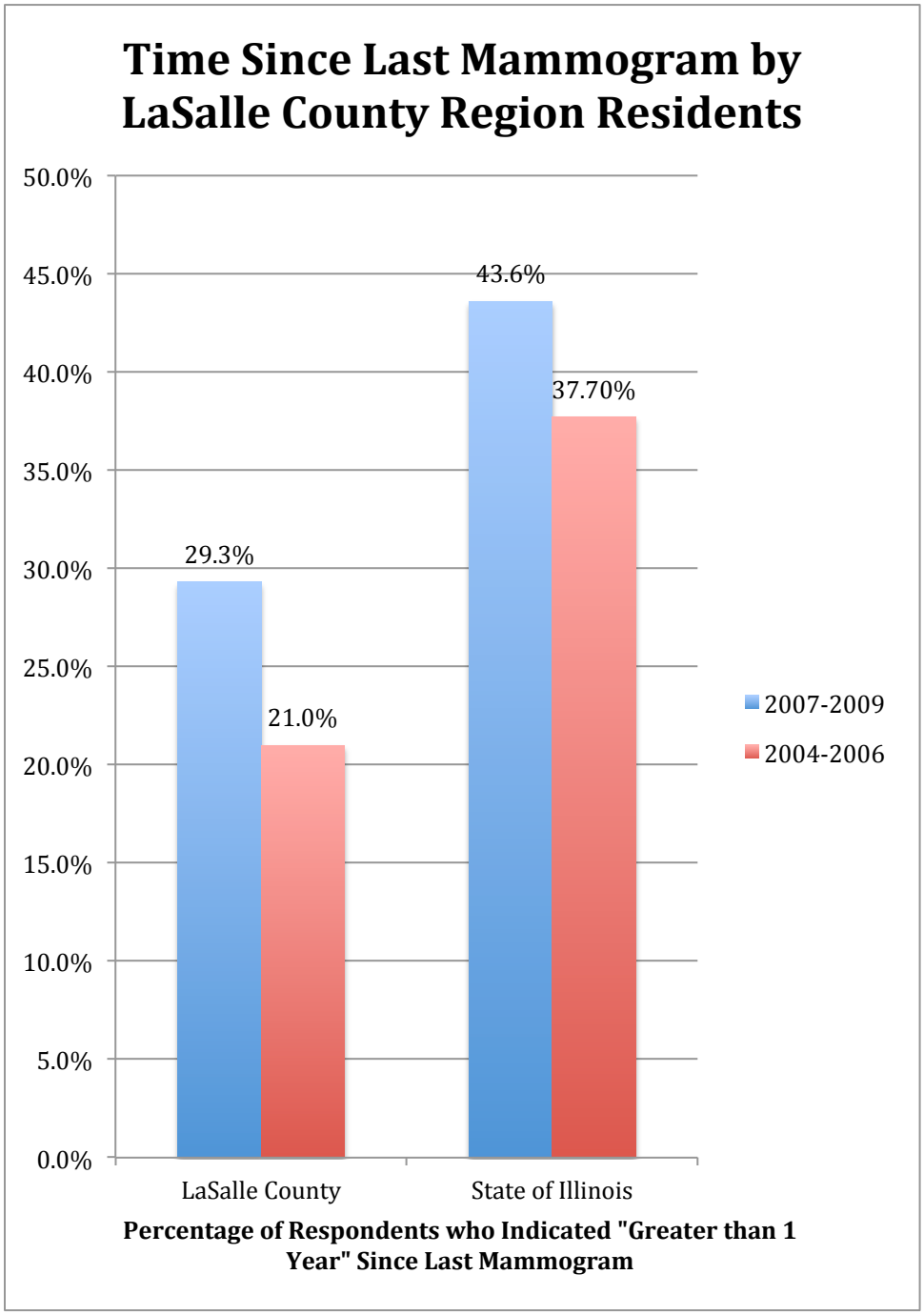
With regard to the time elapsed since one's last mammogram, nearly 70% of residents from LaSalle County reported they had had a mammogram within one year or less. This statistic is significantly better than the State of Illinois average.

Table 2.2.2-4 Percentage of LaSalle County Region Residents Over the Age of 40 Who Have Ever Had a Mammogram



Source: Illinois Behavioral Risk Factor Surveillance System

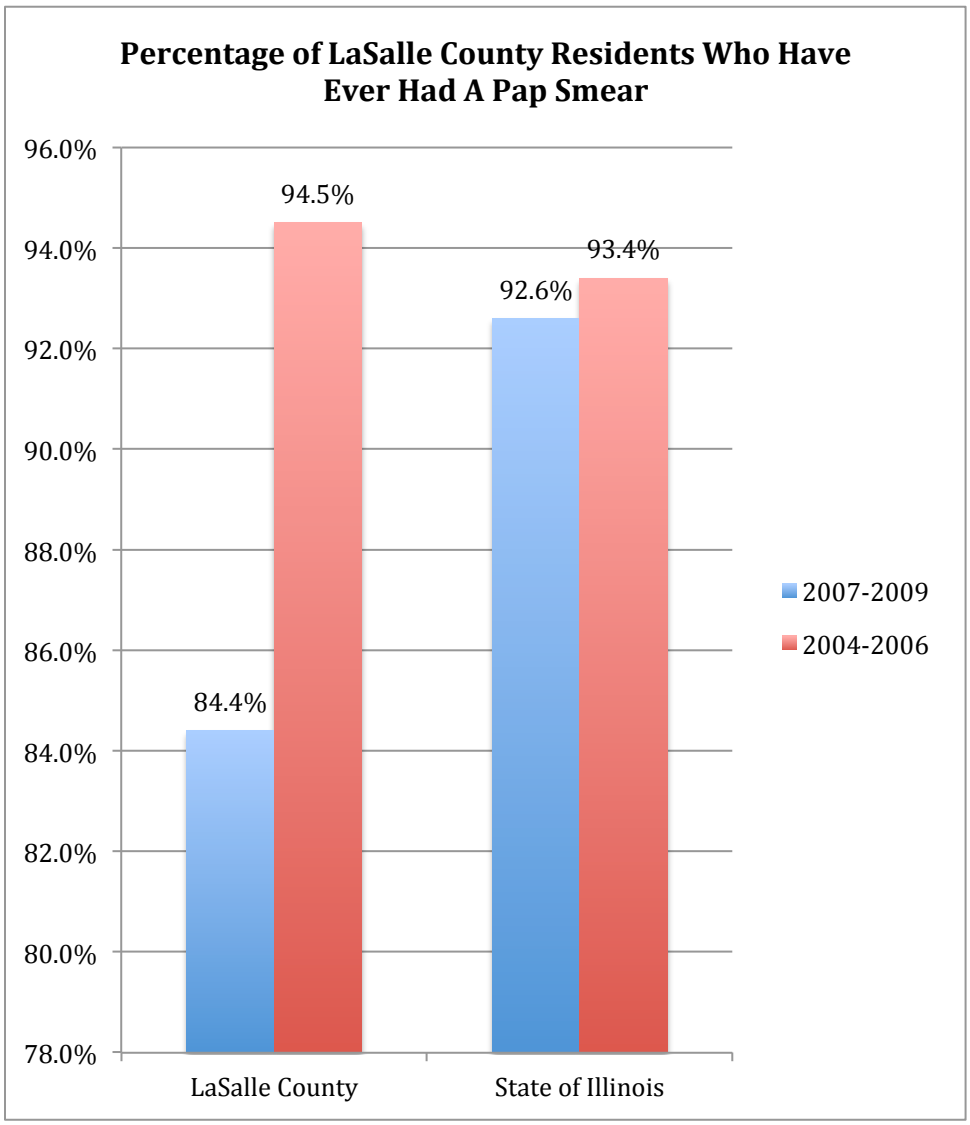
Table 2.2.2-5 Time Since Last Mammogram by LaSalle County Region Residents



Source: Illinois Behavioral Risk Factor Surveillance System

Research suggests pap smears are important in detecting pre-cancerous cells in the uterus and cervix. Data from the 2007-2009 Illinois BRFSS indicate that 84.4% of LaSalle County residents have ever had a pap smear. These percentages are less than the State of Illinois average (92.6%). Between 2004-2006 and 2007-2009, the percentage of LaSalle County residents who had ever had a pap smear decreased -10.1%.

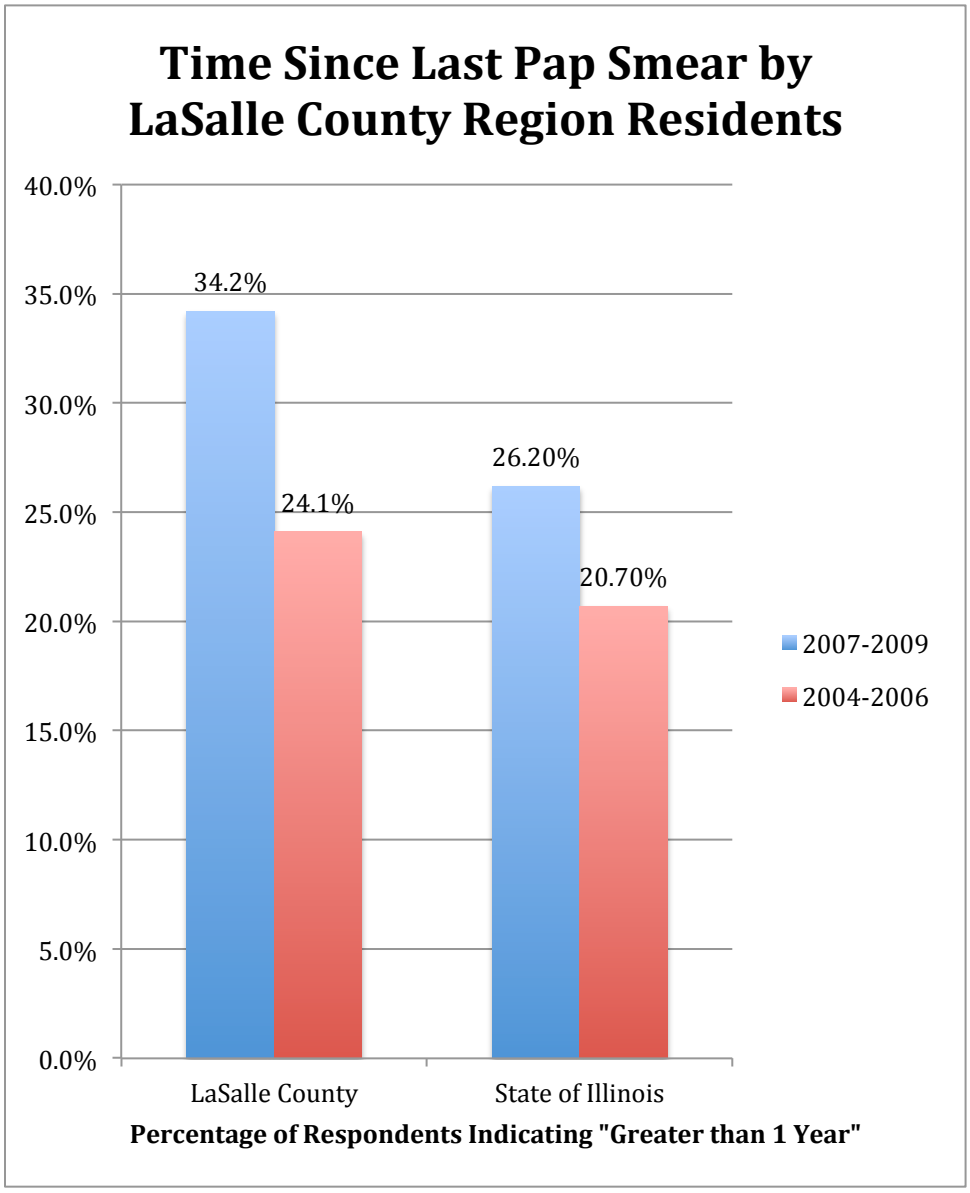
Table 2.2.2-6 Percentage of LaSalle County Residents Who Have Ever Had A Pap Smear



Source: Illinois Behavioral Risk Factor Surveillance System

With regard to the time elapsed since one's last pap smear, residents from LaSalle County reported a 10.1% increase between 2004-2006 and 2007-2009 for greater than 1 year elapsing between pap smears with 34.2% of residents indicating 1 year or more between pap smears. This statistic is significantly worse than the State of Illinois average (26.2%).

Table 2.2.2-9 Time Since Last Pap Smear by LaSalle County Region Residents

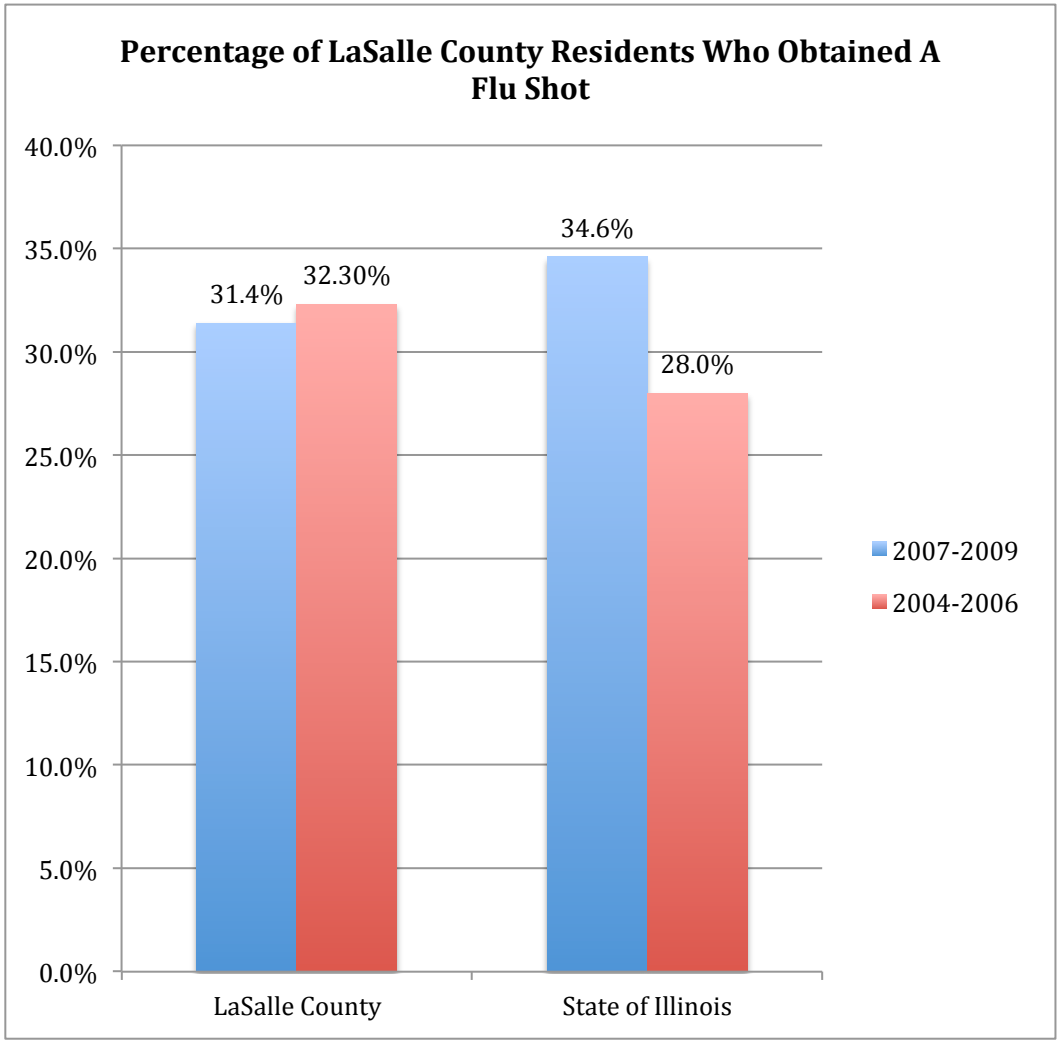


Source: Illinois Behavioral Risk Factor Surveillance System

2.2.3 Immunizations

The overall health of a community is impacted by preventative measures including immunizations and vaccinations. The percentage of people who have had a flu shot in the past year is approximately 35% for both LaSalle County as well as the State of Illinois, although the state average is slightly higher than the LaSalle County average. The percentage of residents in LaSalle County who obtained a flu shot is lower than the state average (34.6%). While the State of Illinois experienced positive growth between 2004-2006 and 2007-2009, LaSalle County and experienced negative growth in the percentage of residents who obtained a flu shot.

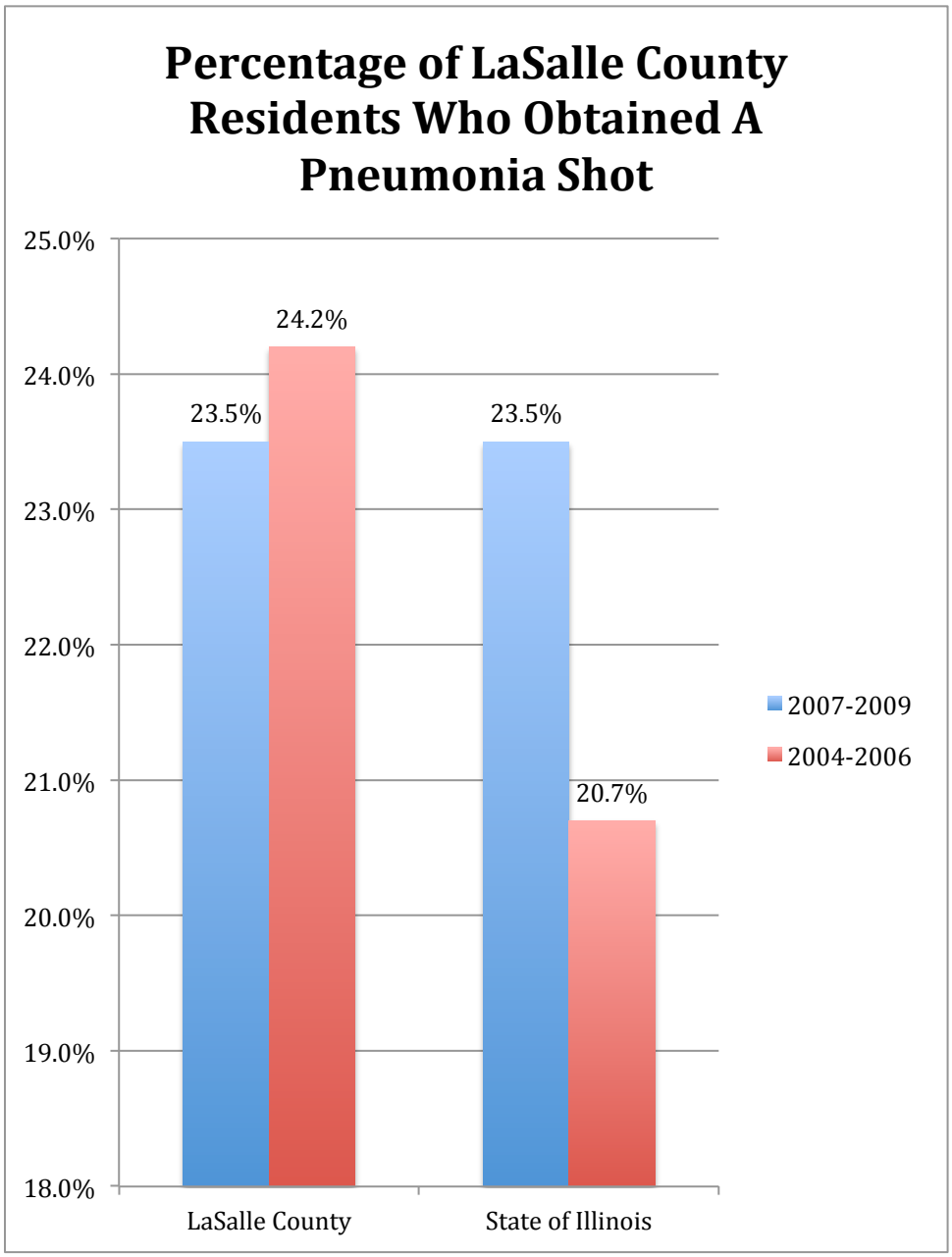
Table 2.2.3-1 Percentage of LaSalle County Residents Who Obtained A Flu Shot



Source: Illinois Behavioral Risk Factor Surveillance System

Pneumonia shots are even less frequent, with 23.5% of LaSalle County residents receiving the treatment between 2007-2009.

Table 2.2.3-2 Percentage of LaSalle County Residents Who Obtained A Pneumonia Shot



Source: Illinois Behavioral Risk Factor Surveillance System

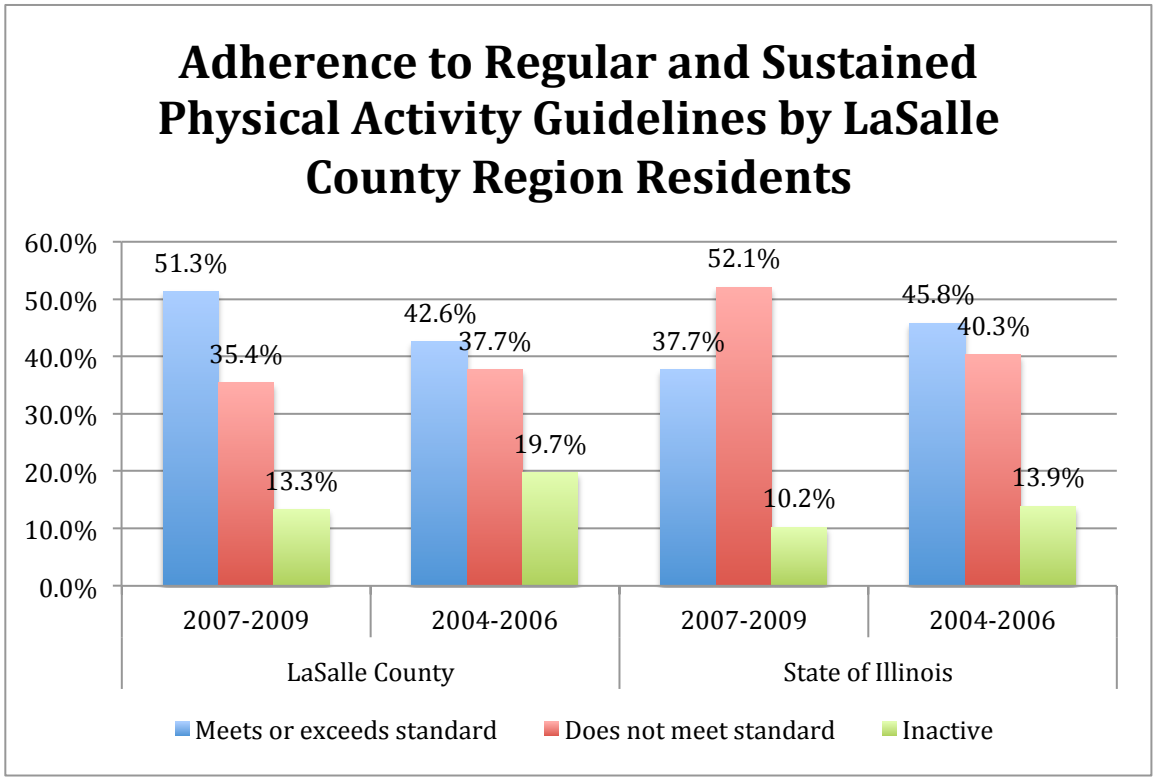
2.2.4 Healthy lifestyle

A healthy lifestyle, comprised of regular physical activity and nutritious diet, has been shown to increase physical, mental, and emotional well-being.

Residents in the LaSalle County Region adhere to regular sustained physical activity guidelines at a higher propensity than the State of Illinois average (37.7%). The most recent data from 2007-2009 indicate that 51.3% of LaSalle County residents meet or exceed the regular and sustained physical activity guidelines.

With regard to work-related activity, upwards of 50% of LaSalle County residents mostly sit or stand to execute their job tasks. The specific percentage in 2007-2009 for LaSalle County (50.7%) is significantly lower than the State of Illinois average of 65.2%.

Table 2.2.4-1 Adherence to Regular and Sustained Physical Activity Guidelines by LaSalle County Region Residents



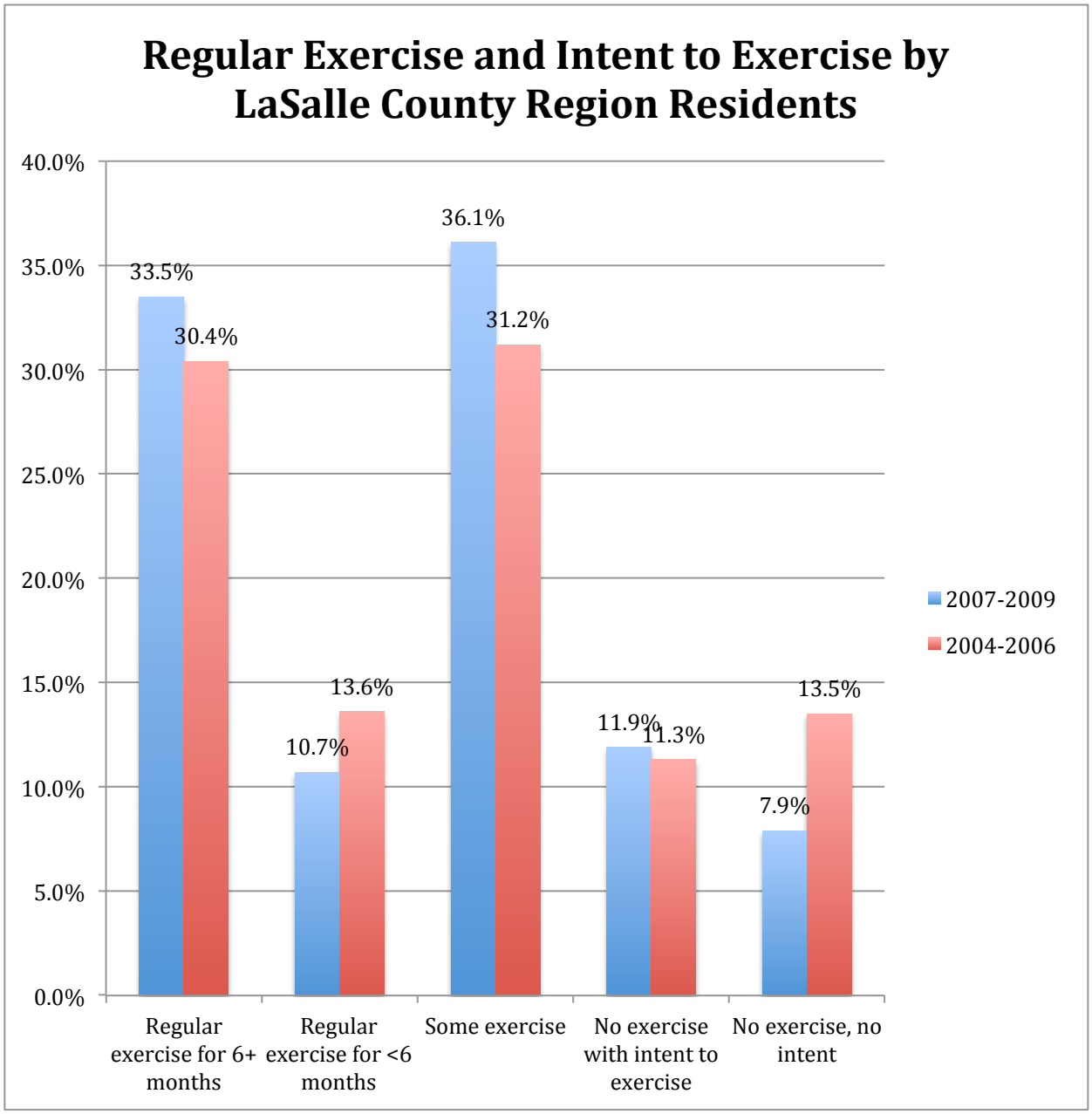
Source: Illinois Behavioral Risk Factor Surveillance System

Table 2.2.4-2 Physical Activity from Work-related Exertion by LaSalle County Region Residents

Source: Illinois Behavioral Risk Factor Surveillance System

When evaluating physical activity, it is important to evaluate the values behind one's decision to exercise. Table 2.2.4-3 illustrates the intentions toward exercise held by residents in the LaSalle County region. According to recent data, approximately 12% of the residents in LaSalle County have the intent to exercise but do not actually follow through with exercising. The percentages of individuals in LaSalle County who do not exercise and do not have any desire to exercise have decreased between the periods of 2004-2006 and 2007-2009.

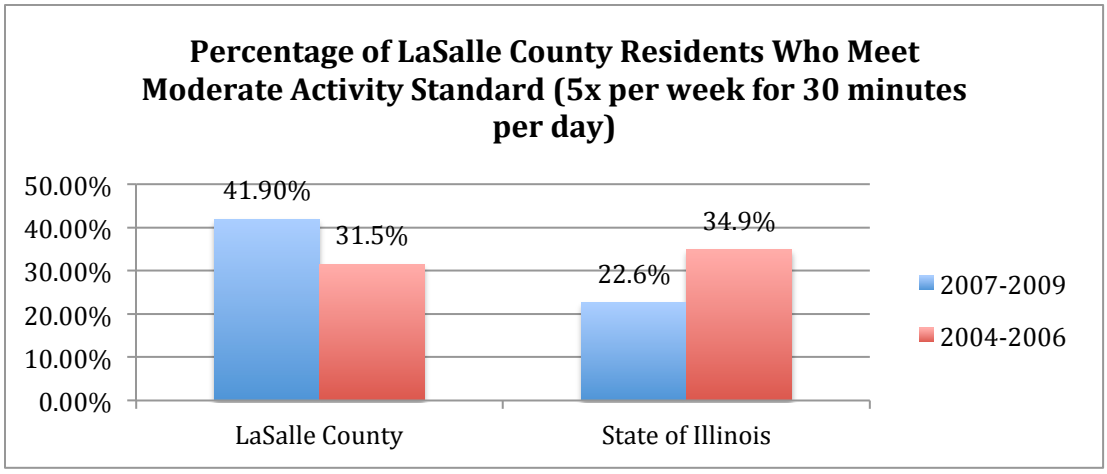
Table 2.2.4-3 Regular Exercise and Intent to Exercise by LaSalle County Region Residents



Source: Illinois Behavioral Risk Factor Surveillance System

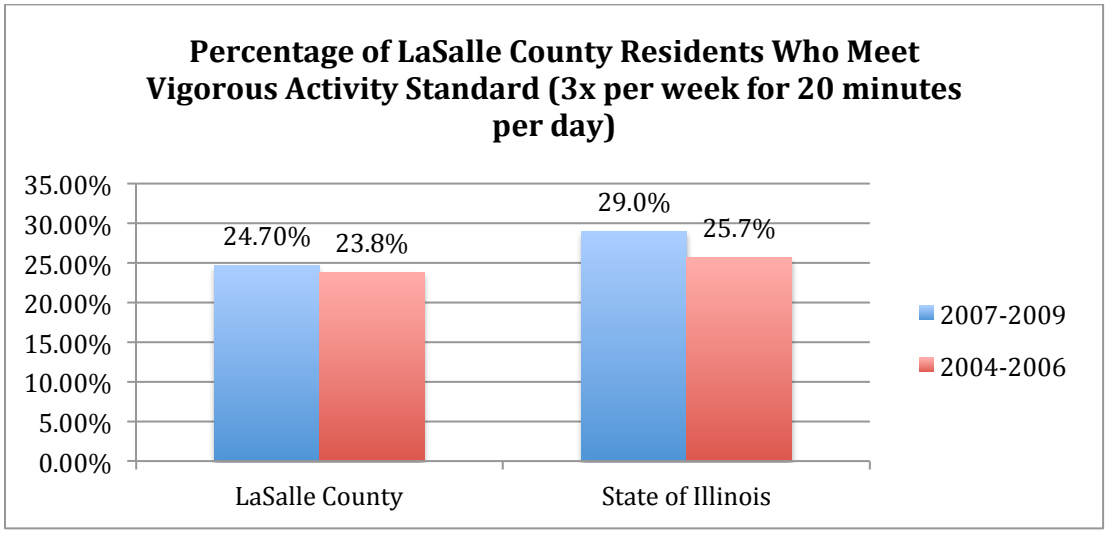
When evaluating physical activity, the intensity and duration of the exercise is important. Residents in the LaSalle County Region report approximately 42% of individuals meet the moderate activity standard (based on heart rate) compared to 22.6% of individuals in the State of Illinois as a whole. The moderate activity standard is defined as five, 30-minute sessions per week. With regard to the vigorous activity standard (based on heart rate), defined as three, 20-minute sessions per week, LaSalle County residents slightly lag behind the state average.

Table 2.2.4-4 Percentage of LaSalle County Residents Who Meet Moderate Activity Standard (5x per week for 30 minutes per day)



Source: Illinois Behavioral Risk Factor Surveillance System

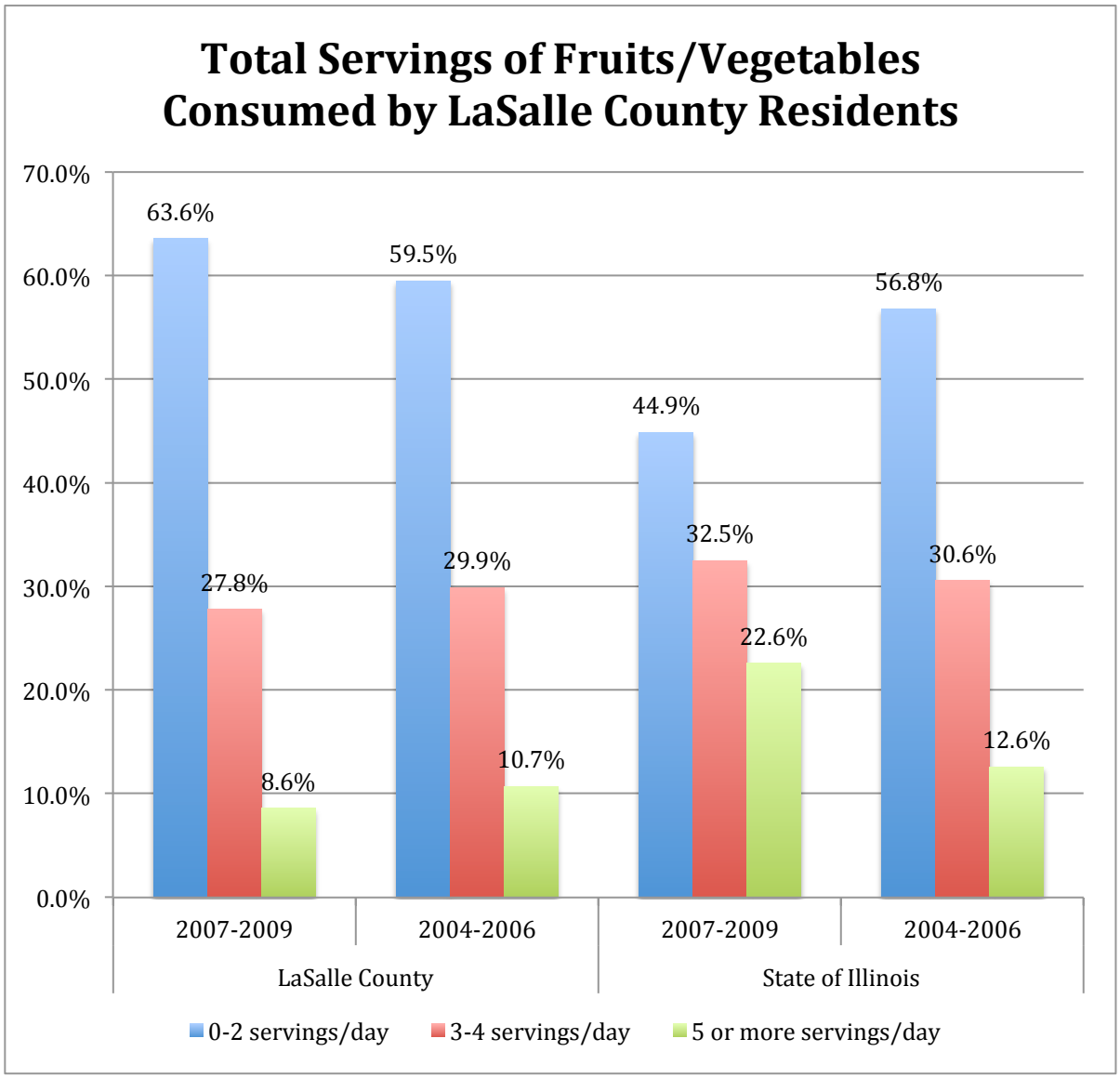
Table 2.2.4-5 Percentage of LaSalle County Residents Who Meet Vigorous Activity Standard (3x per week for 20 minutes per day)



Source: Illinois Behavioral Risk Factor Surveillance System

Nutrition and diet are critical to preventative care. A large percentage (63.6%) of LaSalle County Region residents report low consumption (0-2 servings per day) of fruits and vegetables. This percentage is significantly higher than the State of Illinois average of 44.9% for the same measure.

Table 2.2.4-6 Total Servings of Fruits/Vegetables Consumed by LaSalle County Residents

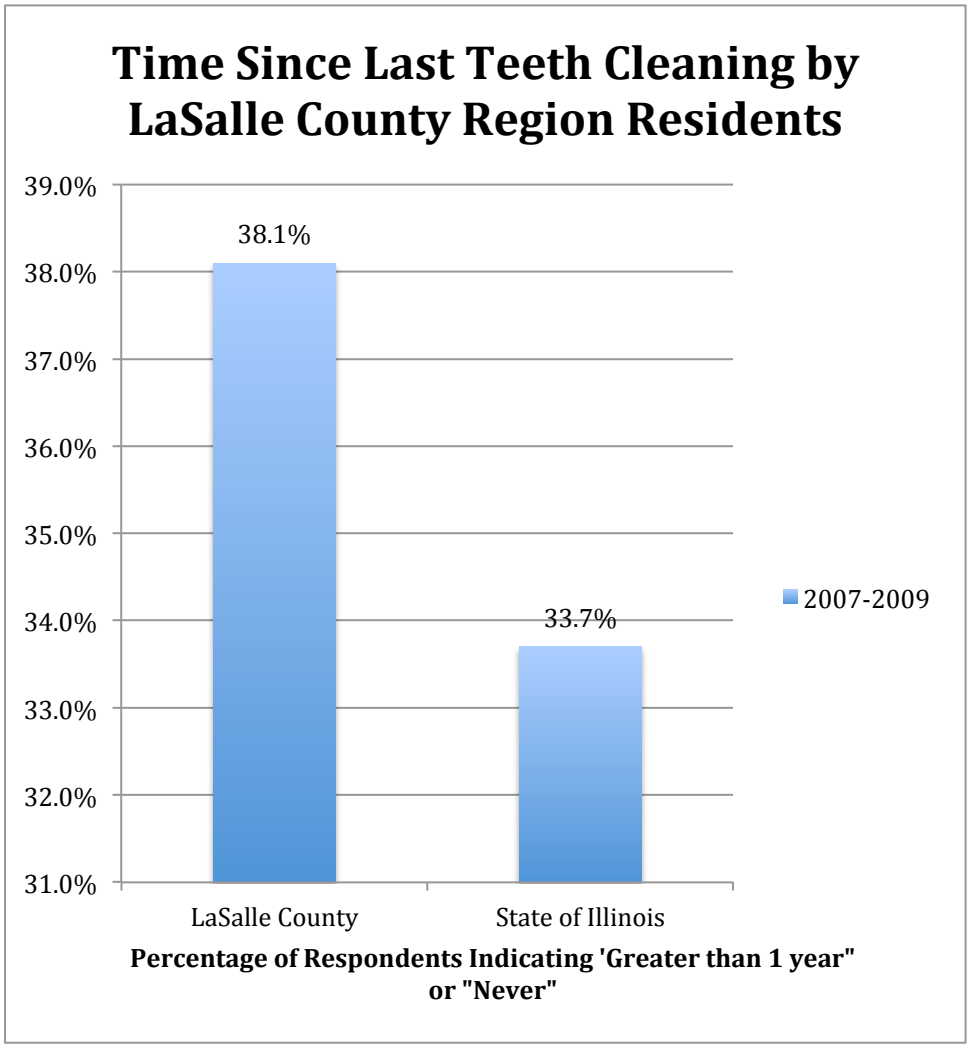


Source: Illinois Behavioral Risk Factor Surveillance System

2.2.5 Oral Health

Research suggests that poor oral hygiene leads to more serious medical concerns. For the 2007-2009 time frame, nearly 62% of LaSalle County Region residents had their teeth cleaned within the last year. The percentages for LaSalle County are lower than that of the State of Illinois average.

Table 2.2.5-1 Time Since Last Teeth Cleaning by LaSalle County Region Residents



Source: Illinois Behavioral Risk Factor Surveillance System

Prevention: Strategic Implications

Increase health care insurance coverage:

Research suggests that private health insurance companies cover nearly 1/3 of the national health expenditures. According to the Kaiser Family Foundation, private health insurance companies comprised 32.7% of the health expenditures in the United States for 2010.[1] While this percentage has held constant around 32% since 1990, it marks an increase of approximately 11% since 1960. Medicare covered approximately 20.2% of national health expenditures in 2010, up nearly 4% since 2000. In addition, data suggest the out-of-pocket expenses incurred by individuals has steadily decreased, from a high of 33.4% of national health care expenditures in 1970 to 14.7% in 2000, and now 11.6% in 2010. The data are clear: Americans are paying less for out-of-pocket health care expenditures and relying more and more on private or public insurance policies to shoulder the financial burdens of health care. Private funds provided approximately 55% of health care payments in 2010 compared to 45% from federal and local government funds. [2]

The rising cost of health care services has resulted in a significant number of families cutting back on care and electing to postpone or cancel treatments. A 2011 Kaiser Health Tracking Poll found that 50% of Americans have cut back on medical treatments in the past 12 months based on cost concerns. [3] Furthermore, 40% reported being "very worried" about having to shoulder more of the financial burden for their health care. Data seem to reinforce this concern, as health insurance premiums have consistently outpaced inflation and the growth in worker earnings.

In LaSalle County, nearly 30% of residents rely on Medicare coverage as their primary insurance coverage. Recent data suggest nearly 92% of LaSalle County residents possess medical health care coverage. These percentages are well above the 86% response rate for the State of Illinois. Dental insurance coverage is less broad across the LaSalle County Region, as only 64.5% of LaSalle County residents possess dental insurance coverage.

Increase the prevalence of preventative health care screens:

There appears to be a relationship between individuals who have health insurance and individuals who take advantage of preventative health care screenings. Research for over twenty years suggests that the strongest predictors of failure to receive screening tests was lack of insurance coverage. [4] Furthermore, research suggests that lack of insurance coverage is more prevalent among socioeconomically disadvantaged groups that are often at high risk for disease and illness. [5] Thus, a vicious cycle results where individuals who are at the highest risk for diseases are unable to receive screening, thus perpetuating a cycle of disease and high health care expenditures.

Screening guidelines from the United States Preventative Services Task Force offer insight on appropriate preventative care and screenings for youth, adults, and older individuals. [6] Adherence to these guidelines provides data-driven benchmarks from physicians in the fields of primary care and preventative medicine. Above all, it is critical for physicians and patients to

engage in thorough evaluation of treatment options and engage in high-quality shared decision-making regarding treatment options. [7]

Routine physicals are essential to detecting adverse medical conditions. Residents in LaSalle County lag the state average when considering those individuals who's last routine checkup was more than one year ago or never. Research suggests many rural communities have dramatic medical professional shortages.[8]

With regard to immunizations, the Center for Disease Control's Advisory Committee on Immunization Practices recommends everyone 6 months and older receive a flu vaccination every year. [9] In LaSalle County, the percentage of residents who obtained a flu shot is lower than the state average and considerably lower than the recommendations from the CDC.

Endnotes for Chapter 2

[1] Kaiser Family Foundation, "Health Care Costs: Key Information on Health Care Costs and Their Impact," May 2012.

[2] Ibid.

[3] Kaiser Family Foundation, Kaiser Health Tracking Poll, *Toplines*, August 10-15, 2011, pp.16-18, http://www.kff.org/kaiserpolls/8217.cfm.

[4] U.S. Department of Health and Human Services, Agency for Healthcare Research and Quality, *National Healthcare Disparities Report*, 2005.

[5] U.S. Department of Health and Human Services, *Healthy People 2010*. Retrieved from http://www.healthlypeople.gov/

[6] U.S. Preventative Screening Task Force*, Recommendations for Adults, Adolescents, and Children*. Retrieved from http://www.uspreventativeservicestaskforce.org

[7] Ibid.

[8] Bailey, J.M. (2010, July). Health Care Reform, What's In It? *Rural Communities and Rural Medical Care.*

[9] Centers for Disease Control and Prevention, Advisory Committee for Immunization Practices, *Comprehensive Recommendations*. Retrieved from http://www.cdc.gov/vaccines/pubs/ACIP-list.htm

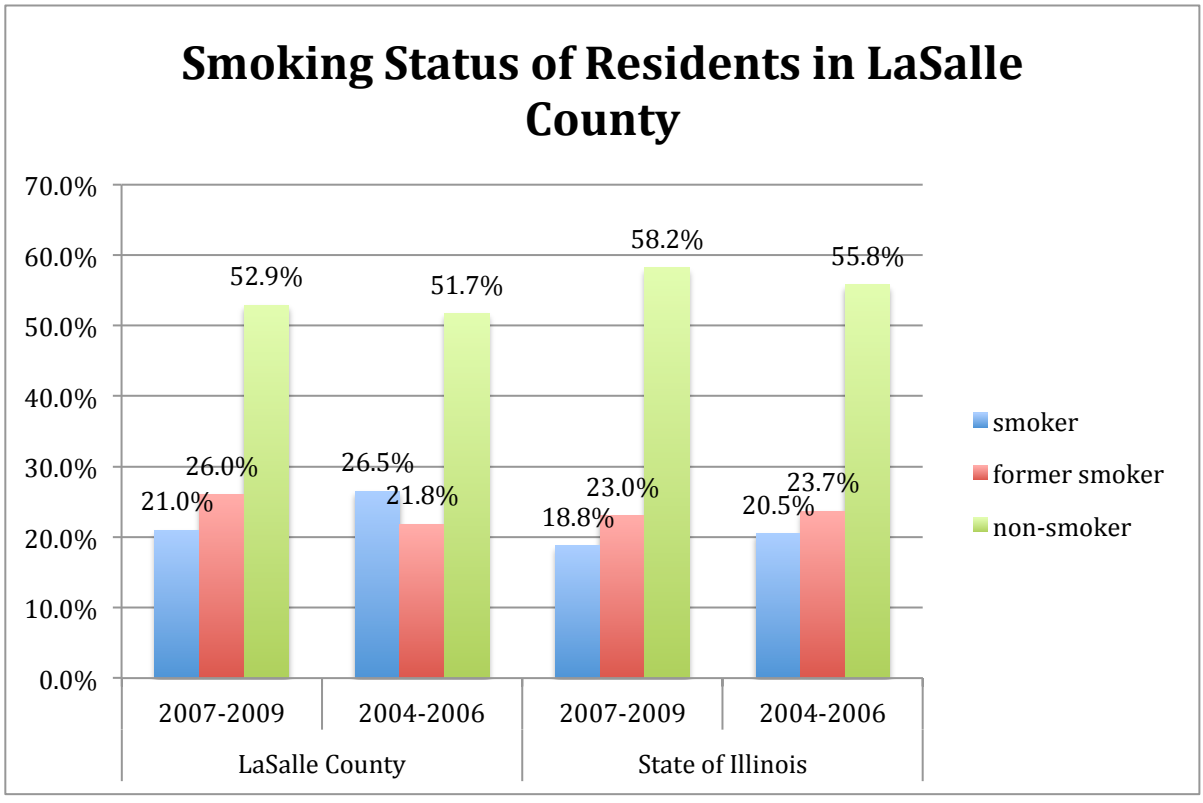
CHAPTER 3. SYMPTOMS AND PREDICTORS

3.1 Tobacco Use

Importance of the measure: In order to appropriately allocate health care resources, a thorough analysis of the leading indicators regarding morbidity and disease must be conducted. In this way, health care services and personnel can target affected populations more effectively. Research suggests tobacco use facilitates a wide variety of adverse medical conditions.

Smoking significantly impacts the health status of individuals. Smoking rates have declined in LaSalle County, which is consistent with all residents within Illinois, yet smoking rates still exceed the State of Illinois averages. Over half of residents within LaSalle County classify themselves as non-smokers, whereas approximately a quarter of residents are former smokers.

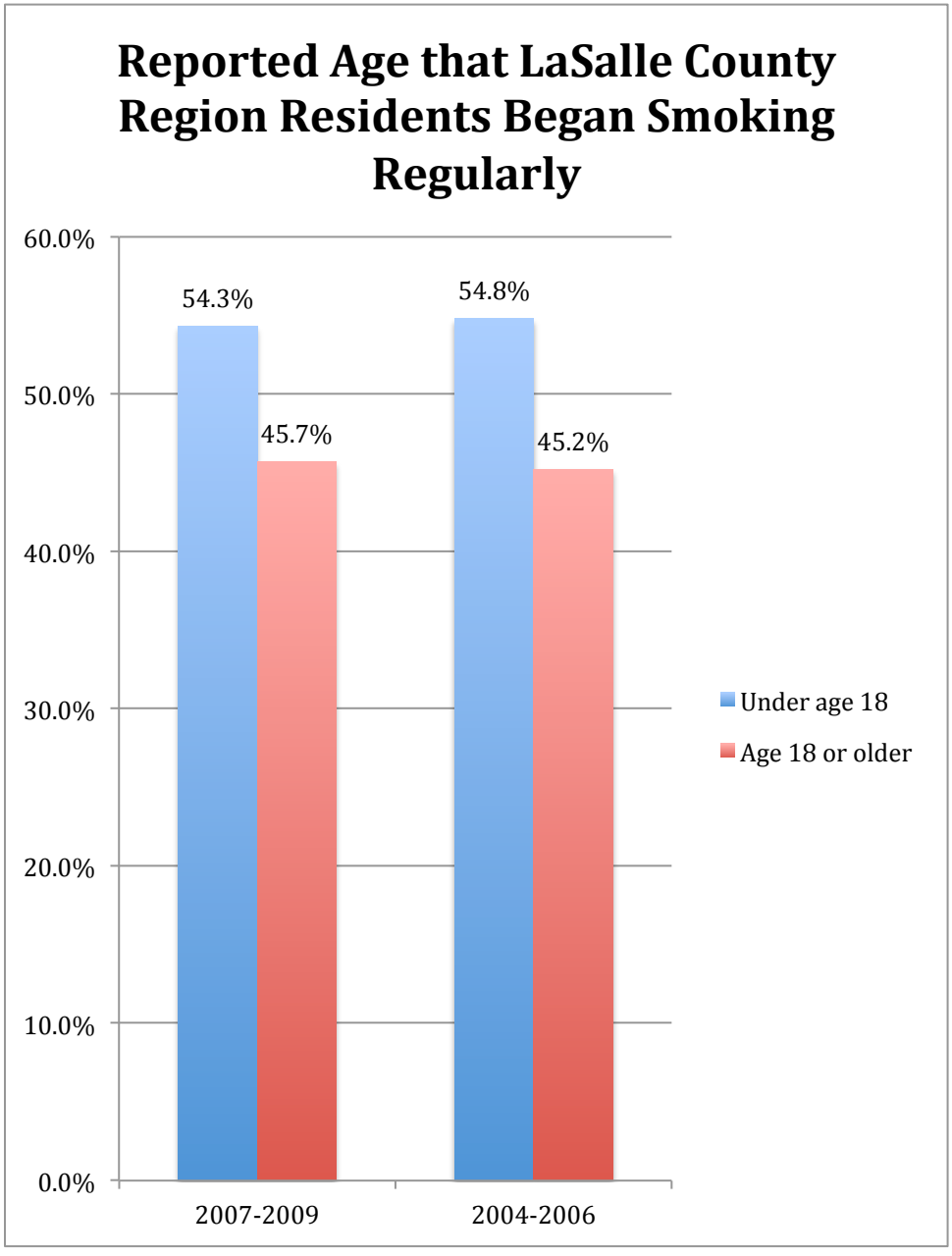
Table 3.1-1: Smoking Status of Residents in LaSalle County



Source: Illinois Behavioral Risk Factor Surveillance System

Many individuals begin smoking tobacco as teenagers. Over half of LaSalle County residents began smoking regularly before the age of 18.

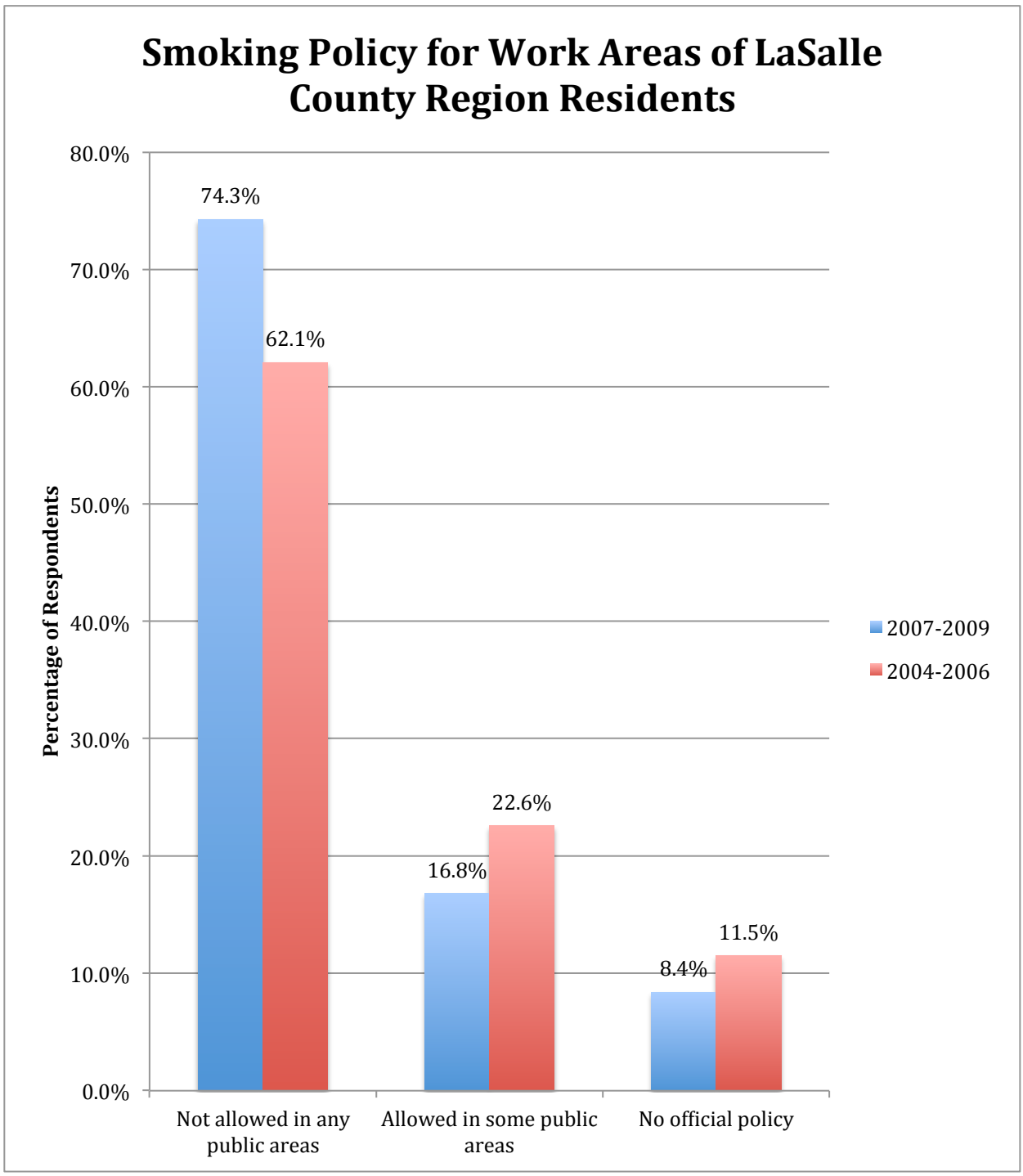
Table 3.1-2: Reported Age that LaSalle County Region Residents Began Smoking Regularly



Source: Illinois Behavioral Risk Factor Surveillance System

Workplaces have different policies regarding smoking in public areas. 74% of LaSalle County residents report that they are not allowed to smoke in any public areas. This is a 12% increase between 2007 and 2010.

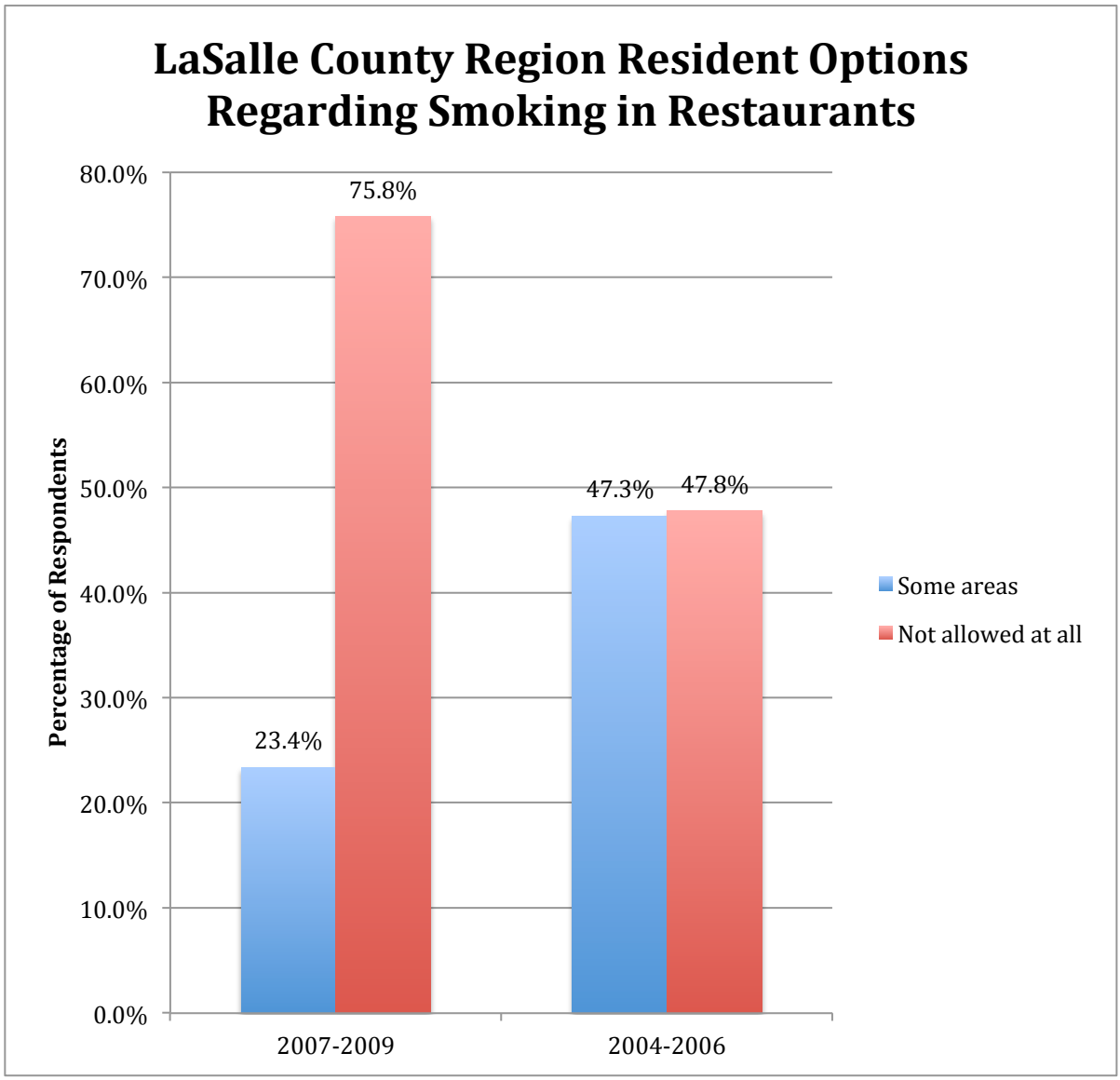
Table 3.1-3: Smoking Policy for Work Areas of LaSalle County Region Residents



Source: Illinois Behavioral Risk Factor Surveillance System

Attittudes toward smoking in restaurants have dramatically changed in the past six years. In 2004-2006, nearly 50% of LaSalle County residents believed that smoking should be allowed in some areas within restaurants. However, by 2007-2009, the percentage of respondents who agreed with that statement had dropped to 23%.

Table 3.1-4: LaSalle County Region Resident Options Regarding Smoking in Restaurants



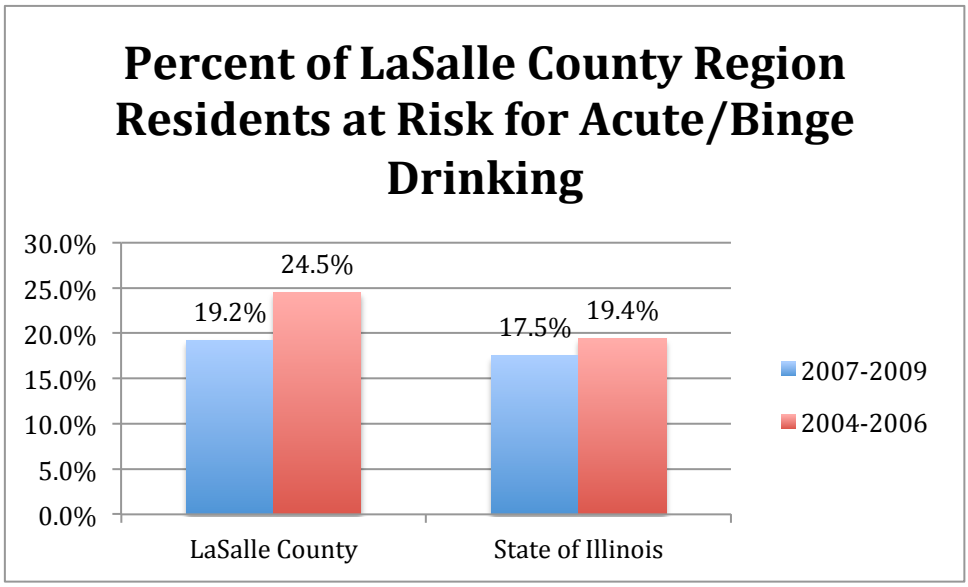
Source: Illinois Behavioral Risk Factor Surveillance System

3.2 Drug and Alcohol Abuse

Importance of the measure: Alcohol and drugs impair decision-making, often leading to adverse consequences and outcomes. Research suggests that alcohol is a gateway drug for youths, leading to increased usage of substances in adult years. Accordingly, the values and behaviors toward substance usage by high school students is a leading indicator of adult substance abuse in later years.

Compared to the State of Illinois average (17.5%), LaSalle County has a higher percentage of residents at risk for acute or binge drinking.

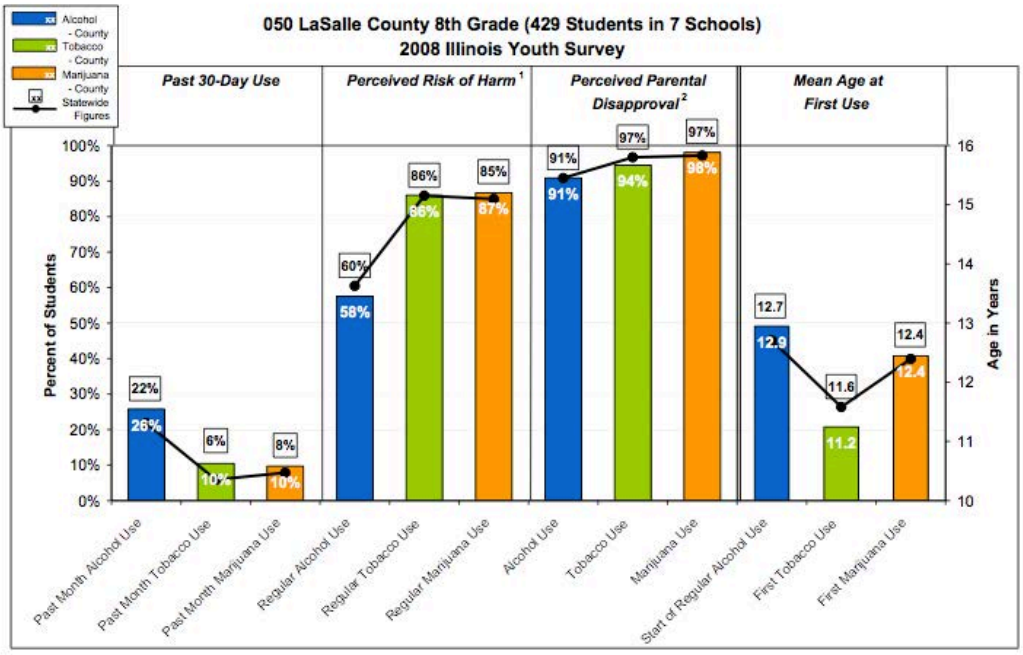
Table 3.2-1: Percent of LaSalle County Region Residents at Risk for Acute/Binge Drinking



Source: Illinois Behavioral Risk Factor Surveillance System

Data from the 2008 Illinois Youth Survey, which measures illegal substance use (alcohol, tobacco, and other drugs – mainly marijuana) among adolescents, suggest emerging trends for adult substance usage. In LaSalle County among 8th graders, the average age at first use of alcohol, tobacco and marijuana is 12.9, 11.6 and 12.4 years respectively. The same average age for 12th graders is 15.6, 14.2 and 14.7 years respectively. In LaSalle County, the past 30-day use is higher for tobacco use (8th and 12th grades), tobacco use (8th and 12th grade) and marijuana use (8th grade) when compared to State of Illinois averages.

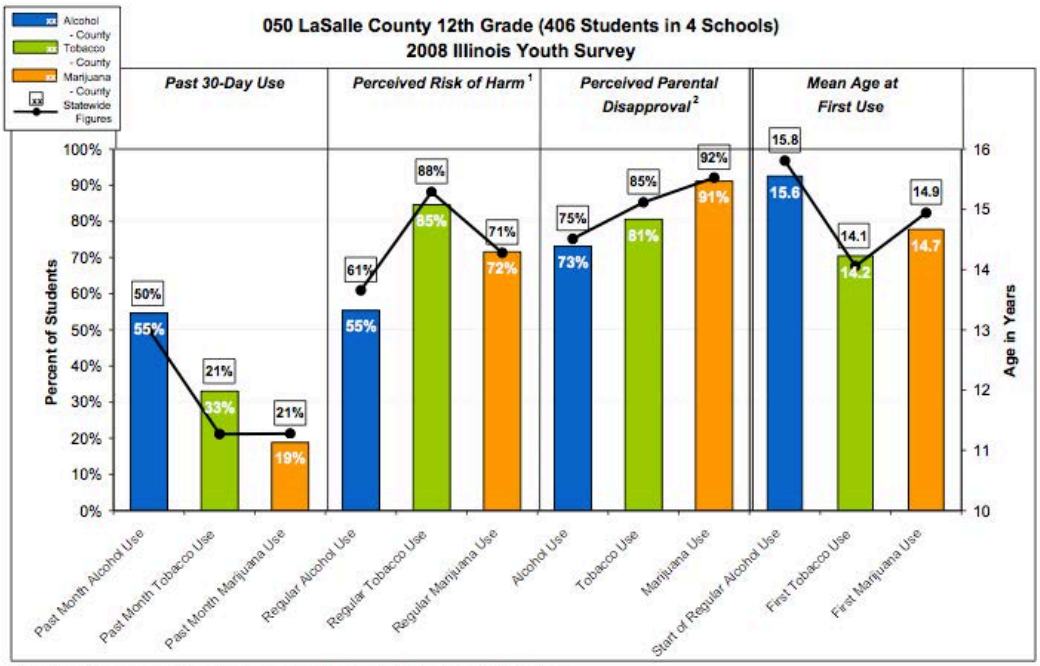
Table 3.2-2: Reported Substance Abuse Usage of LaSalle County 8th Graders, 2008



[1] *Perceived Risk of Harm: Percent who responded "Moderate Risk" or "Great Risk" of harm.*
[2] *Perceived Parental Disapproval: Percent who responded "Wrong" or "Very Wrong" attitude of parents toward youth use of substance.*

Source: http://iys.cprd.illinois.edu/PDFs/2008_CountyCharts_Full_Report.pdf

Table 3.2-3: Reported Substance Abuse Usage of LaSalle County 12th Graders, 2008



[1] *Perceived Risk of Harm: Percent who responded "Moderate Risk" or "Great Risk" of harm.*
[2] *Perceived Parental Disapproval: Percent who responded "Wrong" or "Very Wrong" attitude of parents toward youth use of substance.*

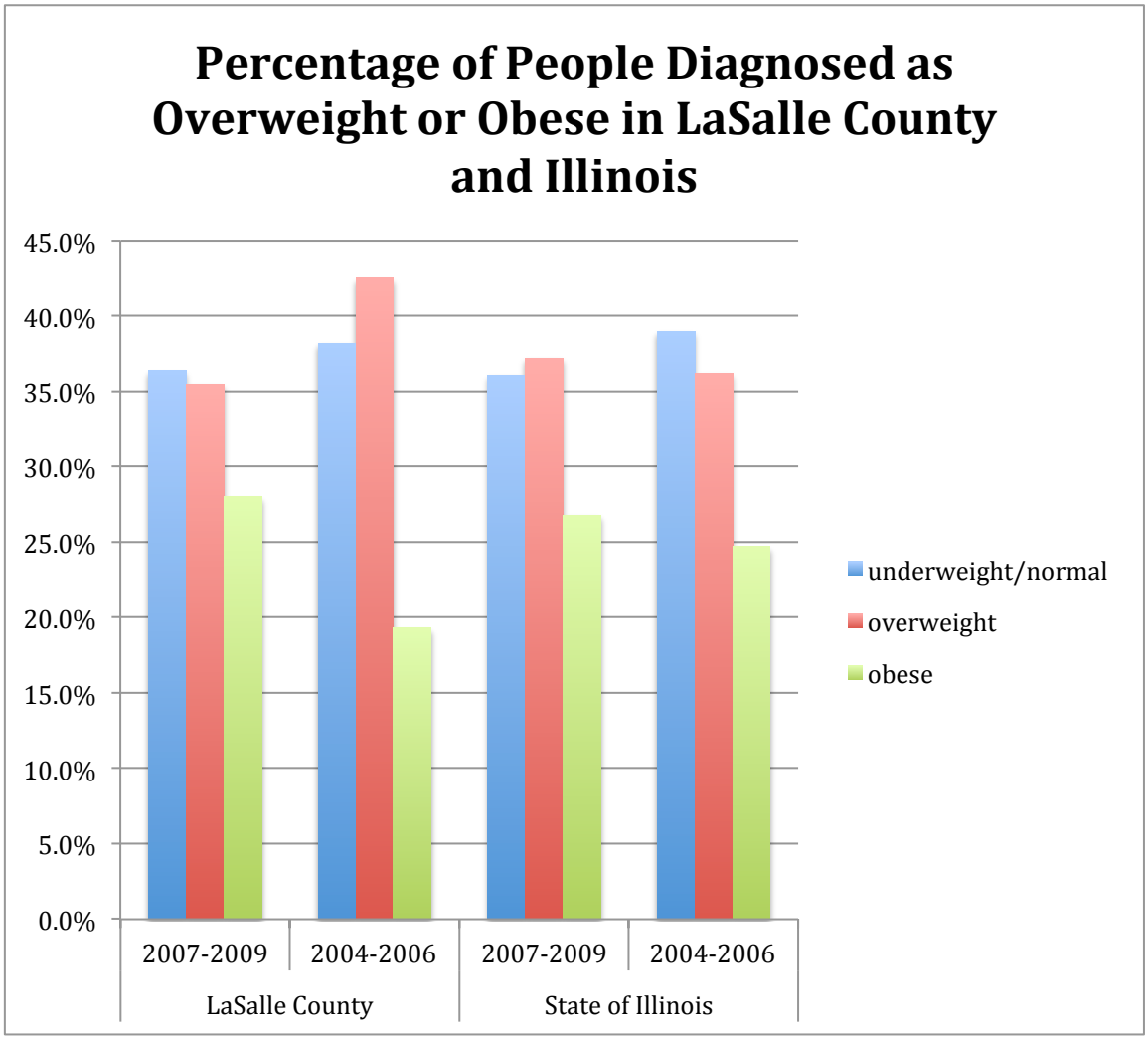
Source: http://iys.cprd.illinois.edu/PDFs/2008_CountyCharts_Full_Report.pdf

3.3 Overweight and Obesity

Importance of the measure: Individuals who are overweight and obese place greater stress on internal organs, thus increasing the propensity to utilize health services.

In terms of obesity and being overweight, Table 3.3-1 shows that in LaSalle County, the number of people who have trouble with their weight has increased over the four years from 2005 to 2009. Note specifically that while the number of overweight people has decreased, the percentage of obese people experienced a significant increase.

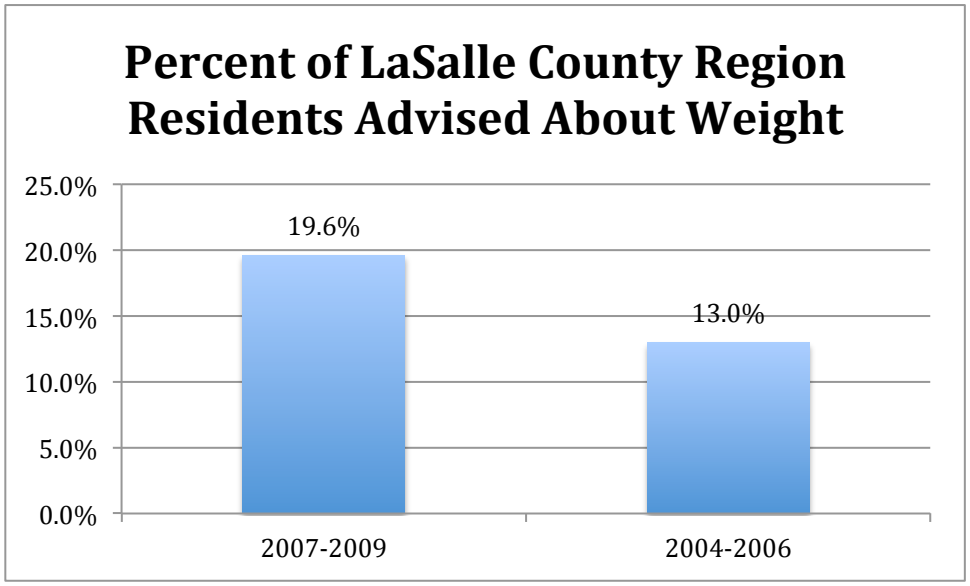
Table 3.3-1: Percentage of People Diagnosed as Overweight or Obese in LaSalle County and Illinois



Source: Illinois Behavioral Risk Factor Surveillance System

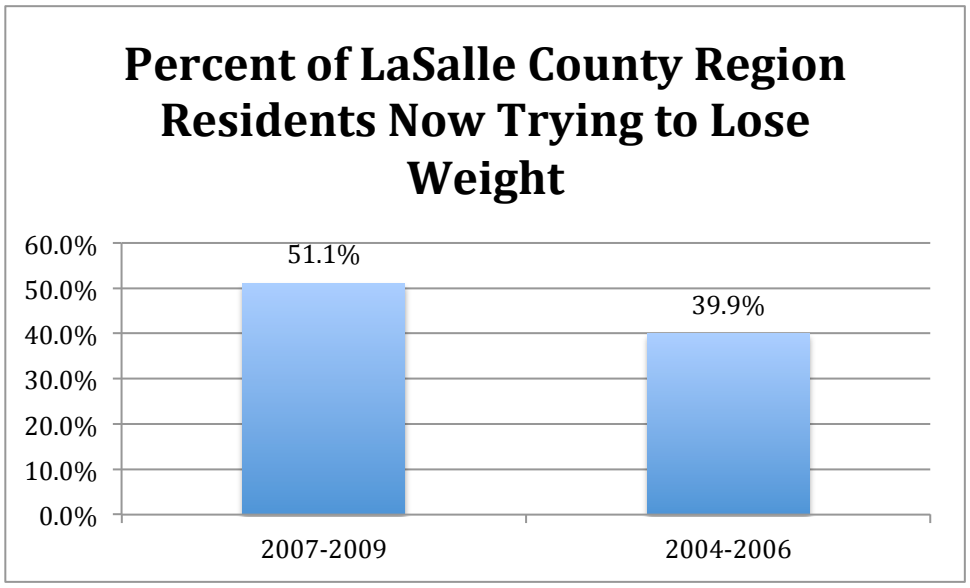
With regard to those individuals advised by a medical professional about their weight, nearly 20% of residents in LaSalle County have been advised about their weight during the 2007-2009 time frame. In Table 3.3-3, over half of LaSalle County residents are attempting to lose weight and Table 3.3-4 illustrates the percentage of LaSalle County residents attempting to maintain their current weight.

Table 3.3-2: Percent of LaSalle County Region Residents Advised About Weight



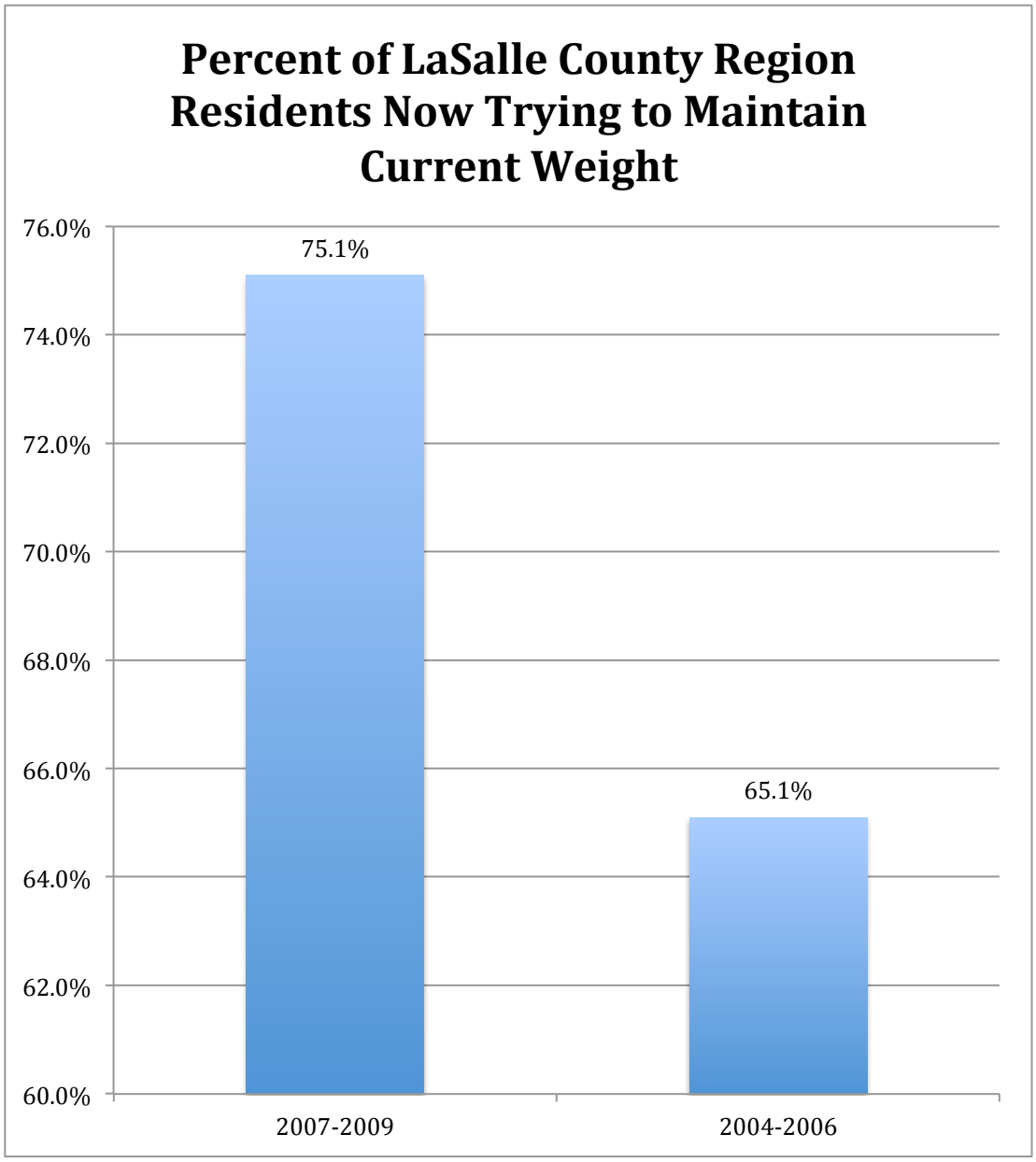
Source: Illinois Behavioral Risk Factor Surveillance System

Table 3.3-3: Percent of LaSalle County Region Residents Now Trying to Lose Weight



Source: Illinois Behavioral Risk Factor Surveillance System

Table 3.3-4: Percent of LaSalle County Region Residents Now Trying to Maintain Current Weight



Source: Illinois Behavioral Risk Factor Surveillance System

Symptoms/Predictors: Strategic Implications

Effectively combating youth obesity:

Research strongly suggests that obesity is a significant problem facing youth and adults nationally, in Illinois, and within the LaSalle County Region. The US Surgeon General has characterized obesity as "the fastest-growing, most threatening disease in America today."[1] According to the Obesity Prevention Initiative from the Illinois General Assembly, 20% of Illinois children are obese[2]. Data from 2010 indicate 62% of Illinois adults are obese or overweight, with a disproportionate number of obese or overweight individuals living in rural areas. The financial burden of overweight and obese individuals is staggering, as the estimated annual medical costs attributed to obesity in Illinois for 1998-2000 exceeded 3.4 billion dollars, ranking Illinois 6th in the nation for obesity-attributed medical costs[3].

With children, research has linked obesity to numerous chronic diseases including Type II diabetes[4], hypertension, high blood pressure, and asthma. Adverse physical health side effects of obesity include orthopedic problems with weakened joints and lower bone density[5]. Detrimental mental health side effects include low self-esteem, poor body image, symptoms of depression and suicide ideation[6]. 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 that of non-obese children[7].

With adults, obesity has far-reaching consequences. Testimony to the Illinois General Assembly indicated that obesity-related illnesses contribute to worker absenteeism, slow workflow, and high worker compensation rates.[8] A Duke University study on the effects of obesity in the workforce noted 13 times more missed work days 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.

Within LaSalle County, leading indicators suggest obesity is a growing concern. With regard to nutrition, evidence suggests residents in the LaSalle County region are not eating enough fruits and vegetables. Table 2.2.4-6 indicates that between 2007 and 2009, only 8.6% of LaSalle County residents consumed 5 or more servings of fruits and vegetables per day. These figures are considerably less than the 22.6% of Illinois residents who eat more than 5 servings per day. Furthermore, approximately 63.6% of LaSalle County residents consume 0-2 servings of fruits and vegetables per day.

Research indicates physical activity helps to prevent illness and obesity[9]. Data regarding the values toward exercise and the actual time spent exercising may contribute to obesity in LaSalle County. For example, data from the Center for Disease Control indicate that 66% of children walked or biked to school in 1973. By 2000, that figure had decreased to only 13%.[10] As seen in Table 2.2.4-4, residents in the LaSalle County Region report approximately 42% of individuals meet the moderate activity standard compared to 22.6% of individuals in the State of Illinois as a whole. However, this means 58% of residents do not meet the moderate activity standard.

Aggressively addressing youth substance abuse:

The use of tobacco, alcohol, and other drugs is a significant contributor to the escalating costs of health care service delivery. According to the Center for Disease Control, tobacco use is the leading preventable cause of death in the United States. [11] On a societal level, alcohol, tobacco, and other drug use leads to accidents, violent behavior, emotional trauma, and assaults. It is estimated that drug-induced related risky behavior needlessly drains community resources such as police intervention, emergency services, and criminal justice costs.

The Surgeon General contends that "alcohol remains the most heavily abused substance by America's youth." [12] Dr. Peter Monti, Director of the Center for Alcohol and Addiction Studies at Brown University notes that alcohol disrupts the continued growth of an adolescent's brain and "impacts the brain's ability to learn life skills." [13] Studies show that an adolescent needs to only drink half as much alcohol as an adult to suffer similar adverse brain effects. [14] Research shows that cigarette smoking as a teenager leads to higher risks for lung cancer as an adult, reduces the rates of lung growth, and the maximum level of lung function that could be achieved. [15]

Financially, underage drinking is estimated to cost the nation upwards of $62 billion dollars annually in deaths, injuries, and other economic losses.[16] A Columbia University study examining the impacts of substance abuse in mid-sized cities and rural America suggested that tobacco use was more prevalent in mid-sized cities and rural areas than large metropolitan areas; specifically, young adults in mid-sized cities and rural areas were 30% more likely than adults in larger cities to have smoked a cigarette in the last month. [17]

In LaSalle County, smoking rates have declined since 2004-2006 and are now lower than the state of Illinois average. However, youth substance usage in LaSalle County exceeds the State of Illinois averages for both 8th graders (alcohol, tobacco, and marijuana usage) and 12th graders (alcohol and tobacco usage) and a higher proportion of residents engage in binge drinking (19.2%) versus 17.5% overall in the State of Illinois.

Endnotes for Chapter 3

[1] *Childhood Obesity: An epidemic is gripping California and the nation*: *How did we get here? What do we do now?* Advertising supplement to The New York Times, Kaiser Permanente, UC San Francisco Medical School, UCLA Medical School, January 2006.

[2] *Obesity Prevention Initiative Act (PA 96-0155): A Report to the Illinois General Assembly*, Illinois Department of Public Health, December 2010.

[3] Ibid.

[4] Crawford, P., Mitchell, T., & Ikeda, J. (2000). *Childhood Overweight: A Fact Sheet for Professionals*, UCB/Cooperative Extension University of California-Berkeley.

[5] Xiang, H. (2005). Obesity and Risk of Nonfatal Unintentional Injuries, *American Journal of Preventative Medicine*, 29,1, 41-45.

[6] U.S. Department of Health and Human Services, *Healthy People 2010*. Retrieved from http://www.healthlypeople.gov/

[7] Schwimmer, J.B., Burwinkle, T.M., & Varni, J.W. (2003). Health-Related Quality of Life of Severely Obese Children and Adolescents. *Journal of the American Medical Association*. 289(14), 1818.

[8] *Obesity Prevention Initiative Act (PA 96-0155): A Report to the Illinois General Assembly*, Illinois Department of Public Health, December 2010.

[9] *The Learning Connection: The Value of Improving Nutrition and Physical Activity in Our Schools*. Retrieved from http://www.actionforhealthykids.org

[10] U.S. Center for Disease Control and Prevention, *Youth Physical Activity: The Role of Families*. Retrieved from http://www.cdc.gov/healthyyouth

[11] U.S. Center for Disease Control and Prevention, *Smoking and Tobacco Use: Data and Statistics.* Retrieved from http://www.cdc.gov/tobacco

[12] U.S. Department of Health and Human Services. *The Surgeon General's Call to Action to Prevent and Reduce Underage Drinking.* Rockville, MD: U.S. Department of Health and Human Services; 2007. Retrieved from http://www.surgeongeneral.gov/topics/underagedrinking/

[13] Monti, P.M., et al. (2005). Adolescence: Booze, Brains, and Behavior. *Alcoholism: Clinical and Experimental Research*. 29, 2, 207-220.

[14] American Medical Association, *Harmful Consequences of Alcohol Use on the Brains of Children.*

[15] *Preventing Tobacco Use Among Young People, Executive Summary, A Report of the Surgeon General*, 1994, Ch. 1.

[16] Pacific Institute for Research and Evaluation*, State Underage Drinking Fact Sheets*, 2004.

[17] The National Center on Addiction and Substance Abuse at Columbia University, *Adolescent Substance Use: America's #1 Public Health Problem*, June 2011.

CHAPTER 4. DISEASES/MORBIDITY

Note in this chapter, given the lack of recent disease/morbidity data from existing secondary data sources, much of the data used in this chapter was manually gathered from three hospitals, including OSF/Saint Elizabeth Medical Center, St. Mary's Hospital, and Illinois Valley Community Hospital.

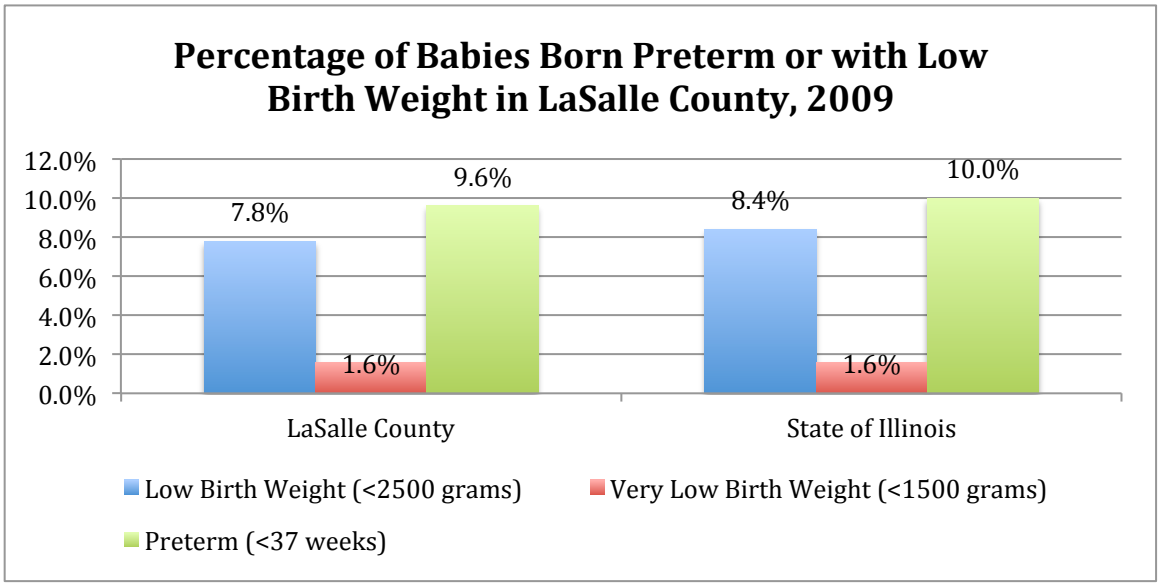
4.1 Age related

Importance of the measure: Age related statistics regarding morbidity gain insight into the prevalence of disease within two vulnerable populations – the very young and the very old. Health care services designed to meet the needs of these populations are very expensive and therefore, a thorough understanding of the leading indicators for these populations helps with managing service delivery costs.

4.1.1 Low birth weight rates

Low birth weight rate is defined as the percentage of infants born below 2,500 grams or 5.5 pounds. Very low birth weight rate is defined as the percentage of infants born below 1,500 grams or 3.3 pounds. In contrast, the average newborn weighs about 7 pounds. The percentage of babies born with low, very low, and preterm birth weights in LaSalle County was less than or equal to the State of Illinois averages.

Table 4.1.1-1: Percentage of Babies Born Preterm or with Low Birth Weight in LaSalle County, 2009



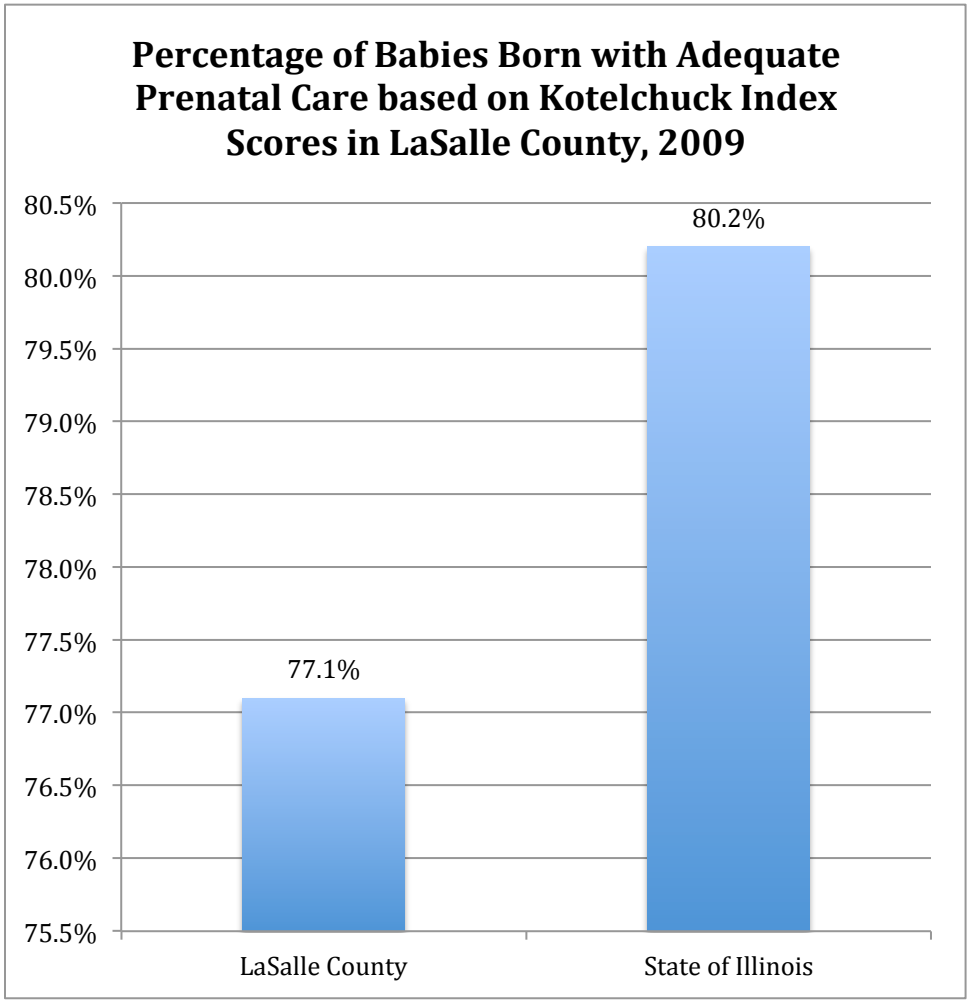
Source: Illinois Department of Public Health

4.1.2 Initiation of prenatal care

Prenatal care is comprehensive medical care provided for the mother and fetus, which includes screening and treatment for medical conditions as well as identification and interventions for behavioral risk factors associated with adverse birth outcomes. Kotelchuck Index Scores are used to determine the quantity of prenatal visits received between initiation of services and delivery. Adequate (80%-109% of expected visits) and Adequate Plus (receiving 110% of recommended services) of received services is compared to the number of expected visits for the period when care began and the delivery date.

Of the babies born in 2009 in LaSalle County, only 77.1% were born with "Adequate" or "Adequate Plus" prenatal care. This figure lags the State of Illinois average of 80.2% of babies born with similar prenatal care.

Table 4.1.2-1: Percentage of Babies Born with Adequate or Better Prenatal Care based on Kotelchuck Index Scores in LaSalle County, 2009



Source: Illinois Department of Public Health

4.2 Cardiovascular

Importance of the measure:
Cardiovascular disease is defined as all diseases of the heart and blood vessels, including ischemic (also known as coronary) heart disease, cerebrovascular disease, congestive heart failure, hypertensive disease, and atherosclerosis.

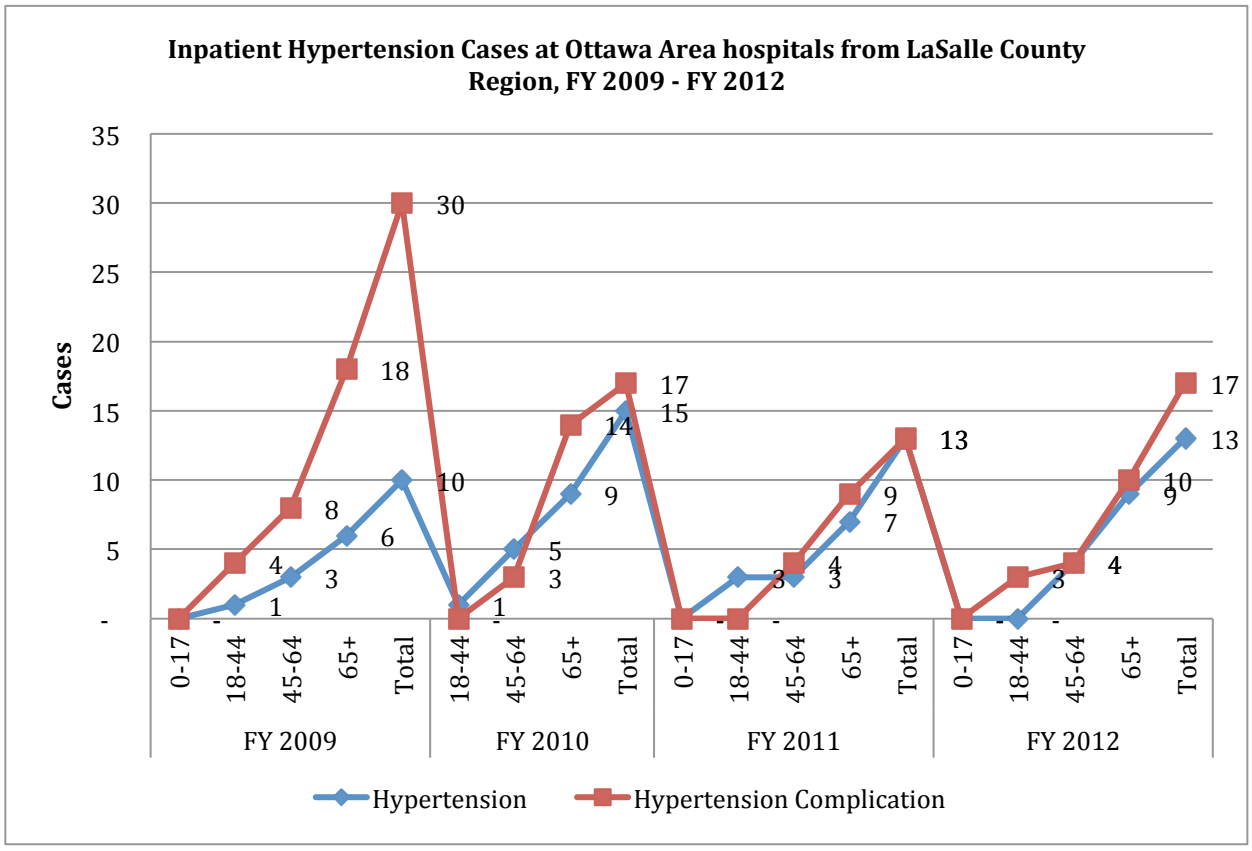
4.2.1 Hypertension

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 the arteries and heart failure.

Cases of hypertension at the three Ottawa area hospitals peaked in FY 2010 when 15 instances were reported overall. Cases of hypertension complication peaked in FY 2009 when 30 instances were reported overall. The most recent data indicate 13 cases of hypertension and 17 case of hypertension complication in FY 2012.

Cases of hypertension complication at the three Ottawa area hospitals have decreased by 43% between 2009 and 2012. Cases of hypertension have increased by 30% during the same time frame.

Table 4.2.1-1 Inpatient Hypertension Cases at Ottawa Area Hospitals from LaSalle County Region

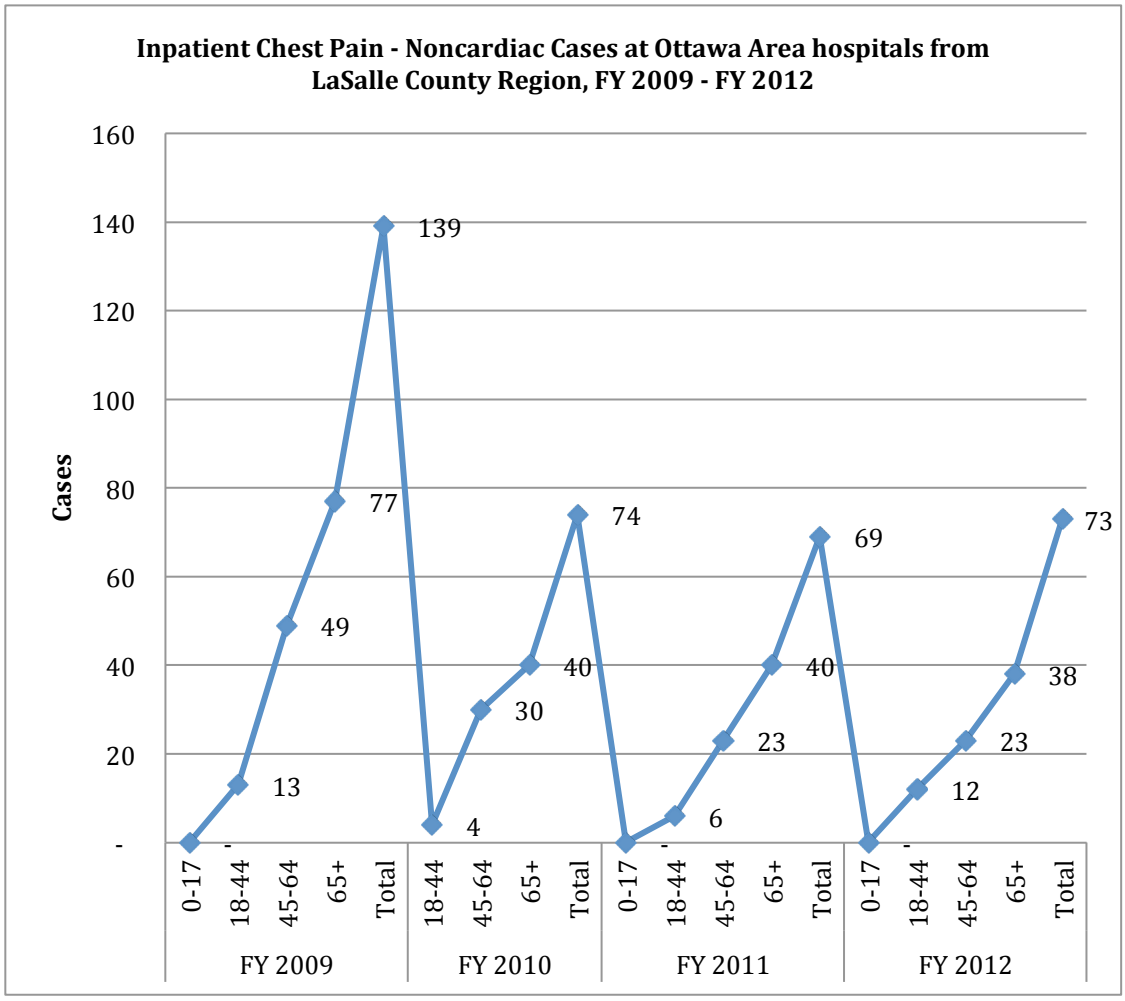


Source: COMPdata 2012

4.2.2 Coronary artery

There has been a 47% decrease in the number of treated cases of noncardiac chest pain at the three Ottawa area hospitals in LaSalle County between 2009-2012. Cases of noncardiac chest pain at the three Ottawa area hospitals peaked in FY 2009 with 139 reported cases.

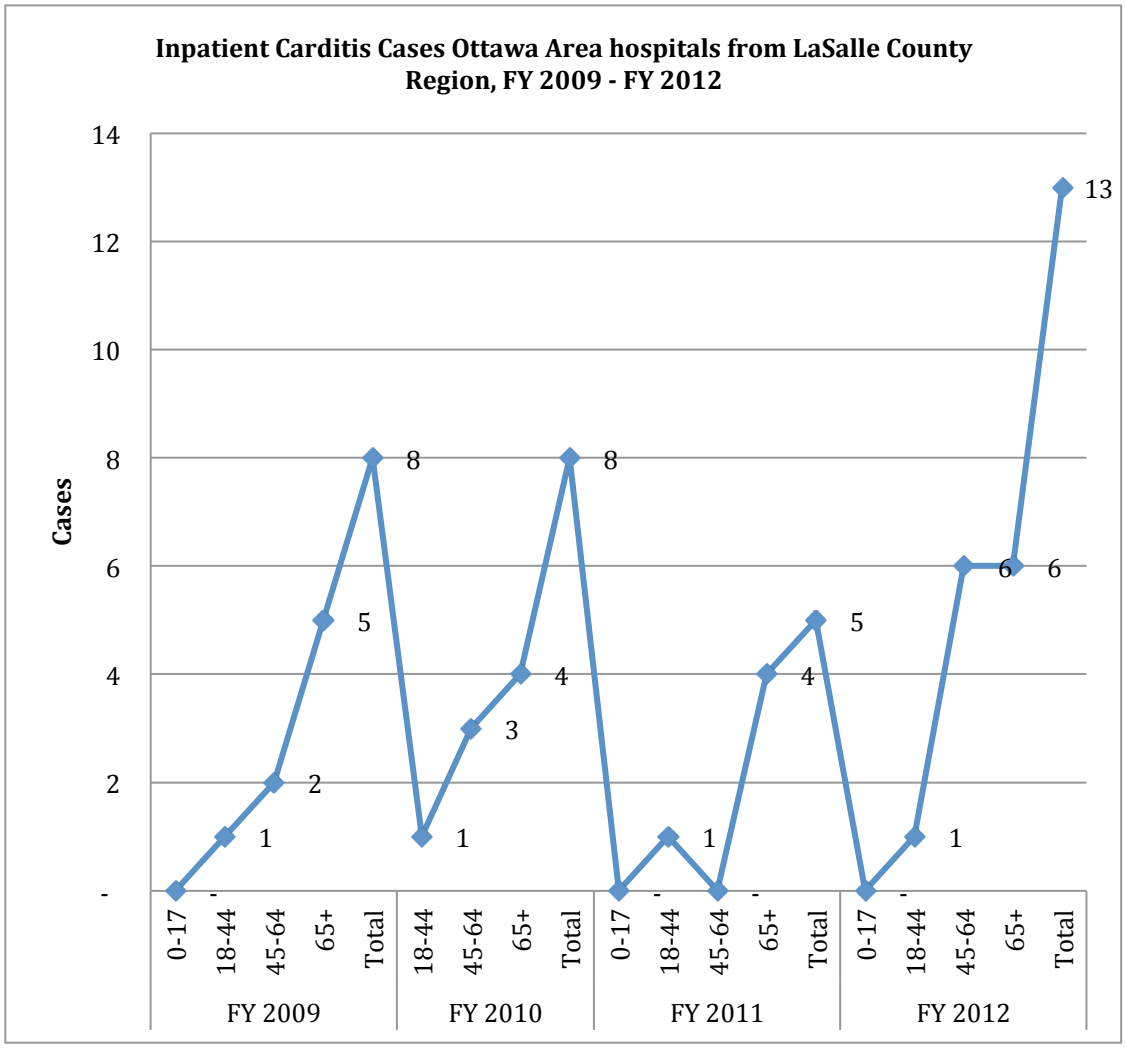
Table 4.2.2-1 Inpatient Chest Pain – Noncardiac Cases at Ottawa Area Hospitals from LaSalle County Region



Source: COMPdata 2012

Cases of carditis at the three Ottawa-area hospitals in LaSalle County have increased by 62.5% between FY 2009 and FY 2012. Cases of carditis peaked at the three Ottawa area hospitals peaked in FY 2012 with 13 reported cases.

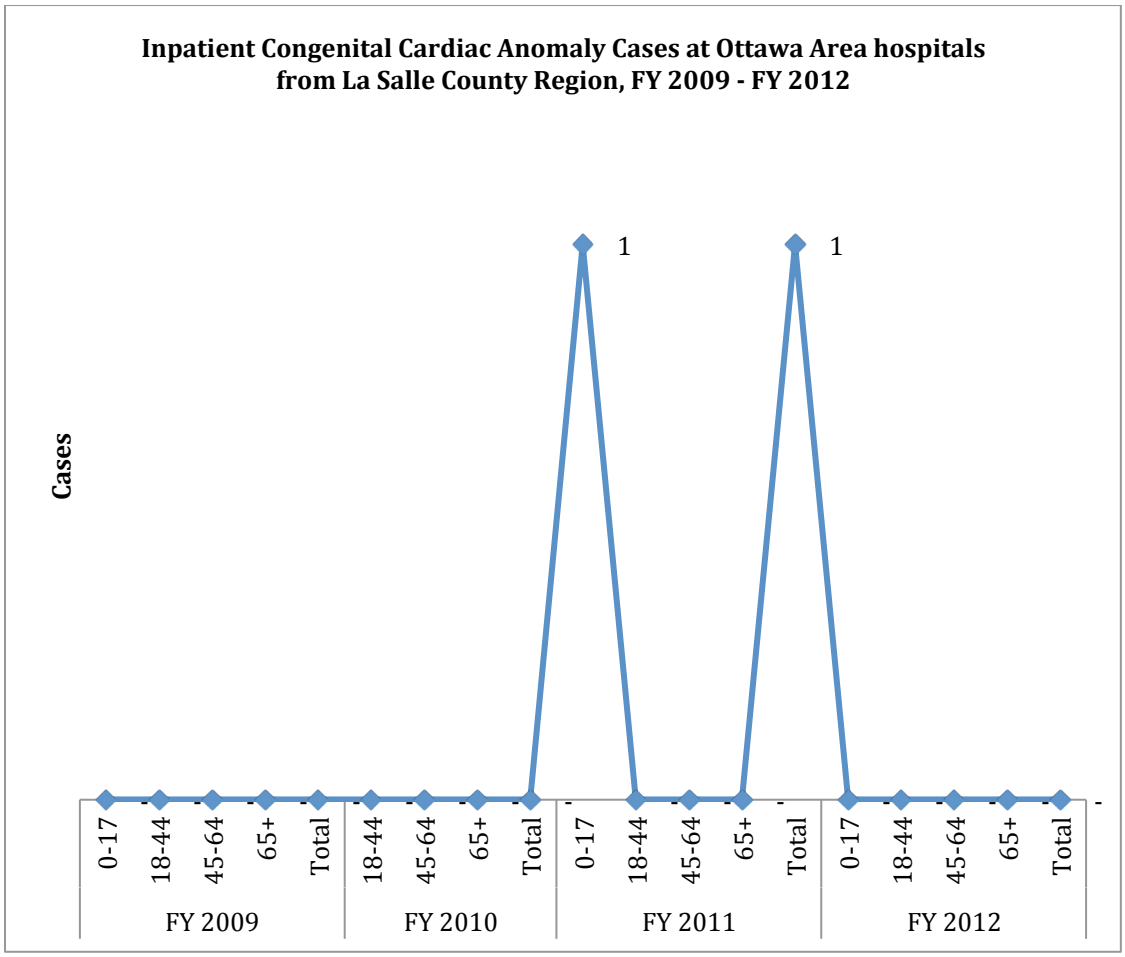
Table 4.2.2-2 Inpatient Carditis Cases at Ottawa Area Hospitals from LaSalle County Region



Source: COMPdata 2012

Cases of congenital cardiac anomaly have remained constant across three of the four years, as zero cases were reported in FY 2009, 2010, and 2012. In FY 2011, there was one reported case of congenital cardiac anomaly.

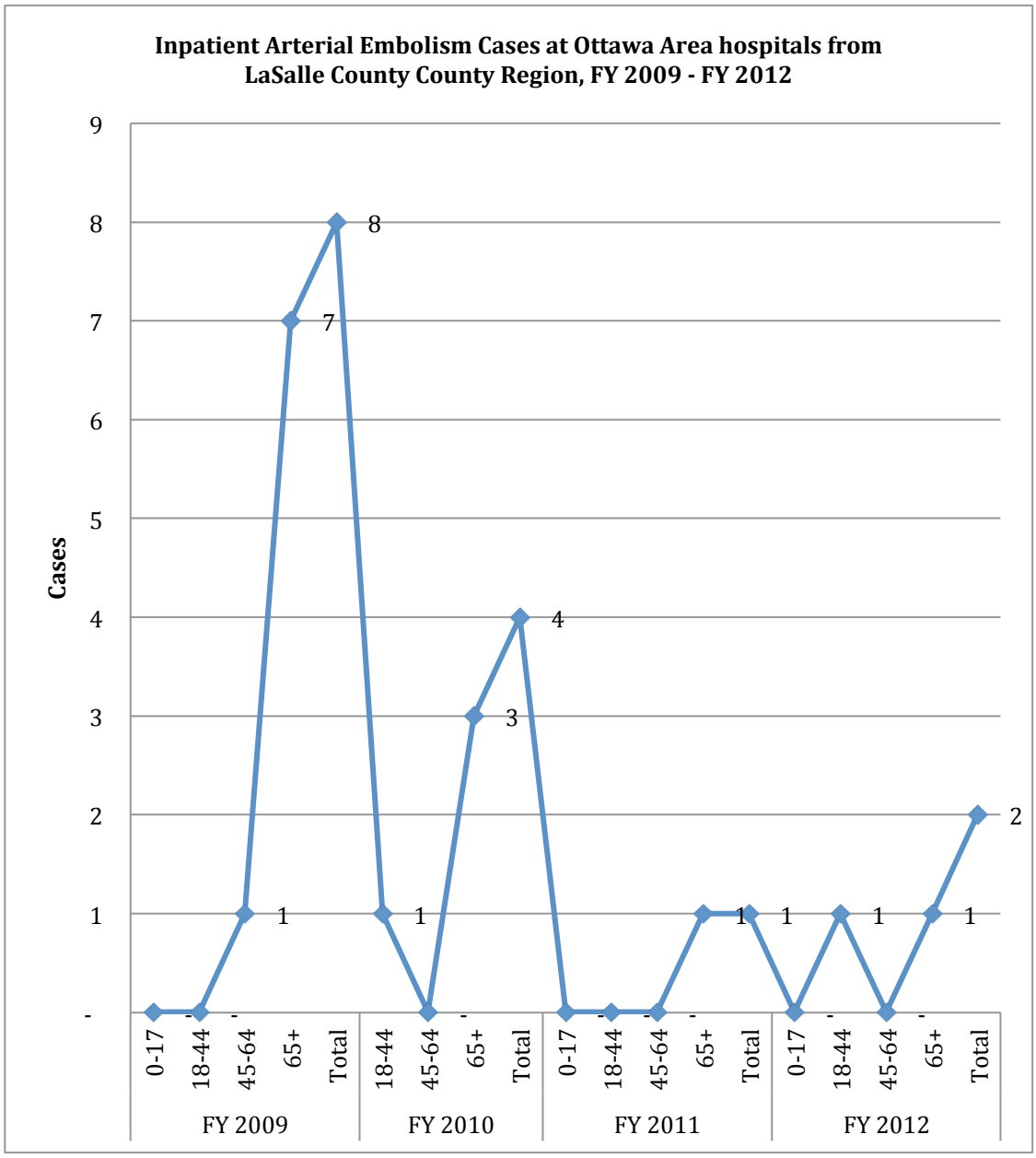
Table 4.2.2-3 Inpatient Congenital Cardiac Anomaly Cases at Ottawa Area Hospitals From LaSalle County Region



Source: COMPdata 2012

Cases of arterial embolism at the three Ottawa-area hospitals in LaSalle County have decreased by 75% between FY 2009 and FY 2012. Cases of arterial embolism peaked at the three Ottawa area hospitals peaked in FY 2009 with 8 reported cases.

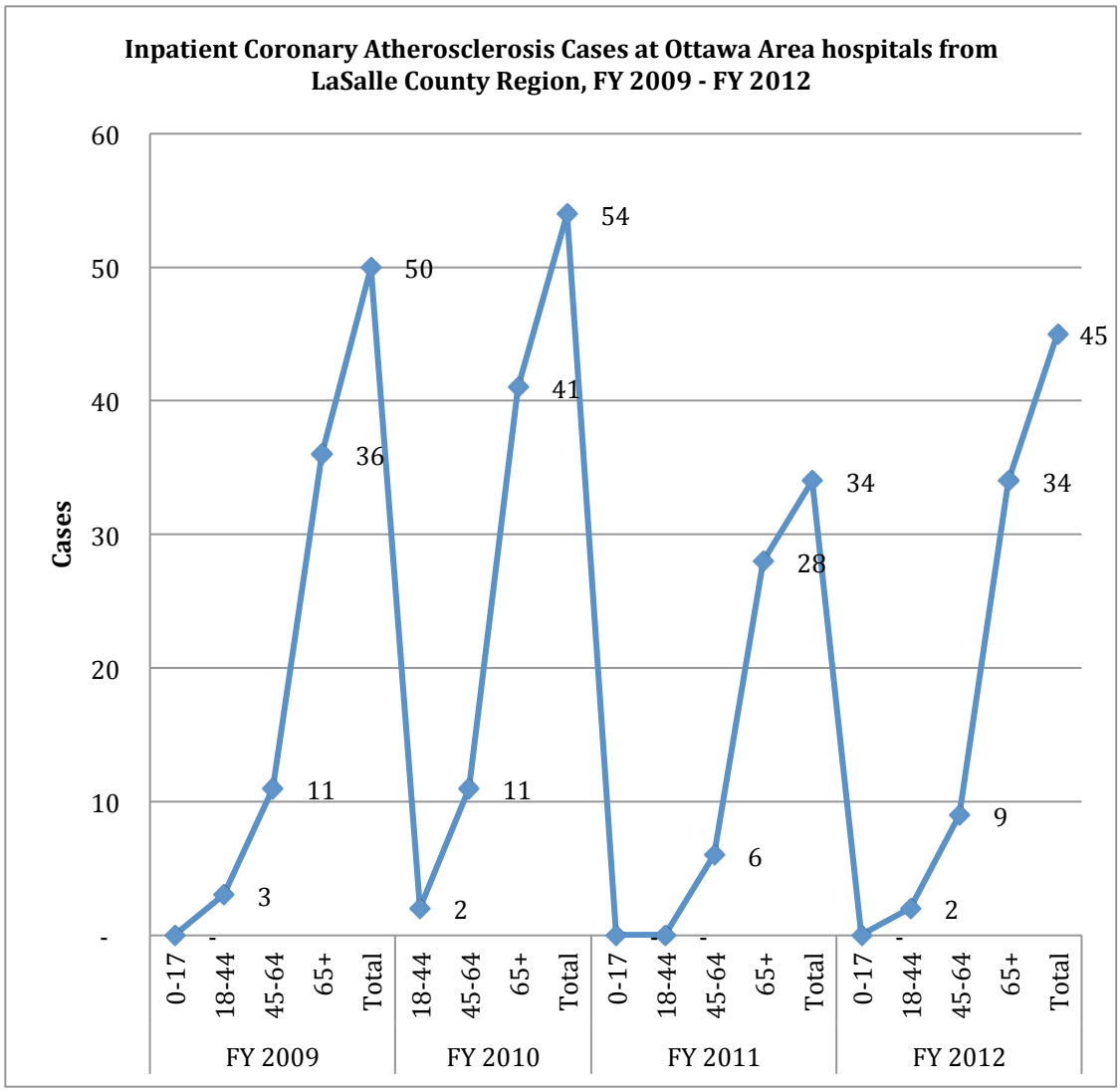
Table 4.2.2-4 Inpatient Arterial Embolism Cases at Ottawa Area Hospitals from LaSalle County Region



Source: COMPdata 2012

There has been a 10% decrease in the number of treated cases of coronary atherosclerosis at the three Ottawa area hospitals between FY 2009 and FY 2012. Similarly, the number of cases for individuals aged 65 and older also decreased -5% for inpatient admissions.

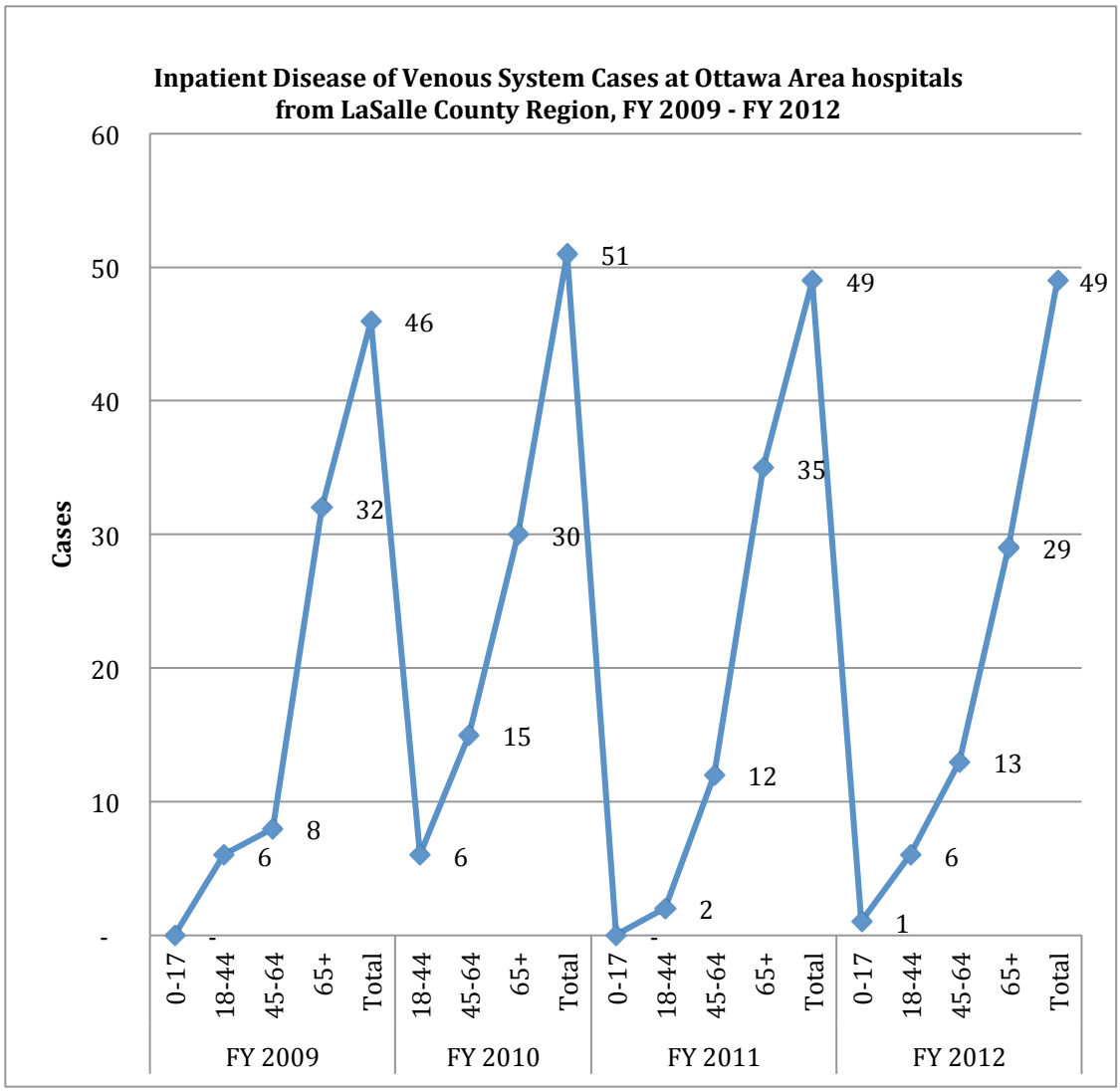
Table 4.2.2-5 Inpatient Coronary Atherosclerosis Cases at Ottawa Area Hospitals from LaSalle County Region



Source: COMPdata 2012

Cases of disease of the venous system at the three Ottawa area hospitals have increased by 6.5% between FY 2009 and FY 2012. However, cases of disease of the venous system decreased in individuals aged 65 and over by 9% during the same time frame.

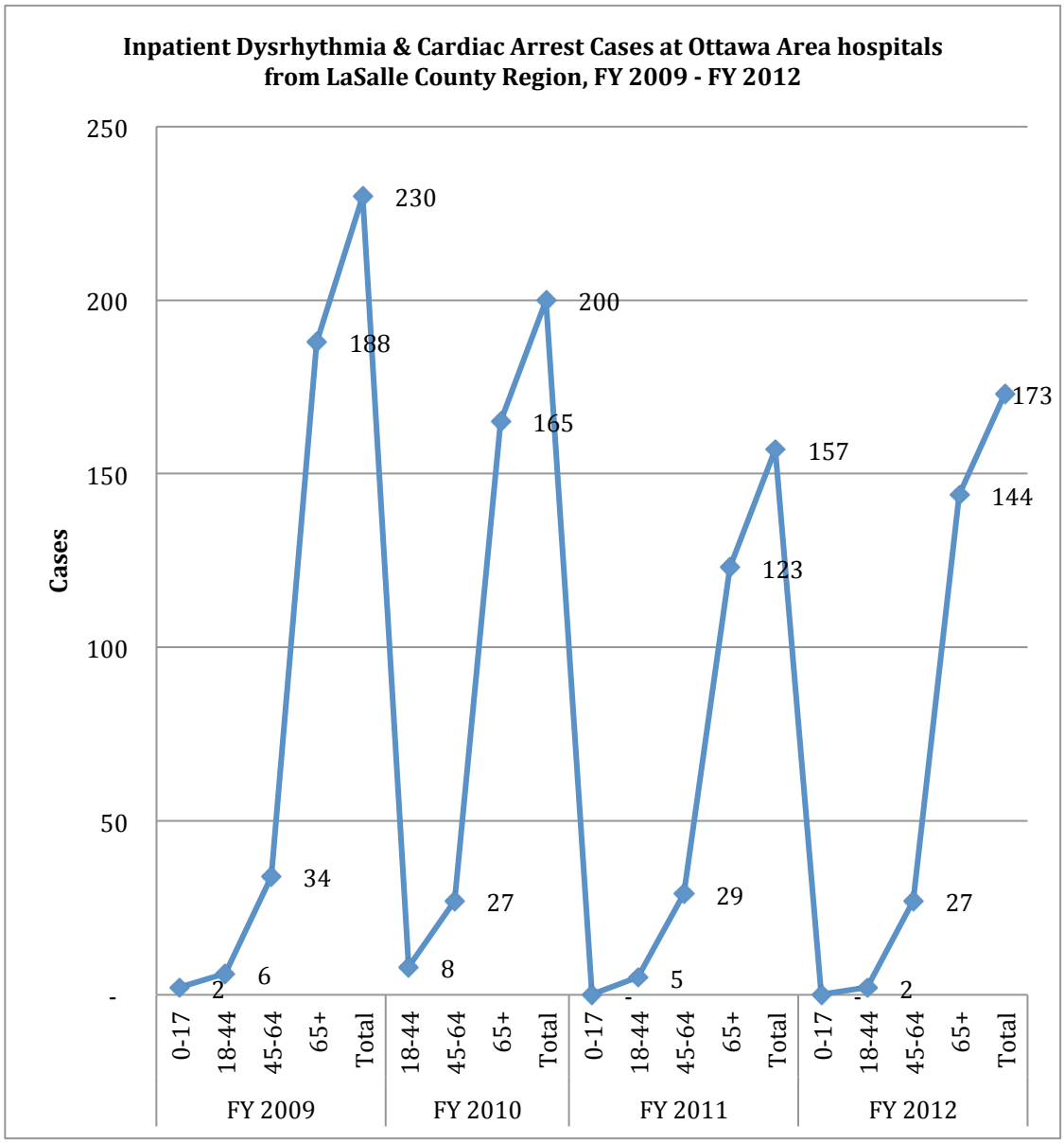
Table 4.2.2-6 Inpatient Disease of Venous System Cases at Ottawa Area Hospitals from LaSalle County Region



Source: COMPdata 2012

Cases of dysrhythmia and cardiac arrest at the three Ottawa area hospitals have decreased by 24.7% between FY 2009 and FY 2012. Similarly, the number of cases for individuals aged 65 and older also decreased 23.4% for inpatient admissions.

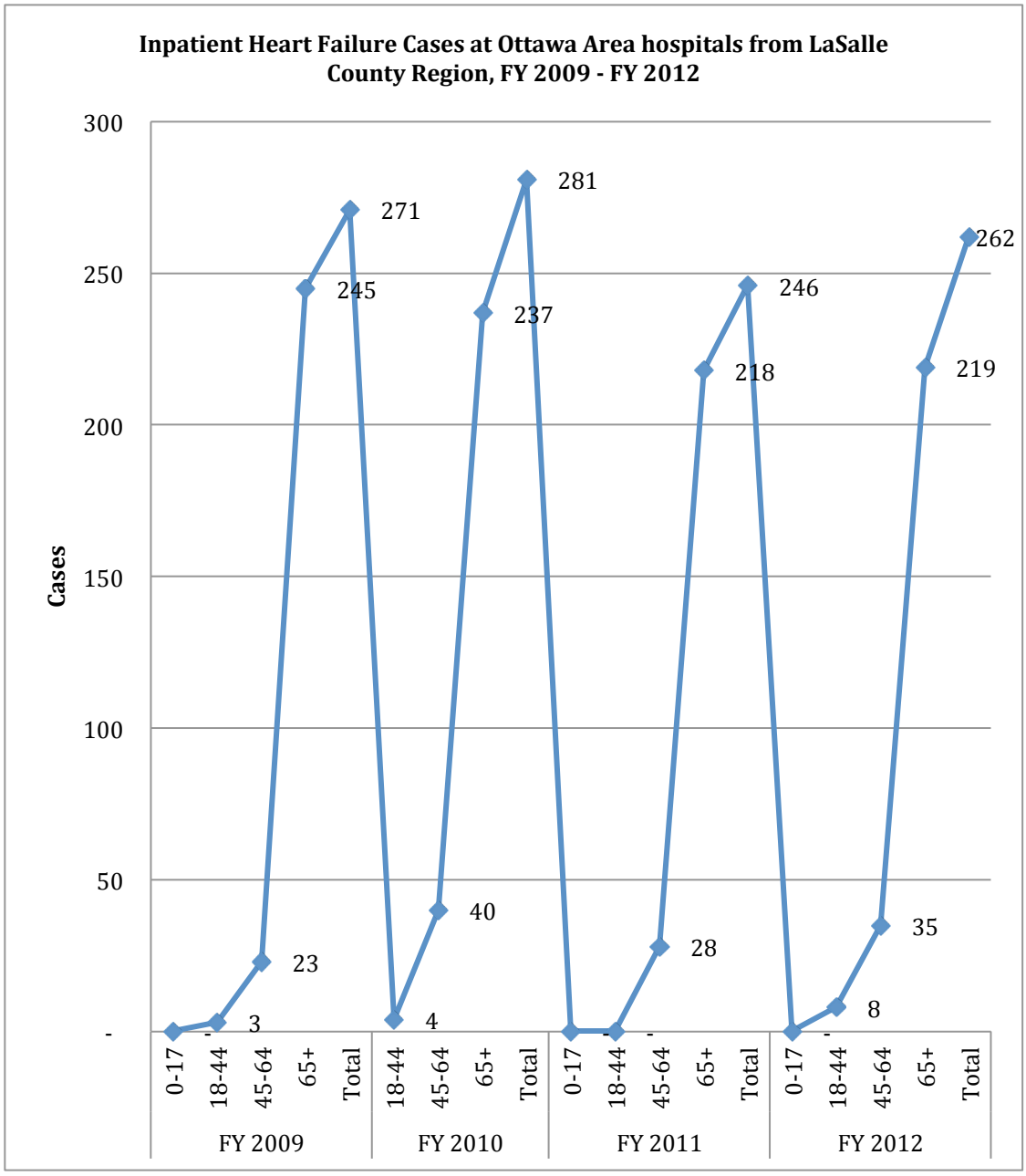
Table 4.2.2-7 Inpatient Dysrhythmia & Cardiac Arrest Cases at Ottawa Area Hospitals from LaSalle County Region



Source: COMPdata 2012

There has been a 3.3% decrease in the number of treated cases of heart failure at the three Ottawa-area hospitals between FY 2009 and FY 2012. However, the number of cases for individuals aged 45-64 years of age increased by 52.1% during the same time frame.

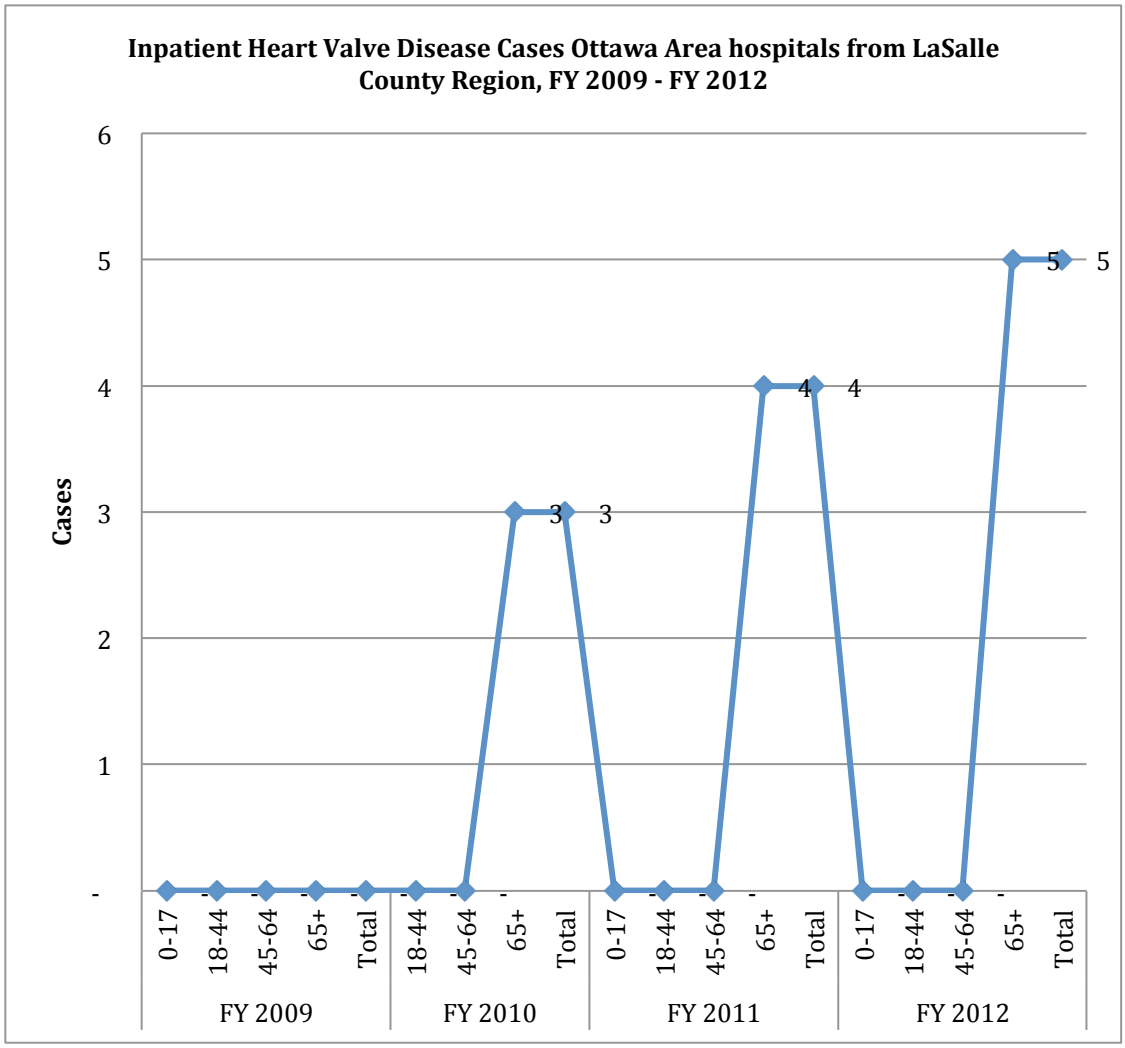
Table 4.2.2-8 Inpatient Heart Failure Cases at Ottawa Area Hospitals from LaSalle County Region



Source: COMPdata 2012

Between FY 2009 and FY 2012, there were twelve reported cases of heart valve disease at the three Ottawa area hospitals. All cases were reported in individuals 65 years of age and over. Cases of heart valve disease peaked in FY 2012 with 5 cases.

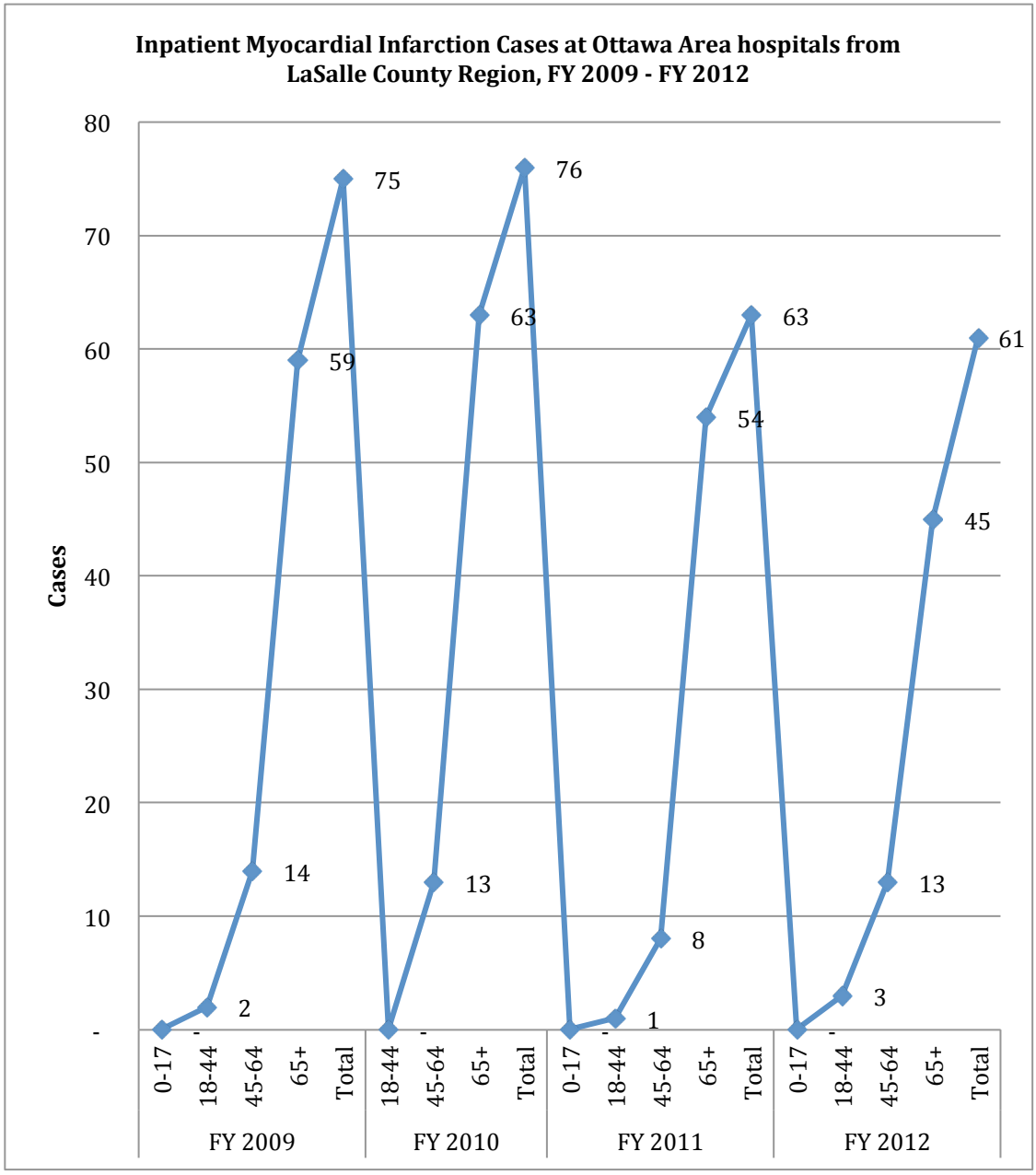
Table 4.2.2-9 Inpatient Heart Valve Disease Cases at Ottawa Area Hospitals from LaSalle County Region



Source: COMPdata 2012

Cases of myocardial infarction at the three Ottawa area hospitals have decreased by 18.6% between FY 2009 and FY 2012.

Table 4.2.2-10 Inpatient Myocardial Infarction Cases at Ottawa Area Hospitals from LaSalle County Region

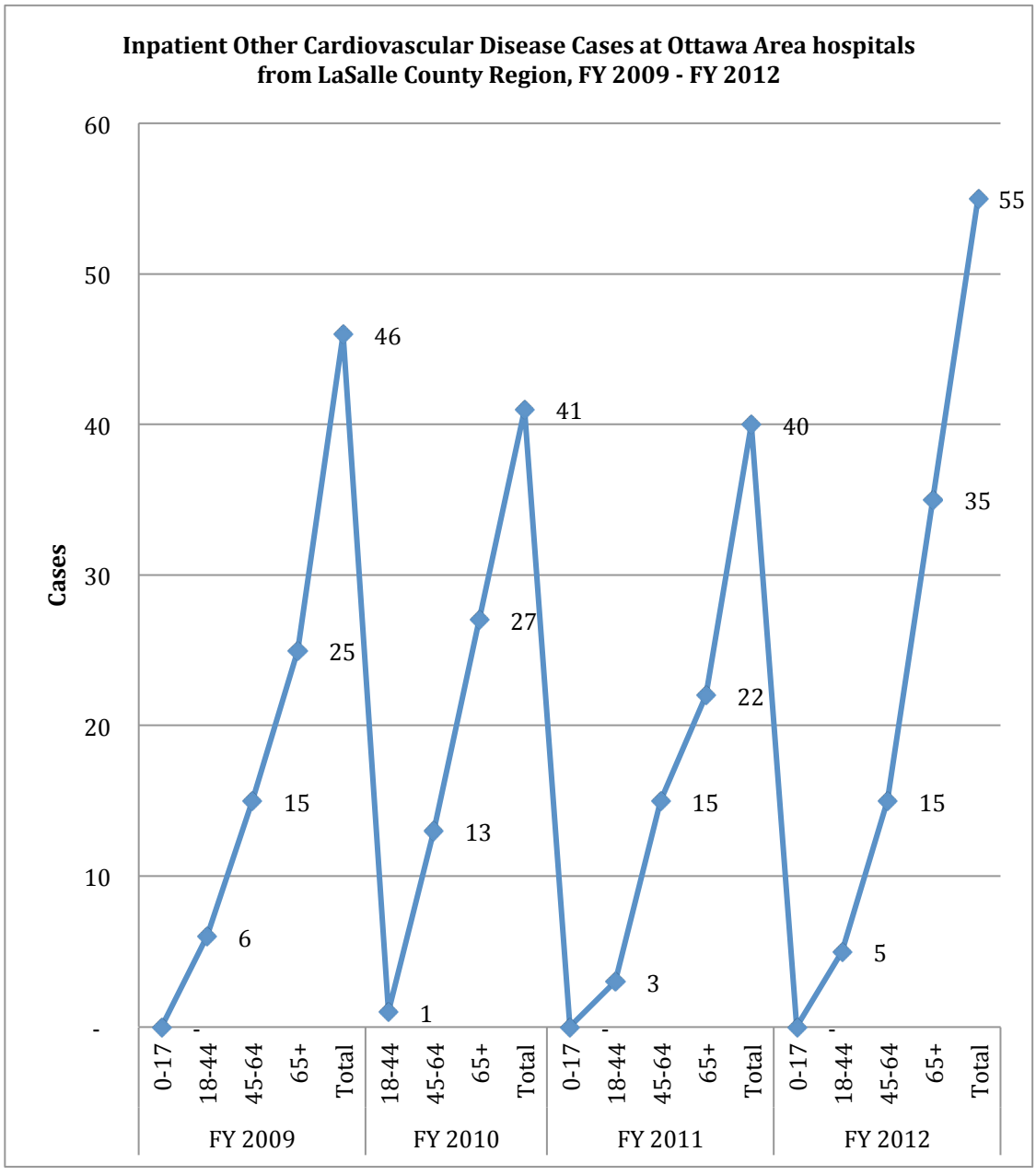


Source: COMPdata 2012

Cases of other cardiovascular disease at the three Ottawa area hospitals have increased by 19.5% between FY 2009 and FY 2012 for inpatient admissions.

Of particular interest, cases of other cardiovascular disease in individuals aged 65 and over have increased by 40% during the same time frame for inpatient admissions.

Table 4.2.2-11 Inpatient Other Cardiovascular Disease Cases at Ottawa Area Hospitals from LaSalle County Region

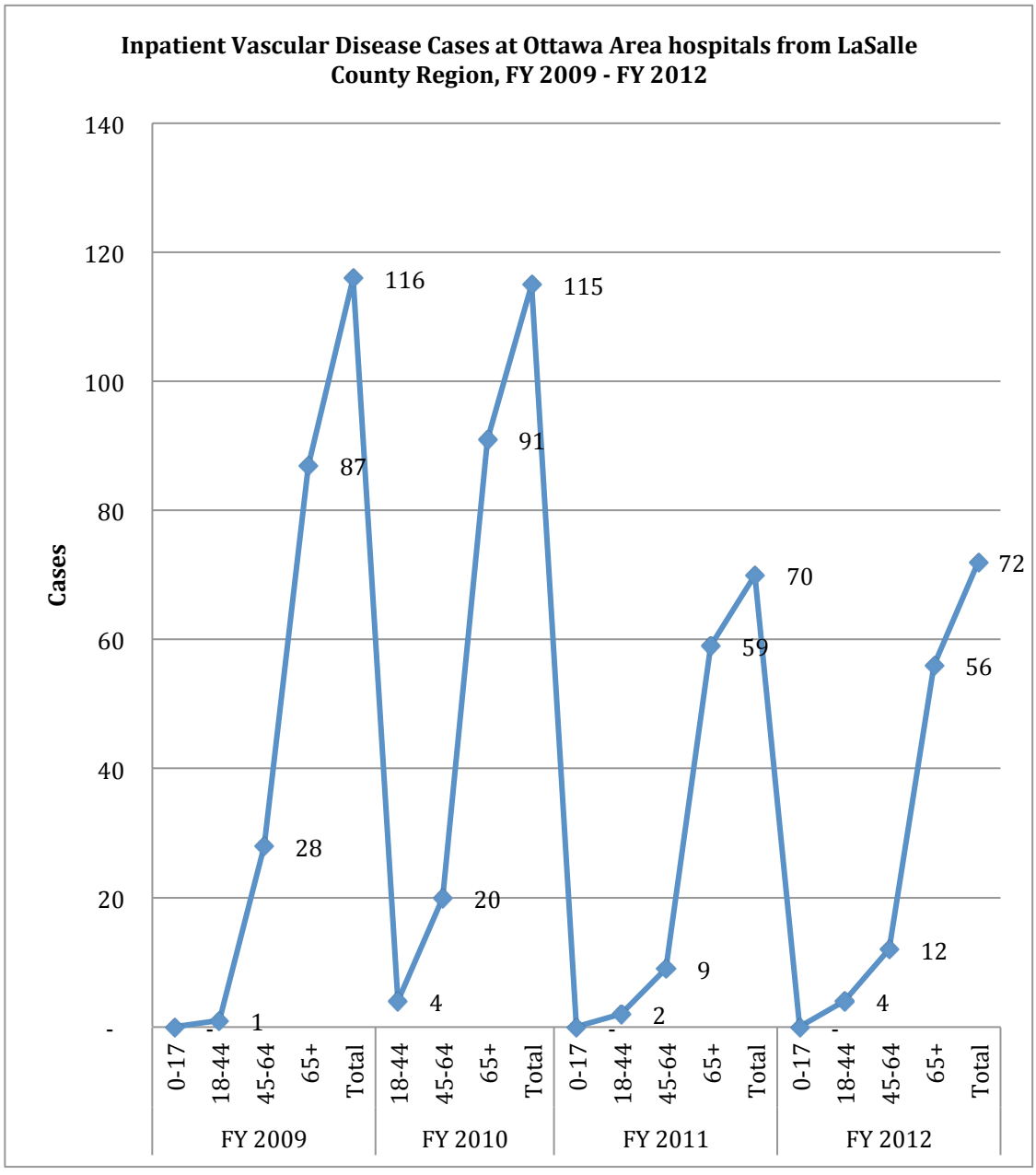


Source: COMPdata 2012

Cases of vascular disease at the three Ottawa area hospitals have decreased by 37.9% between FY 2009 and FY 2012 for inpatient admissions.

Of particular interest, cases of vascular disease in individuals aged 45 to 64 have decreased by -57.1% during the same time frame for inpatient admissions.

Table 4.2.2-12 Inpatient Vascular Disease Cases at Ottawa Area Hospitals from LaSalle County Region

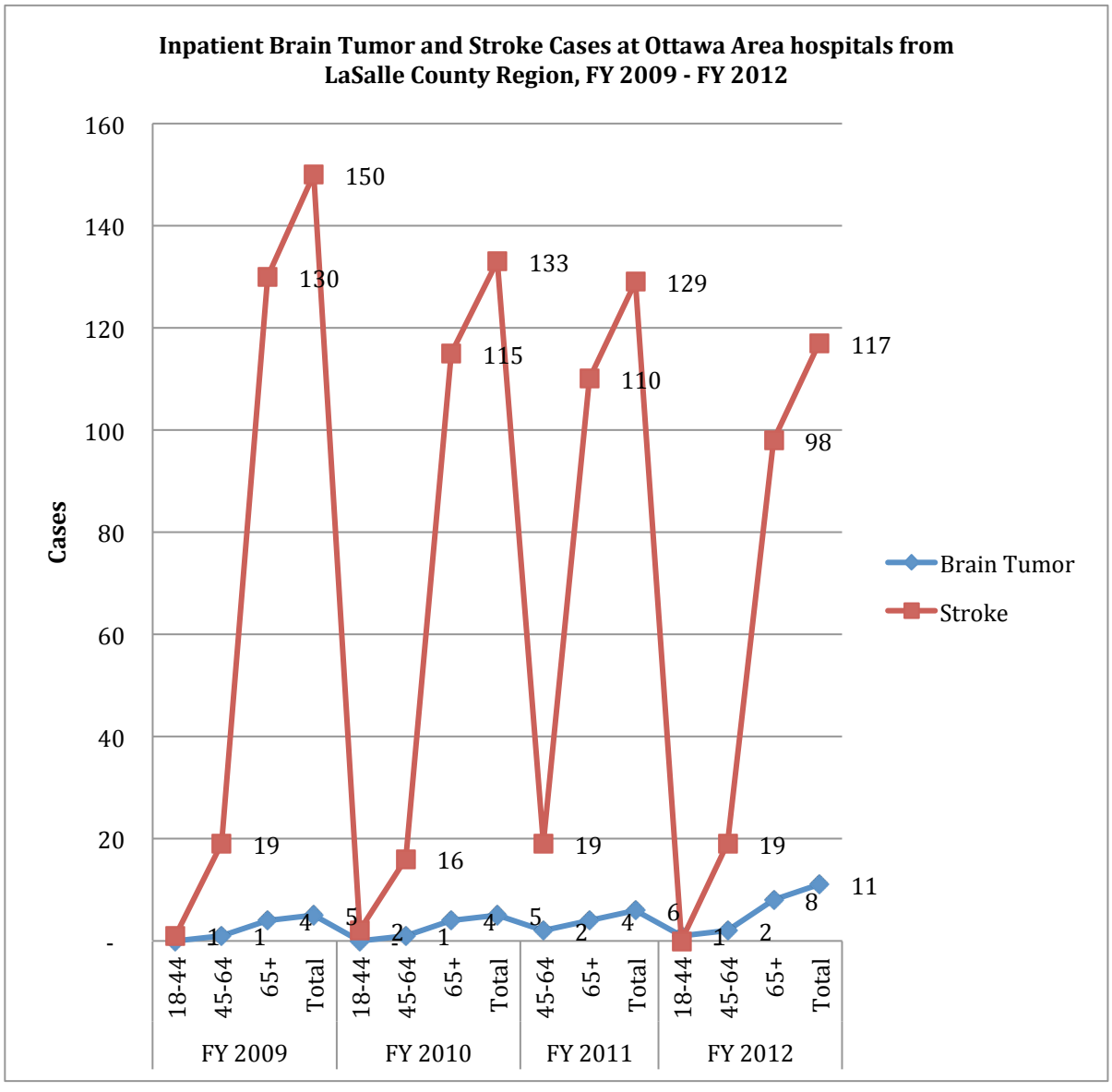


Source: COMPdata 2012

4.2.3 Stroke

Cases of stroke at the three Ottawa area hospitals have decreased by 22% between FY 2009 and FY 2012 for inpatient admissions. Cases of brain tumor have increased by 120% during the same time for inpatient admissions (11 cases in FY 2012 vs. 5 cases in FY 2009).

Table 4.2.3-1 Inpatient Brain Tumor and Stroke Cases at Ottawa Area Hospitals from LaSalle County Region



Source: COMPdata 2012

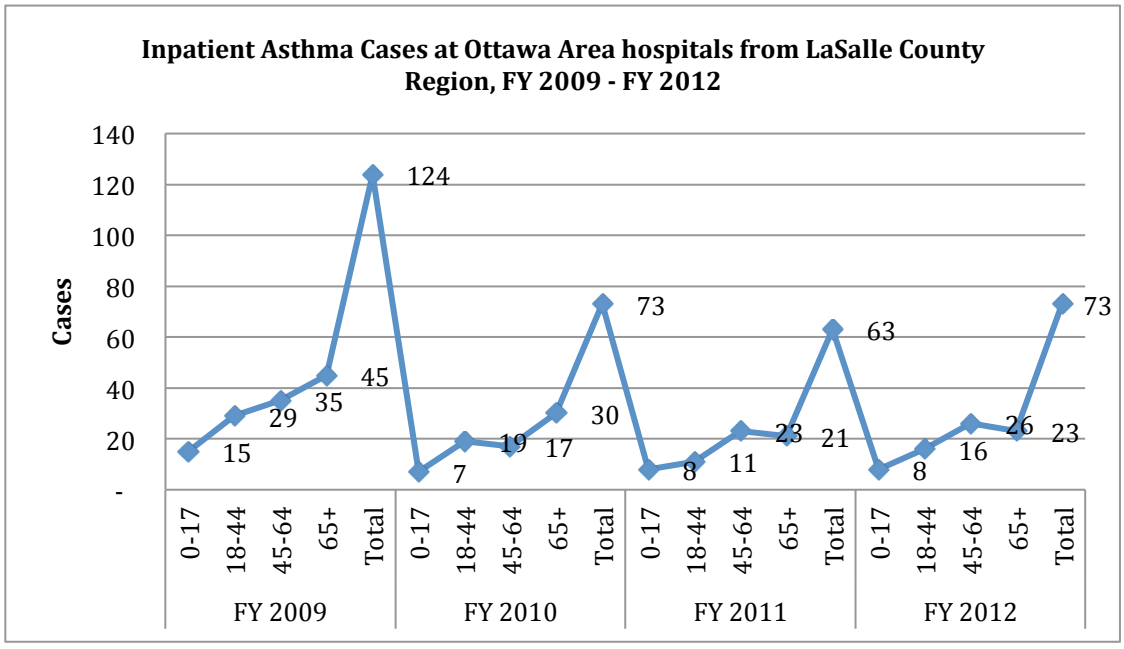
4.3 Respiratory

Importance of the measure: Disease of the respiratory system includes acute upper respiratory infections such as influenza, pneumonia, bronchitis, asthma, emphysema, and Chronic Obstructive Pulmonary Disease (COPD). These conditions are characterized by breathlessness, wheezing, chronic coughing, frequent respiratory infections, and chest tightness. Many respiratory conditions can be successfully controlled with medical supervision and treatment. However, children and adults who do not have access to adequate medical care are likely to experience repeated serious episodes, trips to the emergency room and absences from school and work. Hospitalization rates illustrate the worst episodes of respiratory diseases and are a proxy measure for inadequate treatment.

4.3.1 Asthma

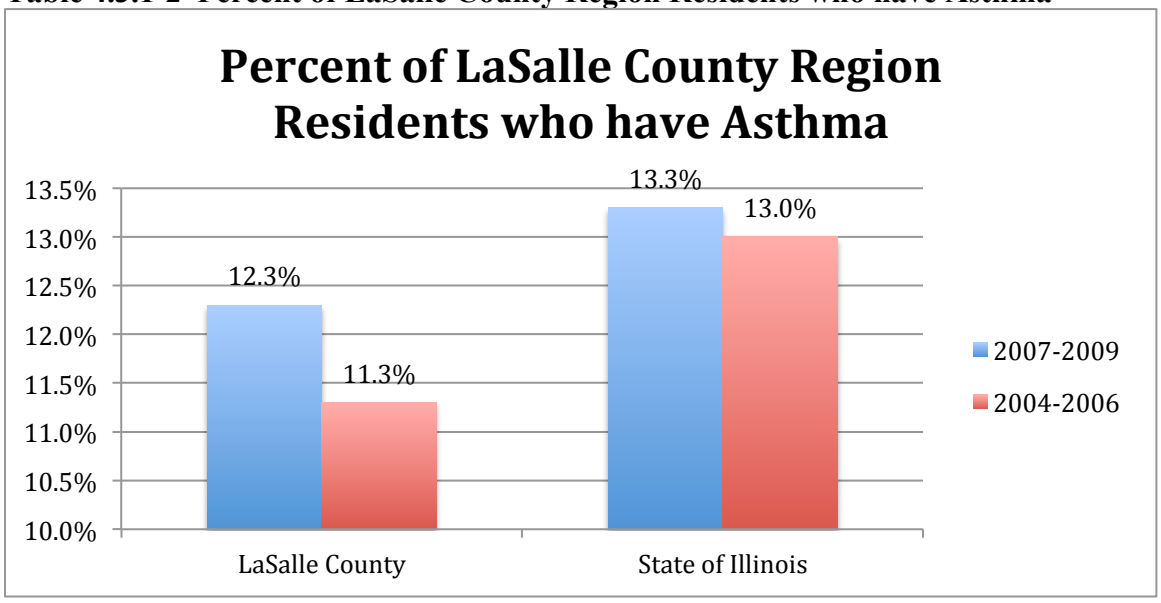
Treated cases of asthma at the three Ottawa area hospitals have decreased by 41.1% between FY 2009 and FY 2012 for inpatient admissions. Of particular interest, cases of asthma in individuals 0-17 years of age have decreased 46.6% for inpatient admissions. According to the Illinois BRFSS, asthma rates in the LaSalle County Region are lower than the average rate for the State of Illinois, yet have grown at a faster rate.

Table 4.3.1-1 Inpatient Asthma Cases at Ottawa Area Hospitals from LaSalle County Region



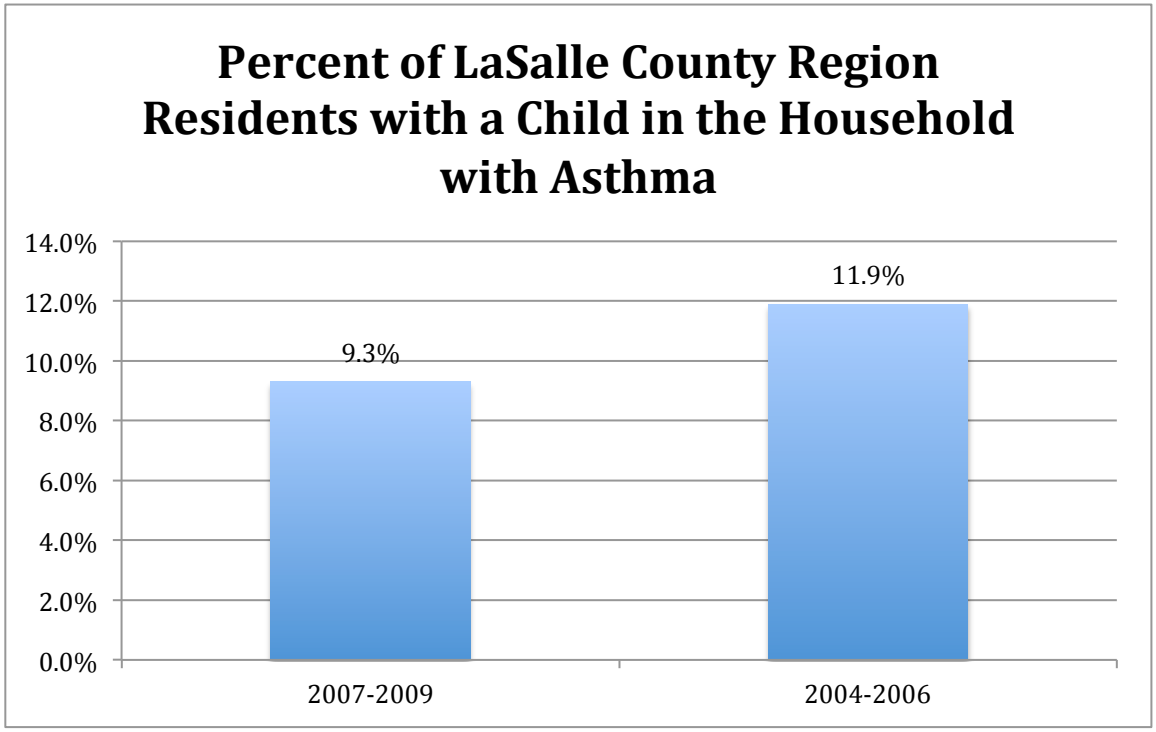
Source: COMPdata 2012

Table 4.3.1-2 Percent of LaSalle County Region Residents who have Asthma



Source: Illinois Department of Public Health

Table 4.3.1-3 Percent of LaSalle County Region Residents with a Child in the Household with Asthma

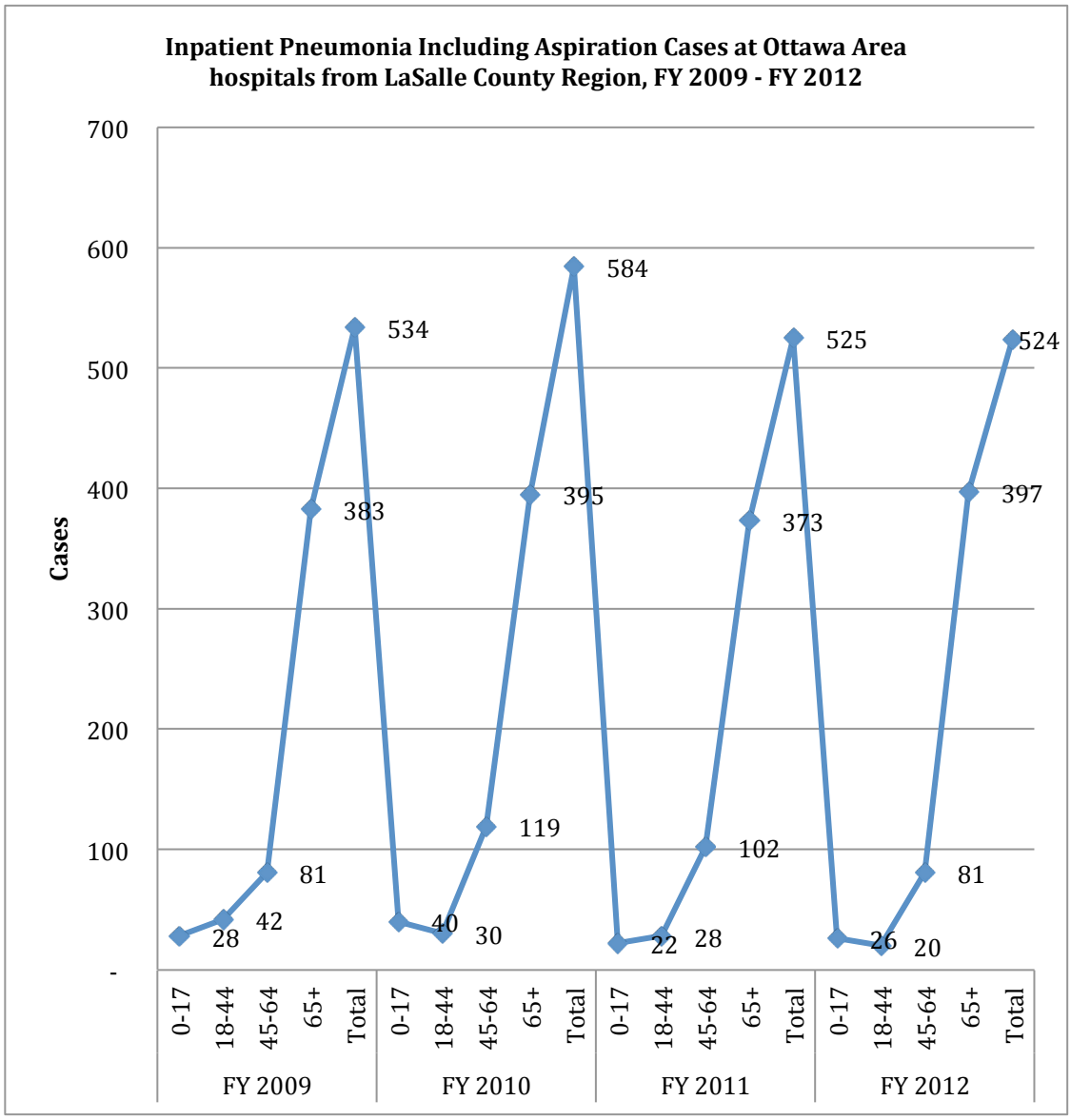


Source: Illinois Department of Public Health

4.3.2 Pneumonia

Treated cases of pneumonia at the three Ottawa area hospitals have decreased by 1.8% between FY 2009 and FY 2012 for inpatient admissions. However, cases of asthma in individuals 65 years of age and older have increased 3.6% during the same time frame.

Table 4.3.2-1 Inpatient Pneumonia Including Aspiration Cases at Ottawa Area Hospitals from LaSalle County Region

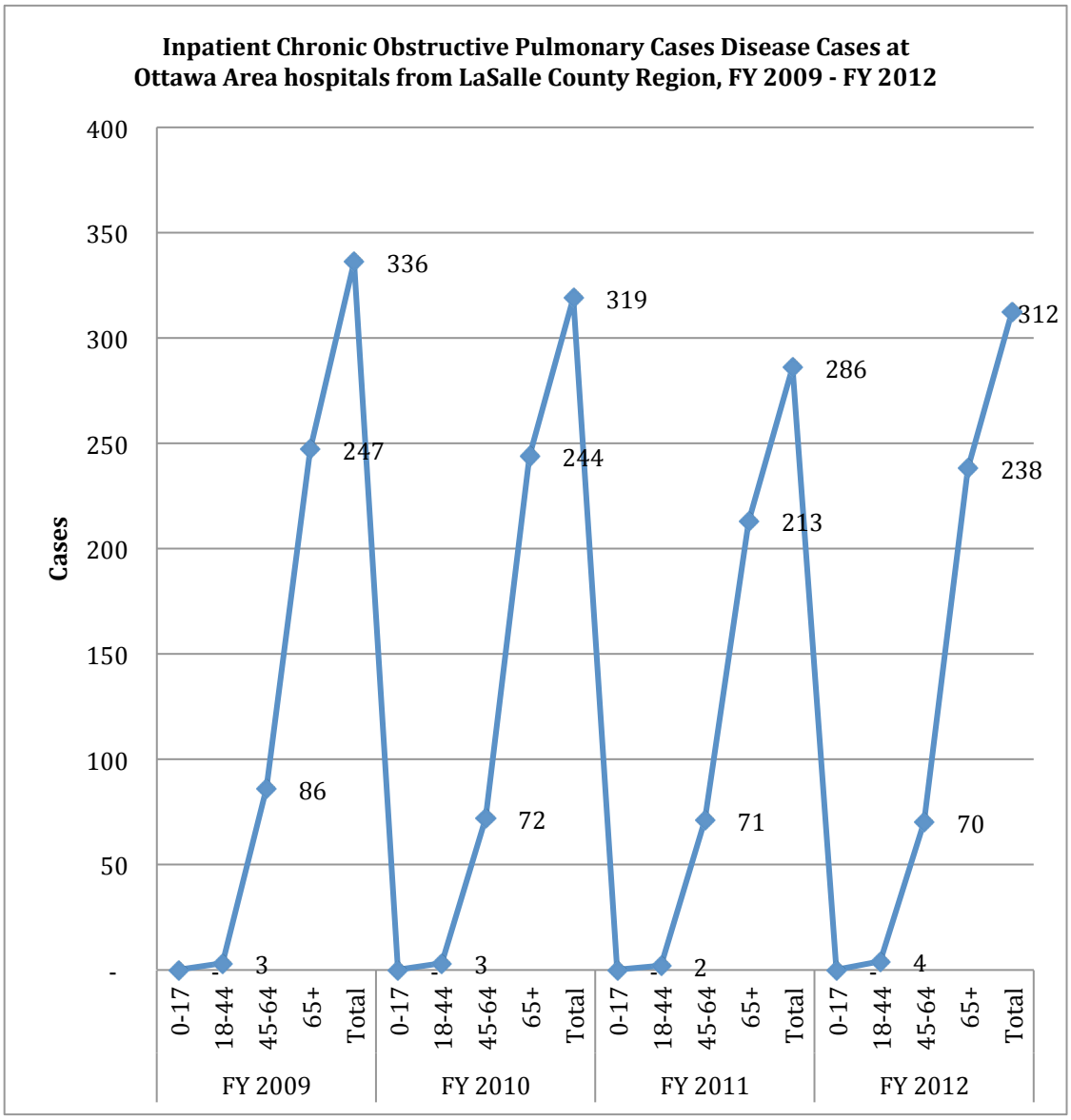


Source: COMPdata 2012

4.3.3 COPD

There has been a 7.1% decrease in the number of treated cases of COPD at the three Ottawa area hospitals between FY 2009 and FY 2012 for inpatient admissions. The number of cases for individuals aged 45 to 64 has decreased 18.6% during the same time frame.

Table 4.3.3-1 Inpatient Chronic Obstructive Pulmonary Disease Cases at Ottawa Area Hospitals from LaSalle County Region



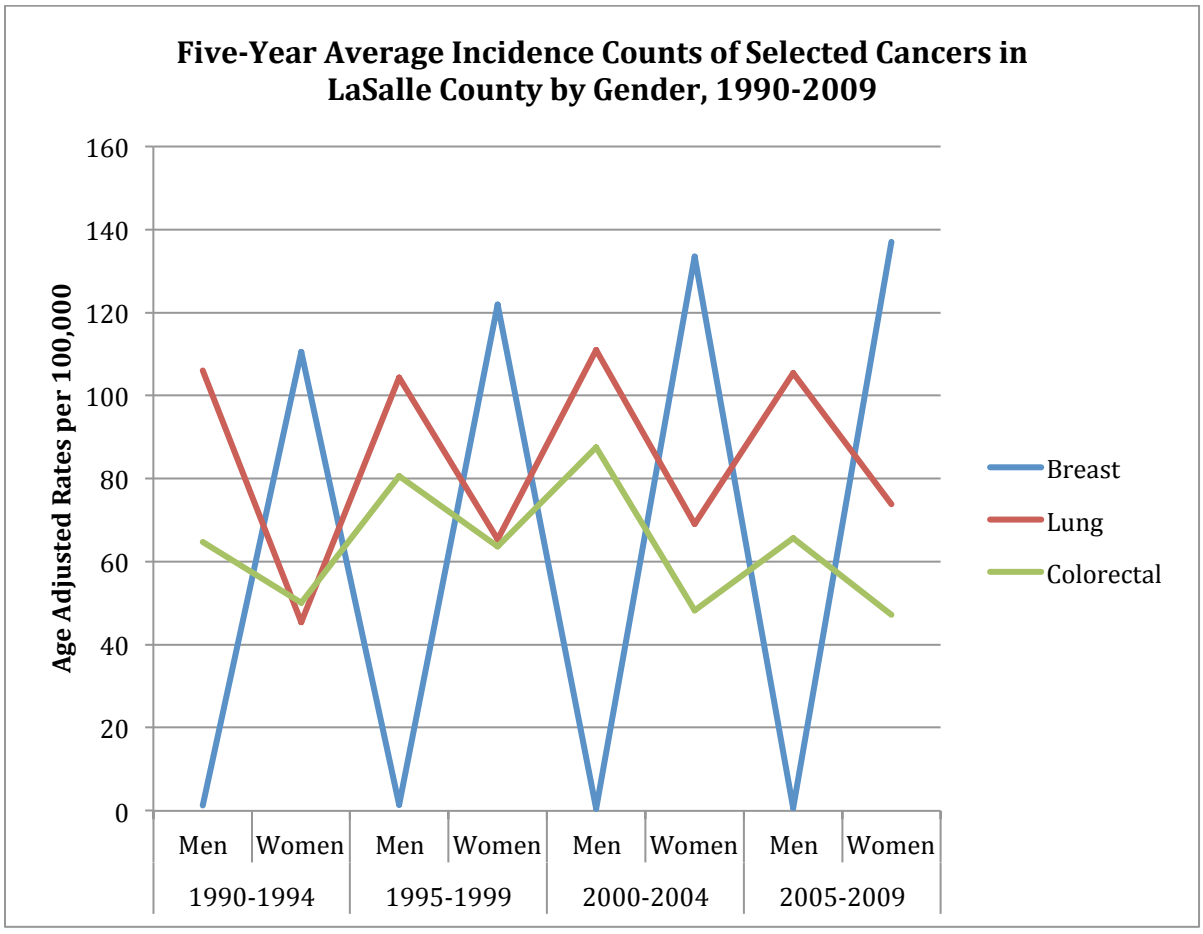
Source: COMPdata 2012

4.4 Cancer

Importance of the measure: Cancer is caused by the abnormal growth of cells in the body and many causes of cancer have been identified. Generally, each type of cancer has its own symptoms, outlook for cure, and methods for treatment. Cancer is one of the leading causes of death in the LaSalle County Region.

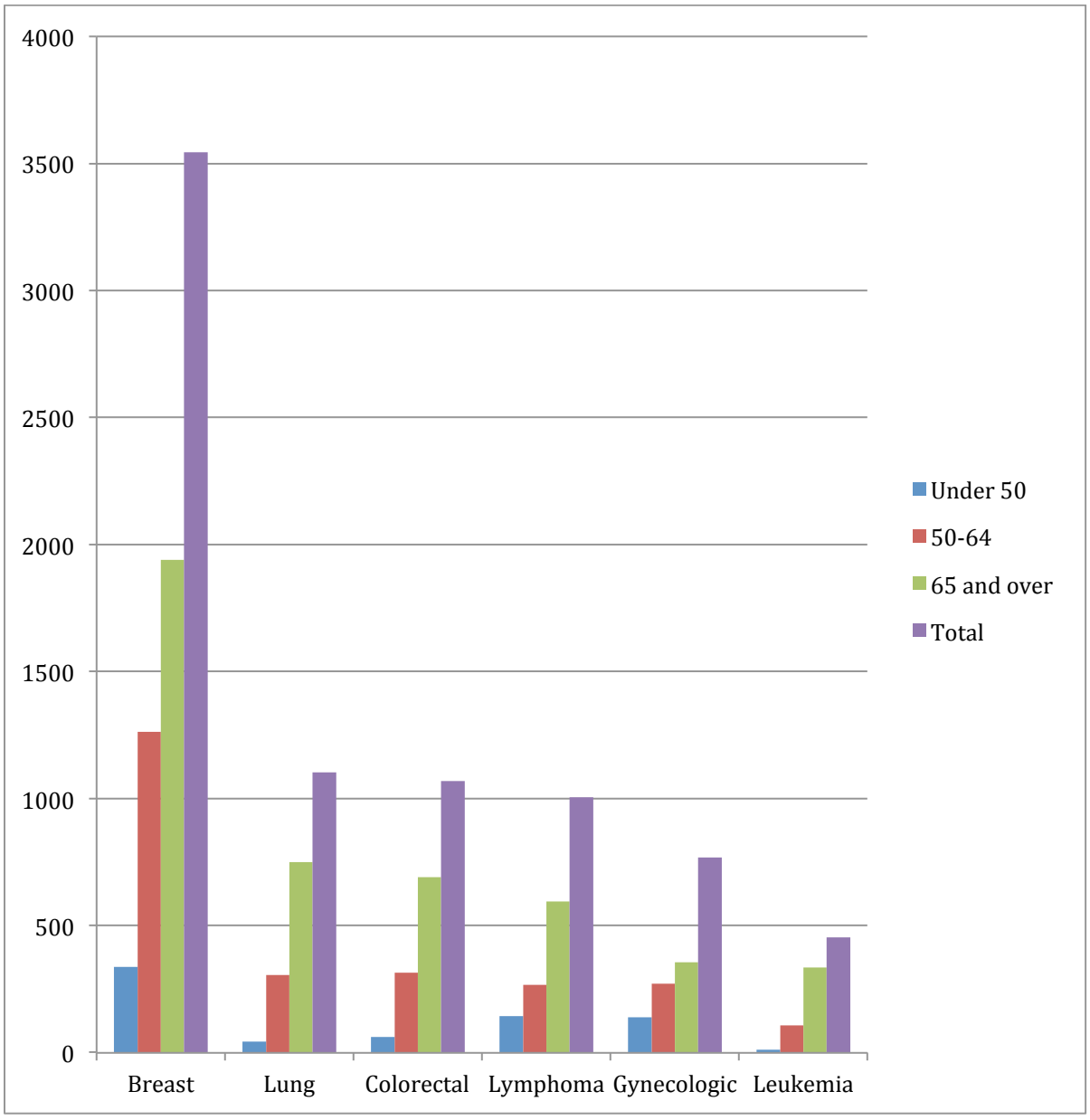
Table 4.4-1 provides longitudinal data on the incidence counts of breast, lung, and colorectal cancers in LaSalle County. Tables 4.4-2 and 4.4-3 offer insight into the number of treated cases of the top 6 cancers by treatment in Illinois by age and percentage breakdown by gender.

Table 4.4-1 Five-Year Average Incidence Counts of Selected Cancers in LaSalle County by Gender, 1990-2009



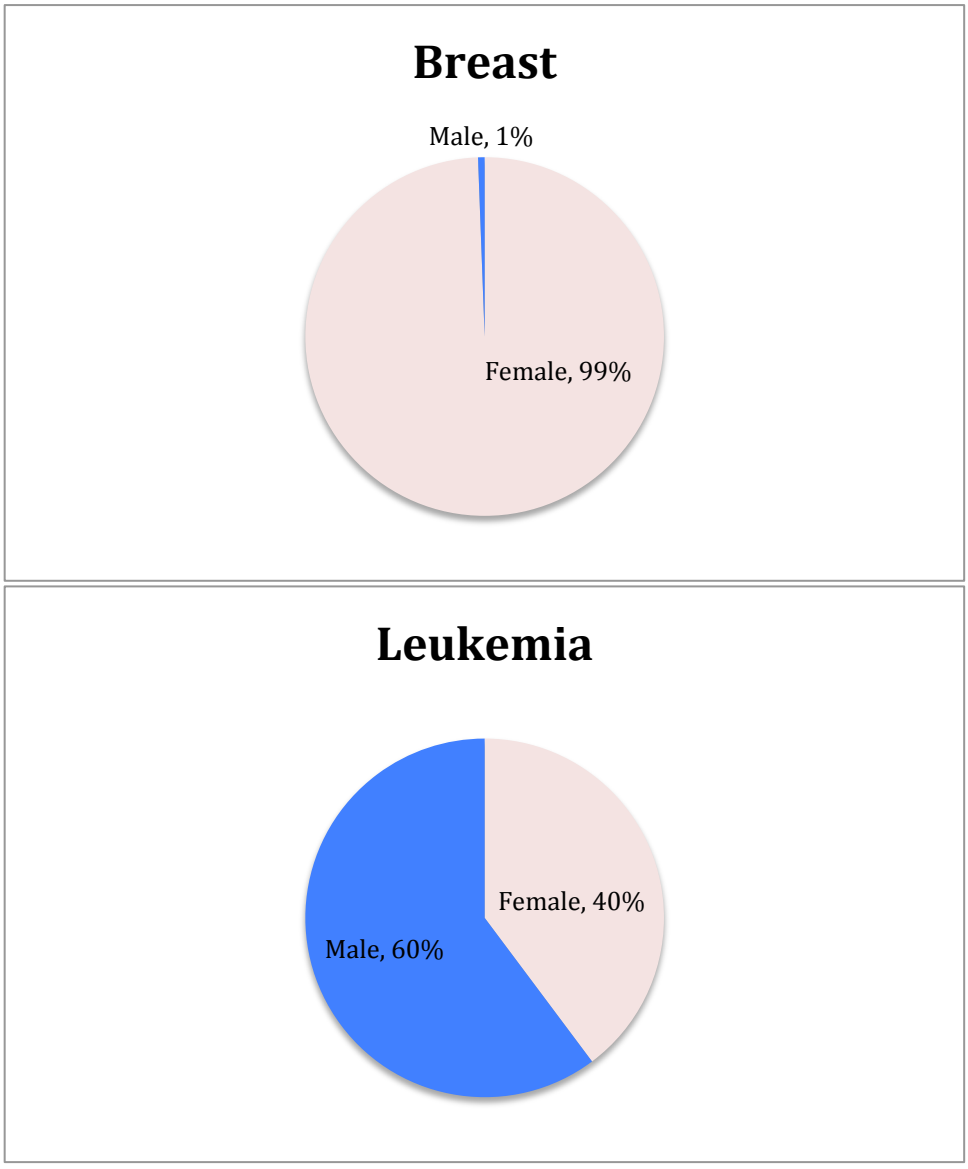
Source: IL Department of Public Health

Table 4.4-2 Top 6 Cancers by Treatment

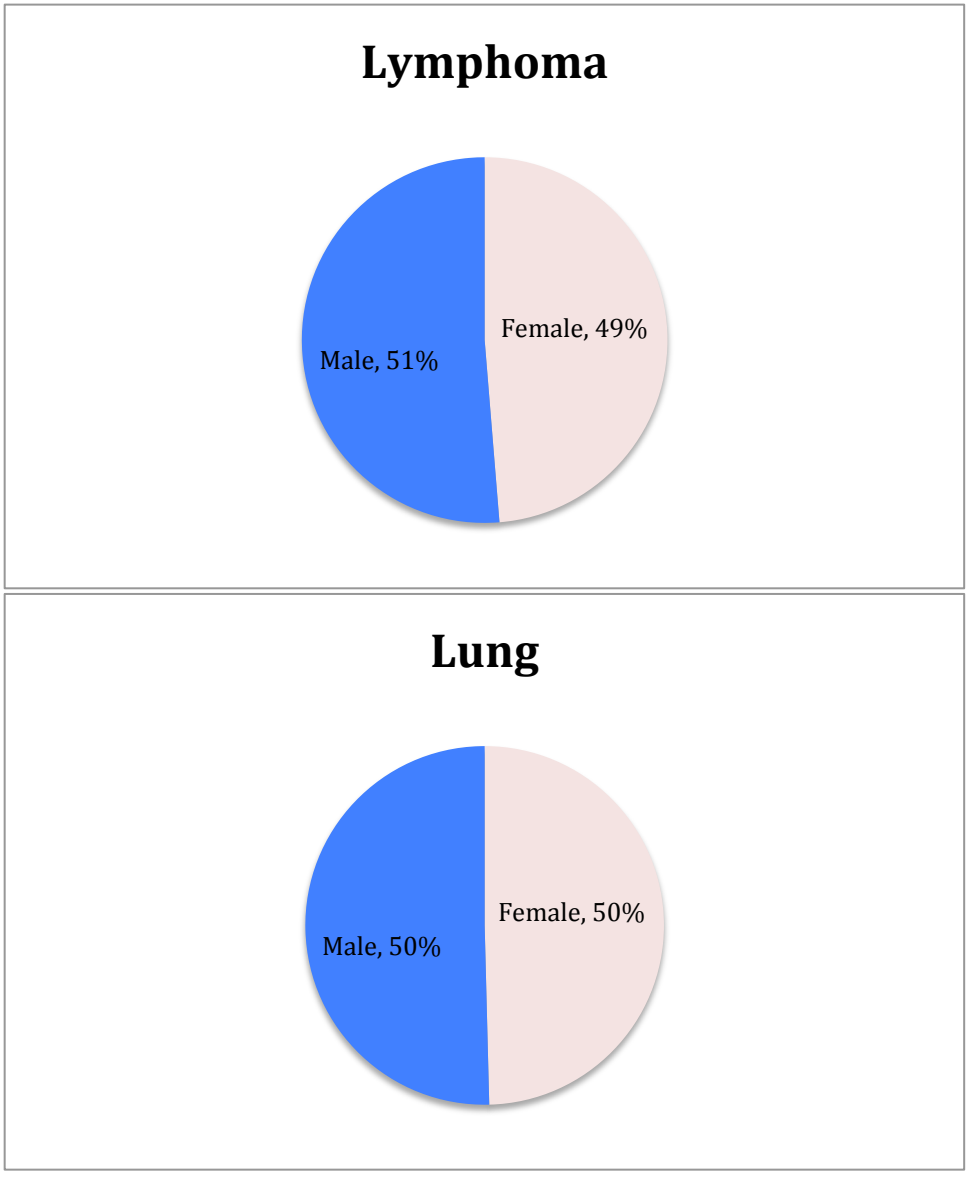


Source: IL Cancer Care, 2011

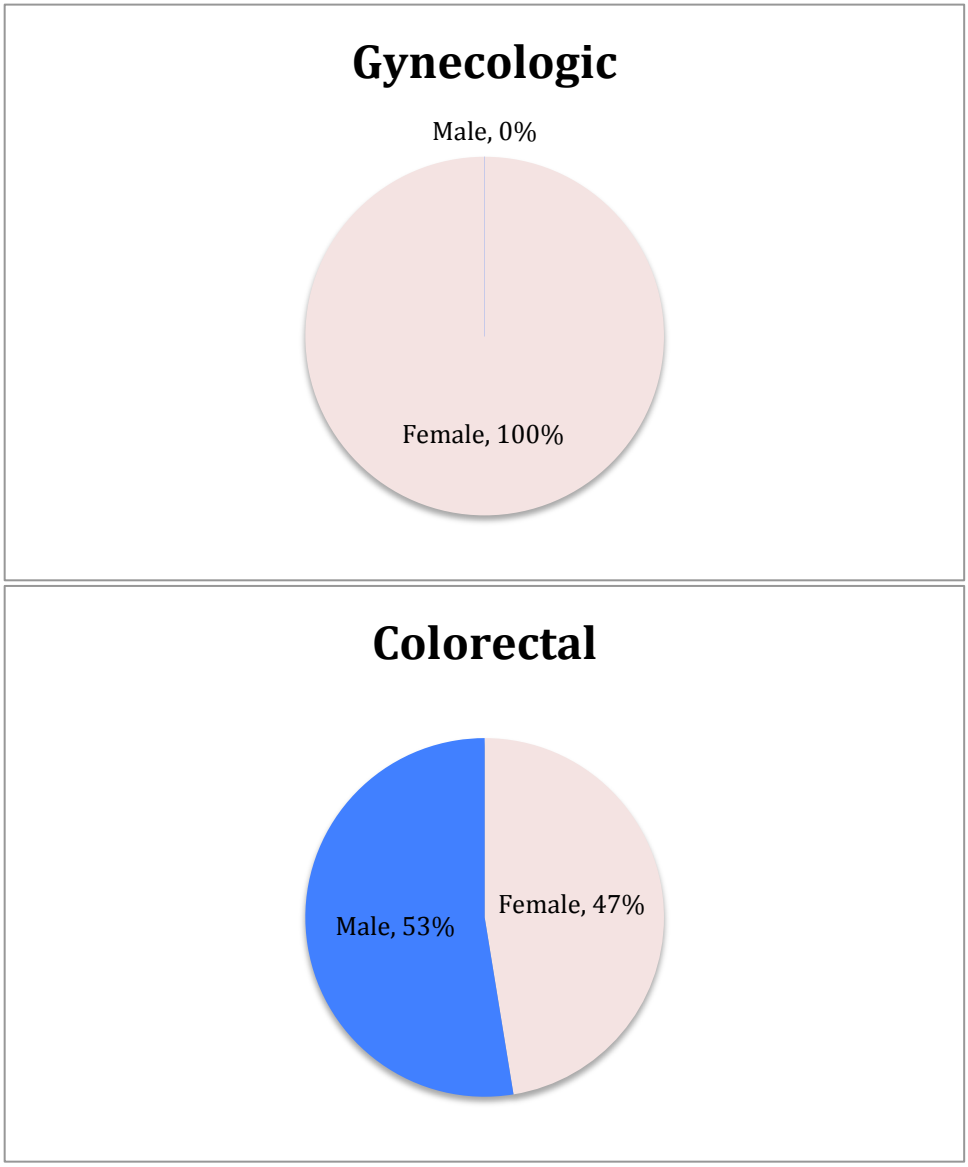
Table 4.4-4 Cancer by Gender



Source: IL Cancer Care, 2011



Source: IL Cancer Care, 2011

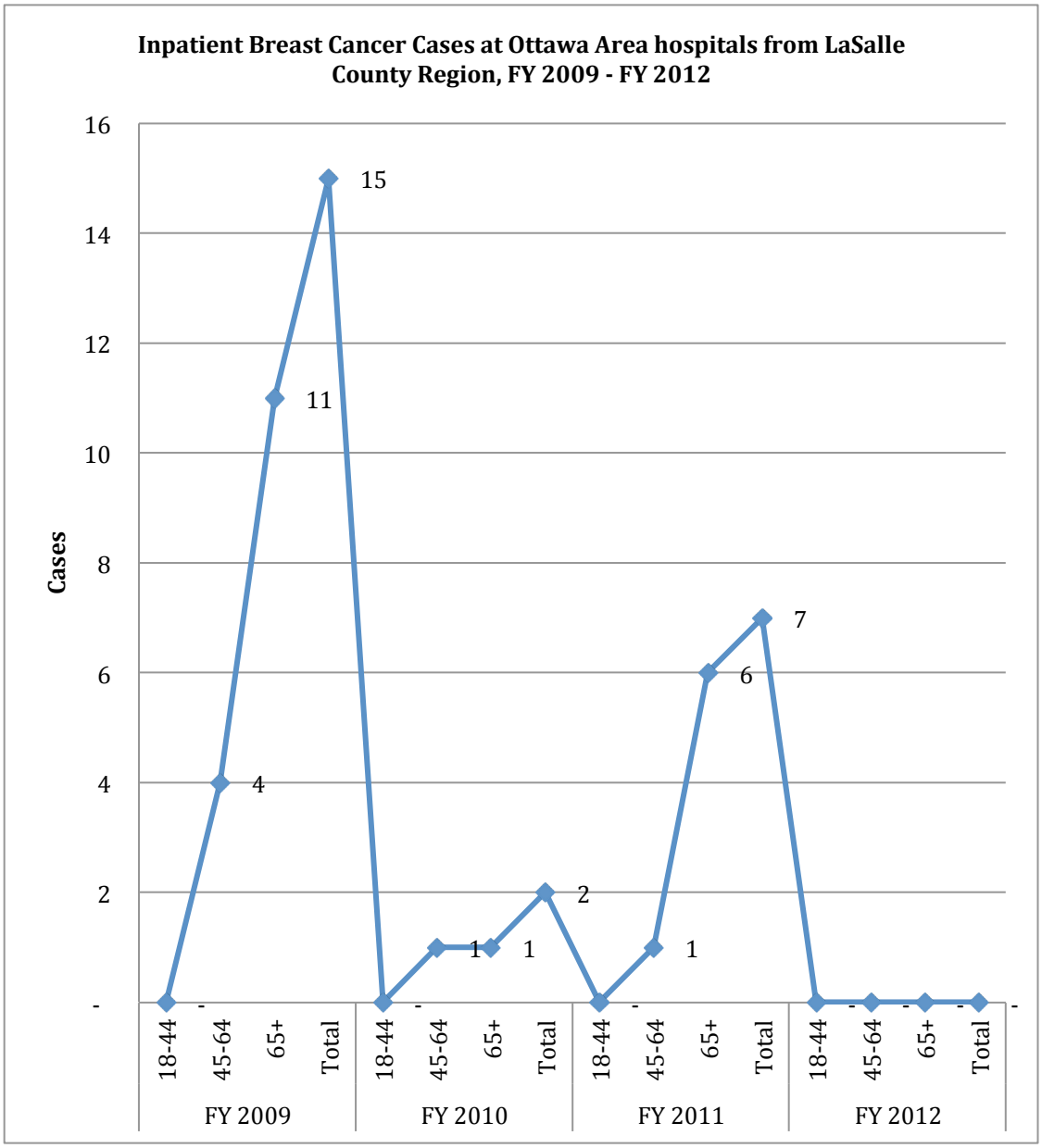


Source: IL Cancer Care, 2011

4.4.1 Carcinoma

Between FY 2009 and FY 2012, there were 24 reported cases of inpatient breast cancer at the three Ottawa area hospitals. Inpatient cases of breast cancer peaked in FY 2009 with 15 cases.

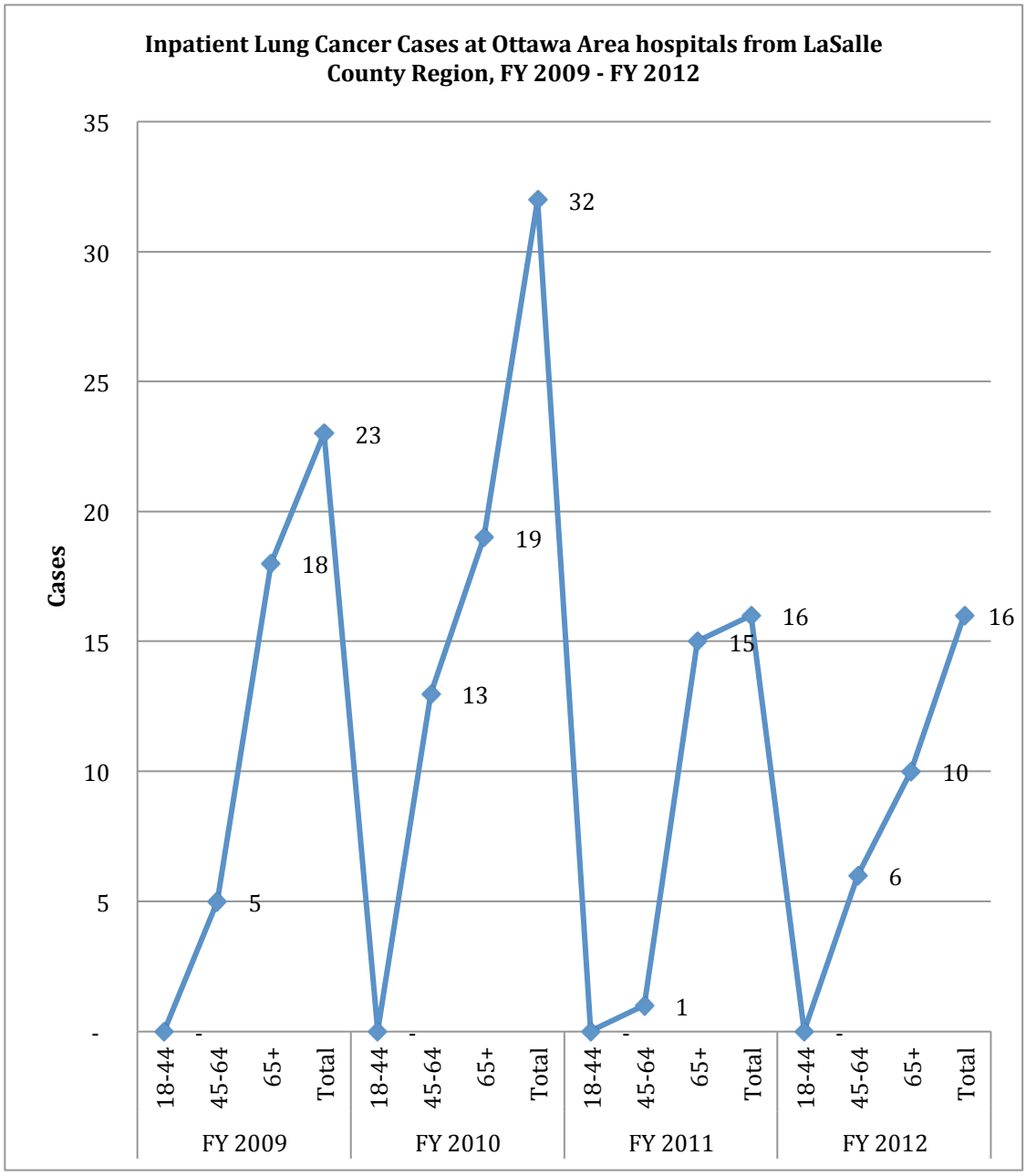
Table 4.4.1-1 Inpatient Breast Cancer Cases at Ottawa Area Hospitals from LaSalle County Region



Source: COMPdata 2012

Cases of lung cancer at the three Ottawa area hospitals have decreased by 30.4% between FY 2009 and FY 2012. The number of cases of lung cancer peaked in FY 2010 with 32 inpatient admissions.

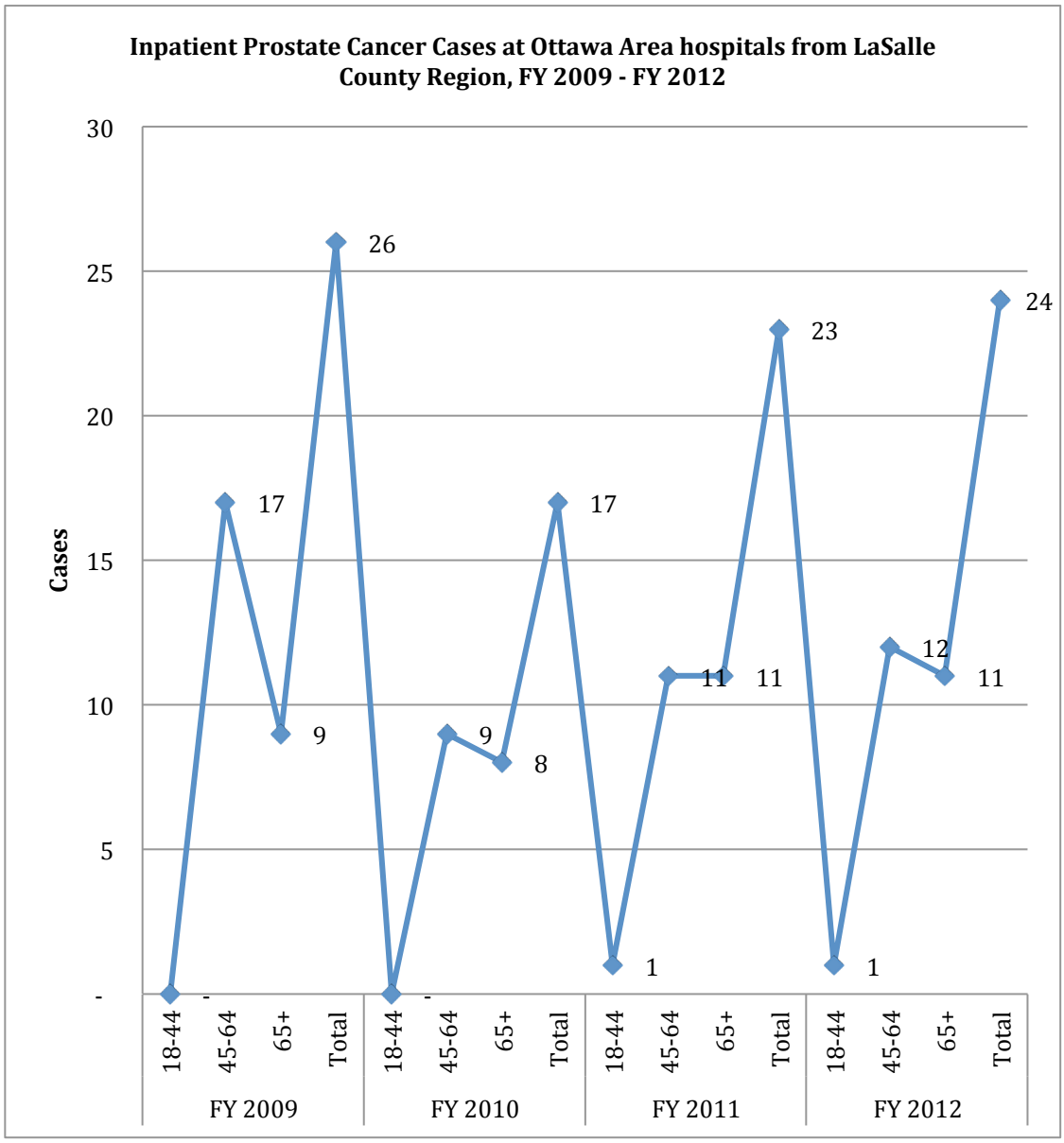
Table 4.4.1-2 Inpatient Lung Cancer Cases at Ottawa Area Hospitals from LaSalle County Region



Source: COMPdata 2012

Cases of prostate cancer at the three Ottawa area hospitals have decreased by 7.6% between FY 2009 and FY 2012 for inpatient admissions. The number of cases peaked in FY 2009 with 26 cases of inpatient prostate cancer.

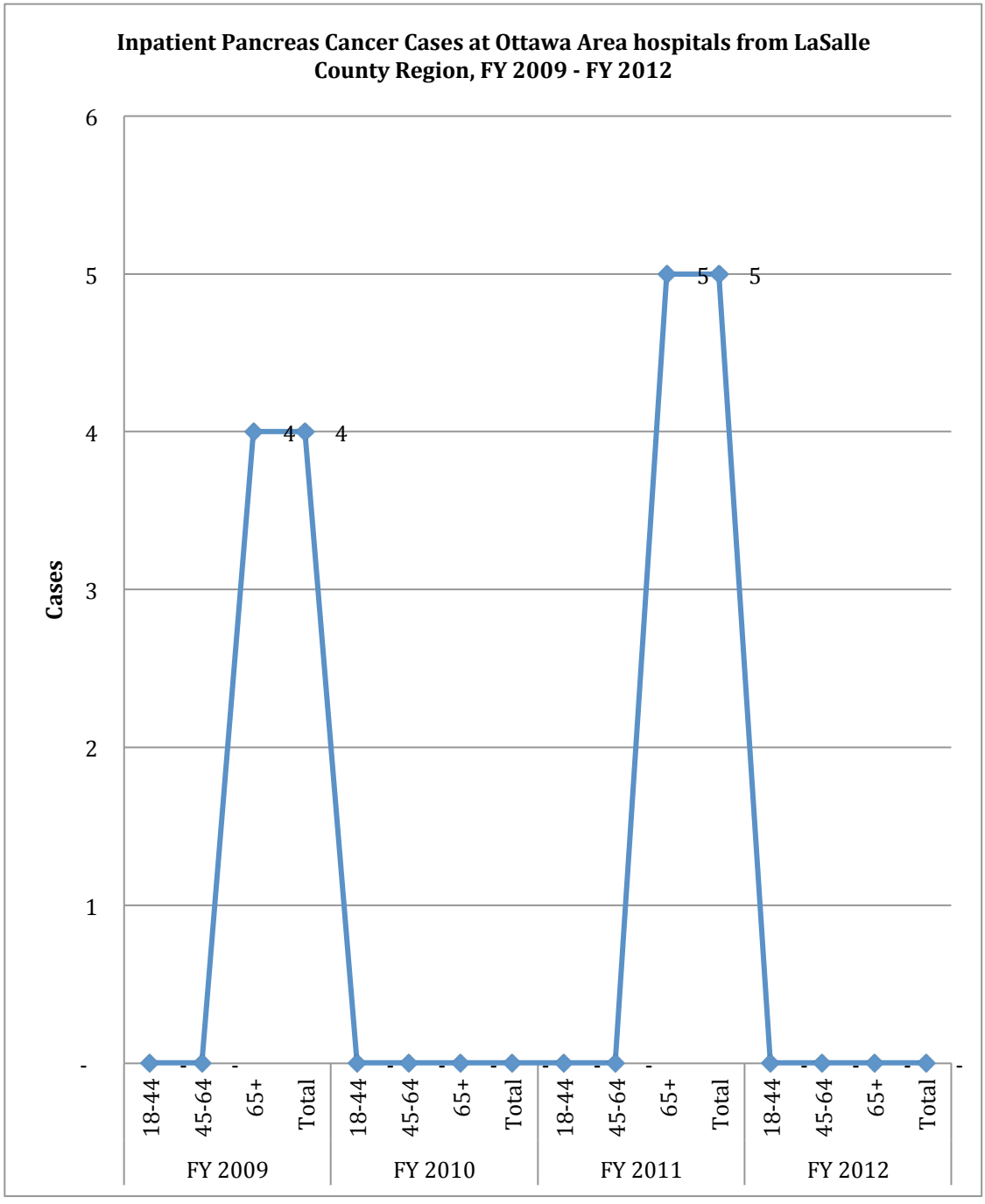
Table 4.4.1-3 Inpatient Prostate Cancer Cases at Ottawa Area Hospitals from LaSalle County Region



Source: COMPdata 2012

Between FY 2009 and FY 2012, there were nine cases of inpatient pancreas cancer at the three Ottawa area hospitals.

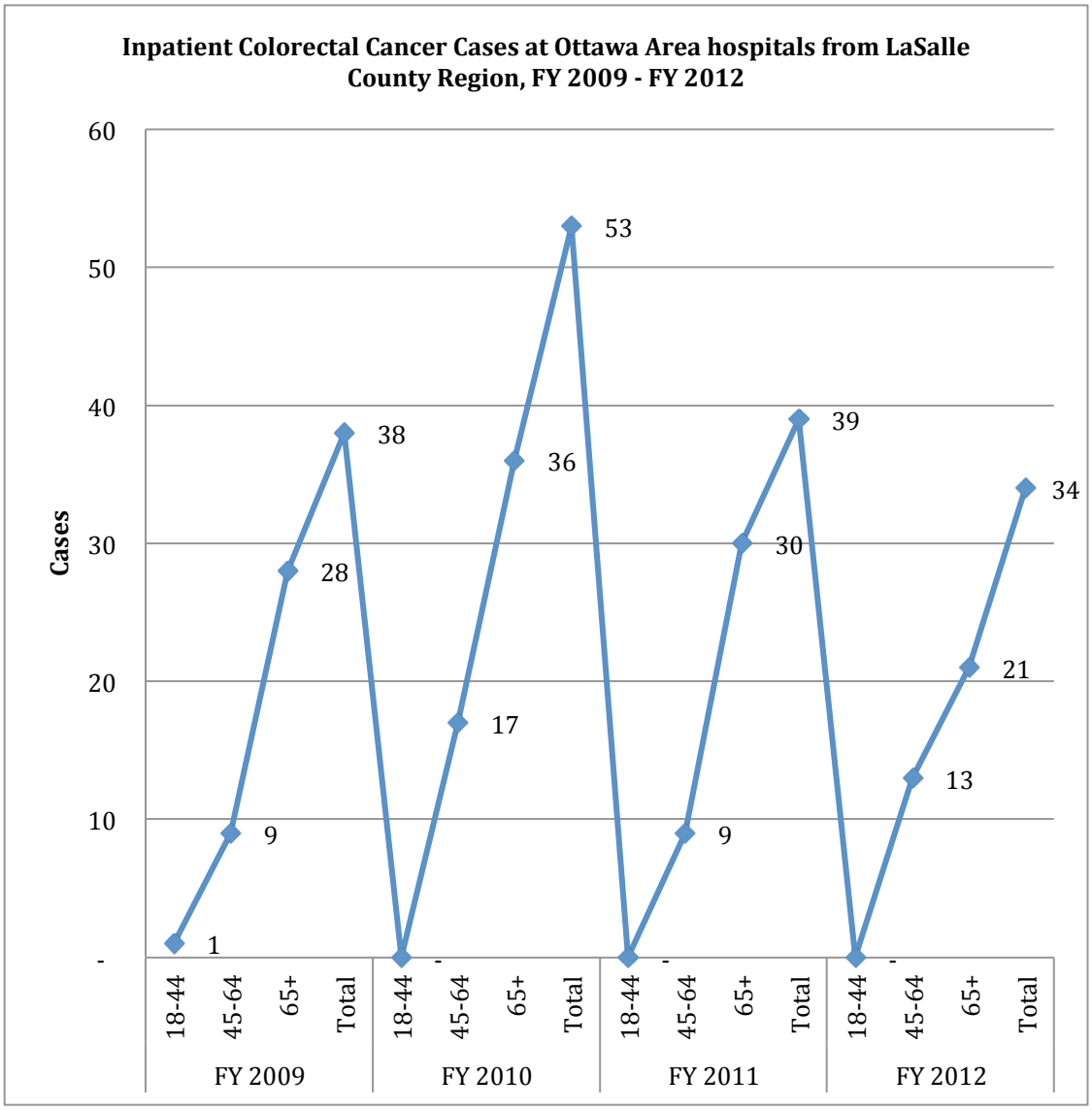
Table 4.4.1-4 Inpatient Pancreas Cancer Cases at Ottawa Area Hospitals from LaSalle County Region



Source: COMPdata 2012

Cases of colorectal cancer at the three Ottawa-area hospitals have decreased by 10.5% between FY 2009 and FY 2012 for inpatient admissions. The number of cases for individuals aged 45-64 has increased by 44.4% during the same time frame.

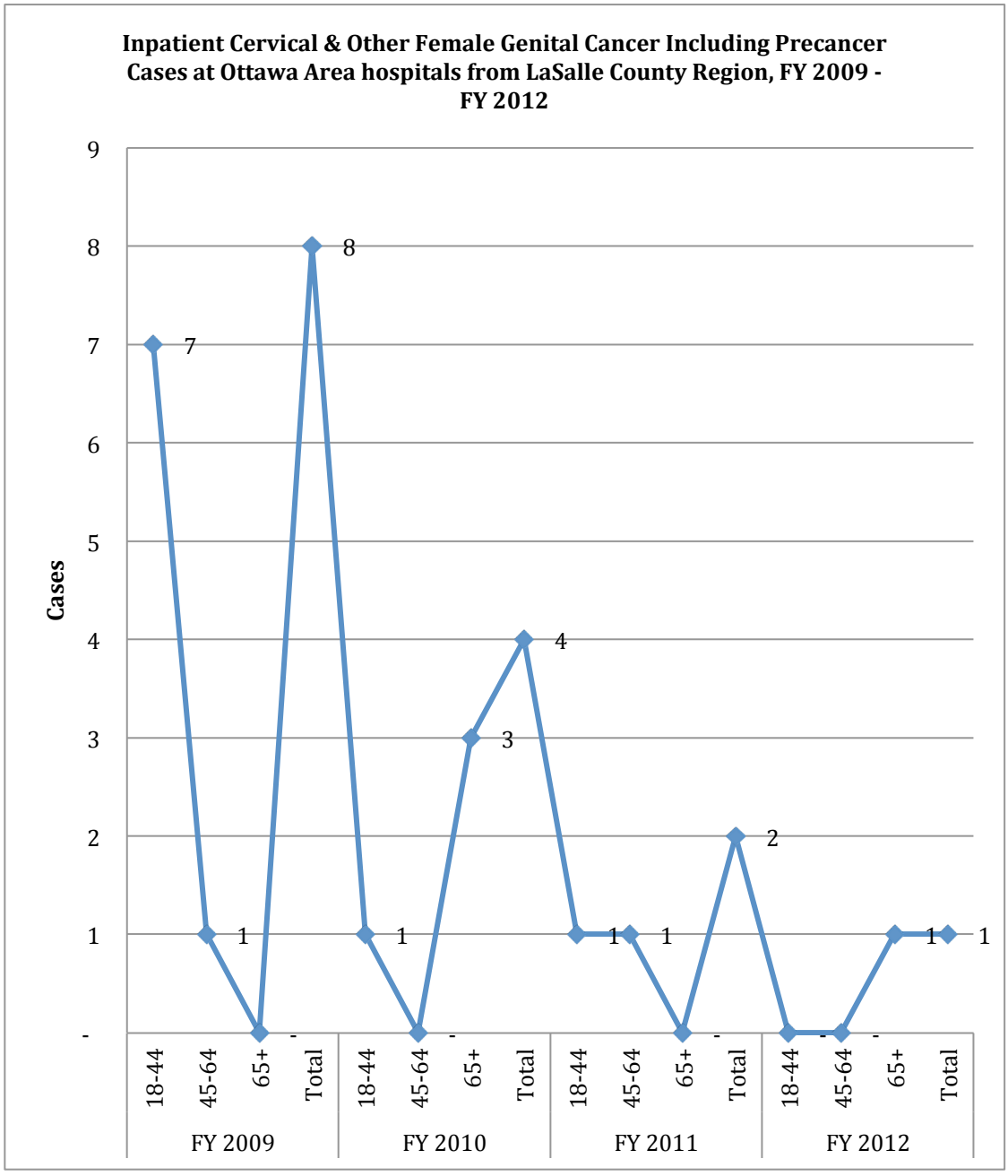
Table 4.4.1-5 Inpatient Colorectal Cancer Cases at Ottawa Area Hospitals from LaSalle County Region



Source: COMPdata 2012

Between FY 2009 and FY 2012, there were fifteen cases of inpatient cervical cancer at the three Ottawa area hospitals.

Table 4.4.1-6 Inpatient Cervical and Other Female Genital Cancer Including Precancer Cases at Ottawa Area Hospitals from LaSalle County Region

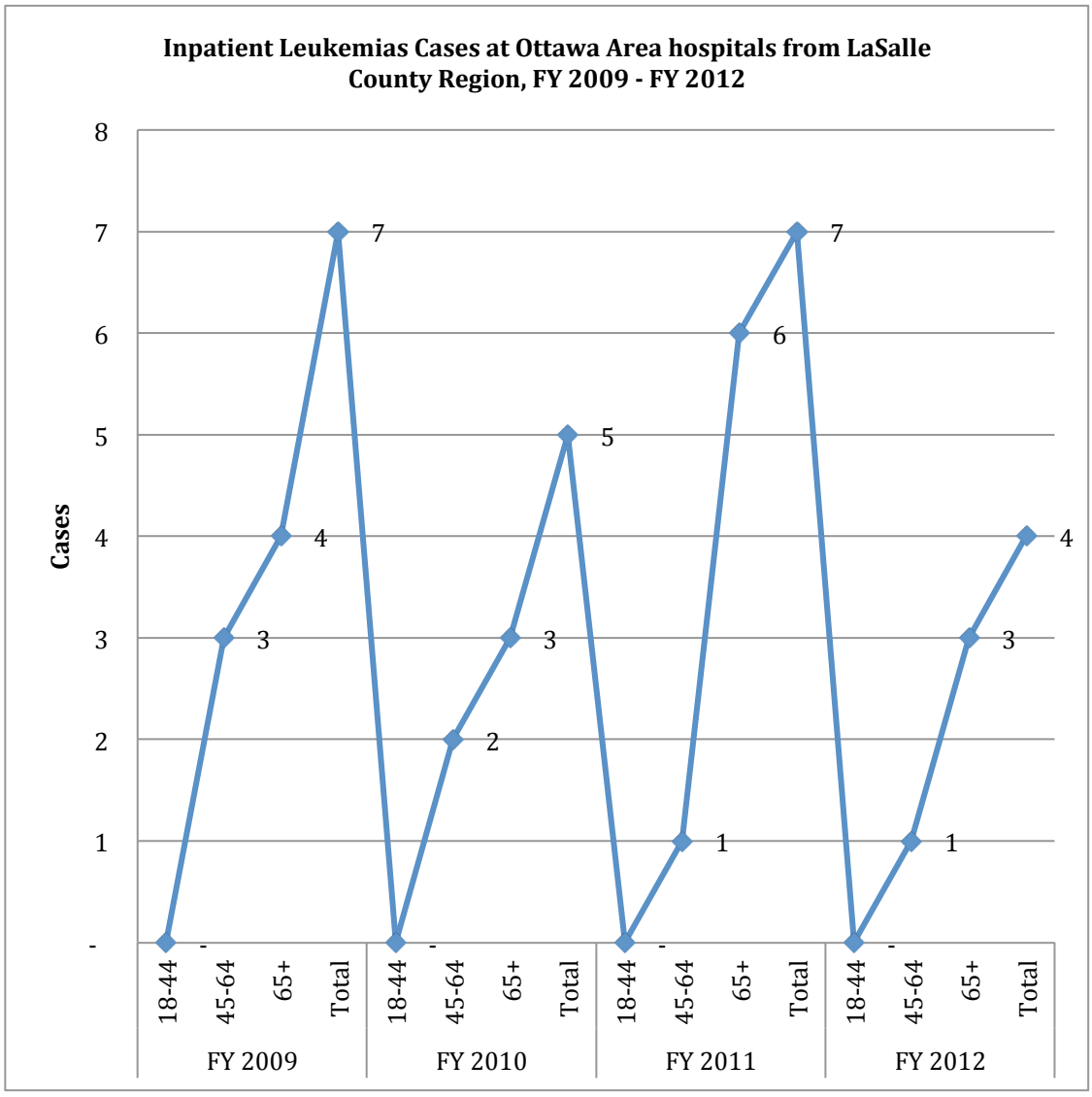


Source: COMPdata 2012

4.4.2 Leukemia

Cases of leukemia at the three Ottawa-area hospitals remained relatively constant between FY 2009 and FY 2012, with an average of 5.75 cases and a range between 4 and 7 cases.

Table 4.4.2-1 Inpatient Leukemia Cases at Ottawa Area Hospitals from LaSalle County Region



Source: COMPdata 2012

4.5 Type II Diabetes

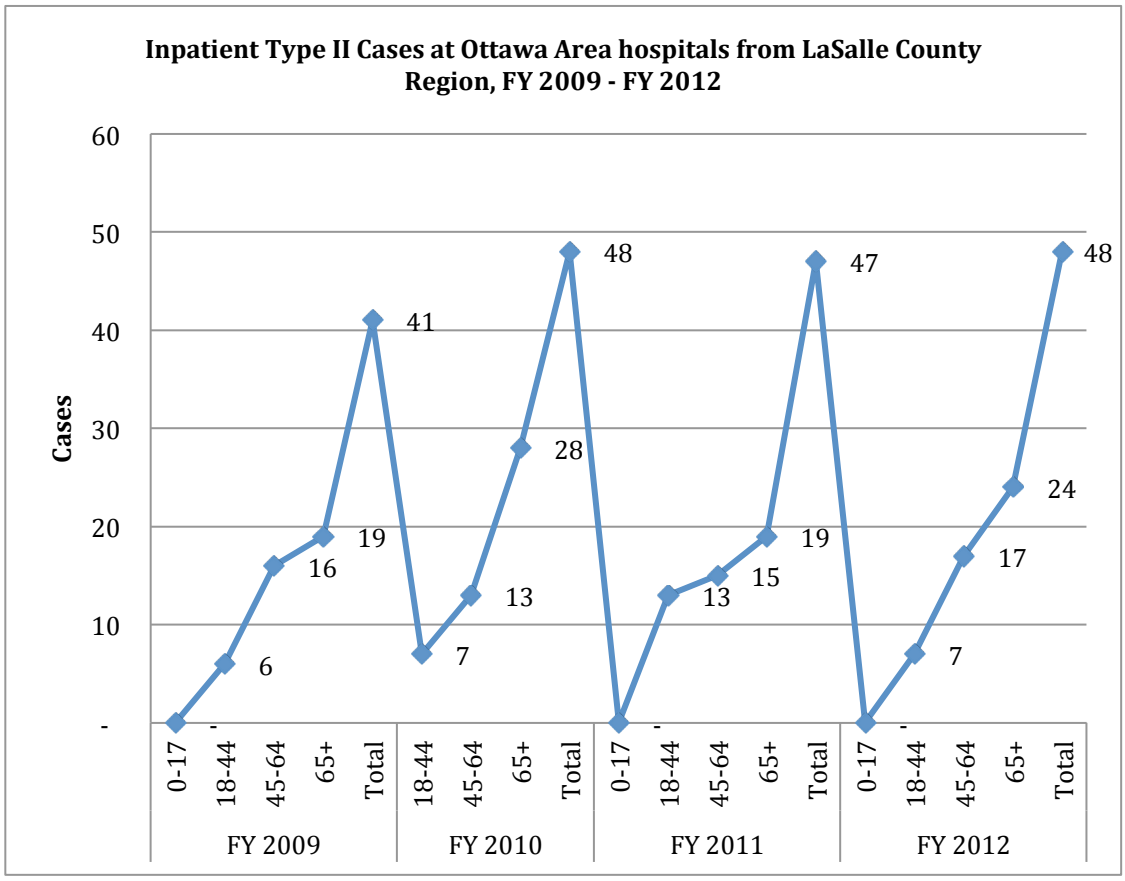
Importance of the measure:

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). Only 10-15% of individuals with diabetes have Type I diabetes (previously known as juvenile diabetes).

Cases of Type II diabetes at the three Ottawa-area hospitals have increased by 17.1% between FY 2009 and FY 2012 for inpatient admissions. Cases of Type I diabetes at the three Ottawa-area hospitals have increased by 47.3% between FY 2009 and FY 2012 for inpatient admissions.

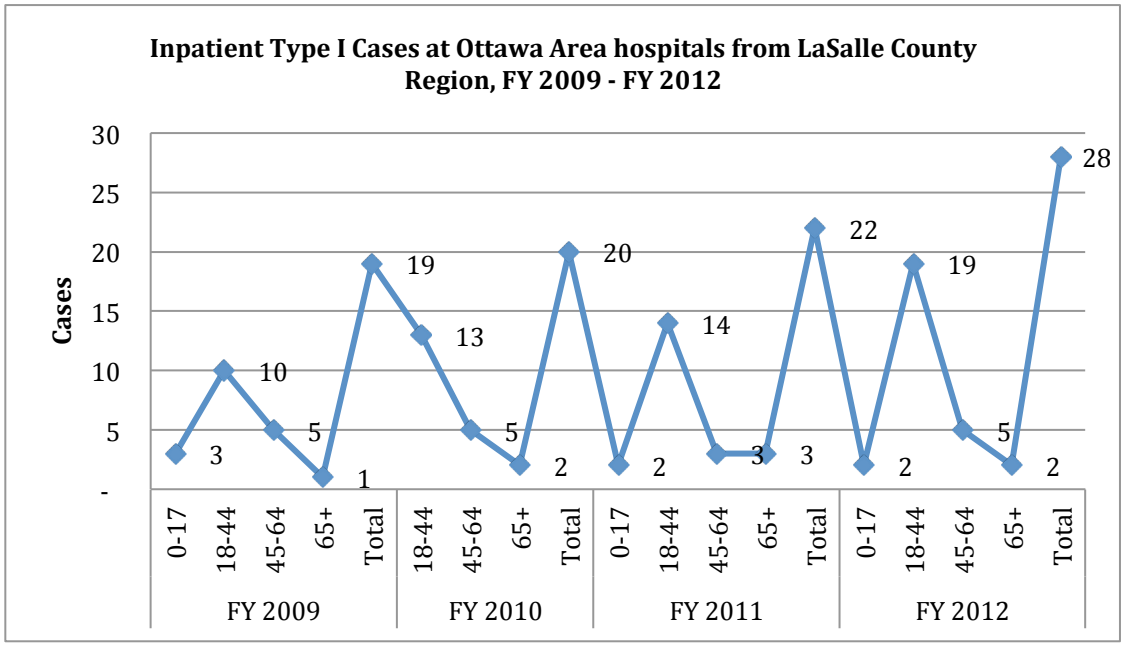
Data from the Illinois BRFSS indicate that nearly 10% of LaSalle County Region residents have diabetes. Compared to data from the State of Illinois, the prevalence of diabetes is increasing at a faster rate in LaSalle County than in the state as a whole and now exceeds the state average.

Table 4.5-1 Inpatient Type II Cases at Ottawa Area Hospitals from LaSalle County Region



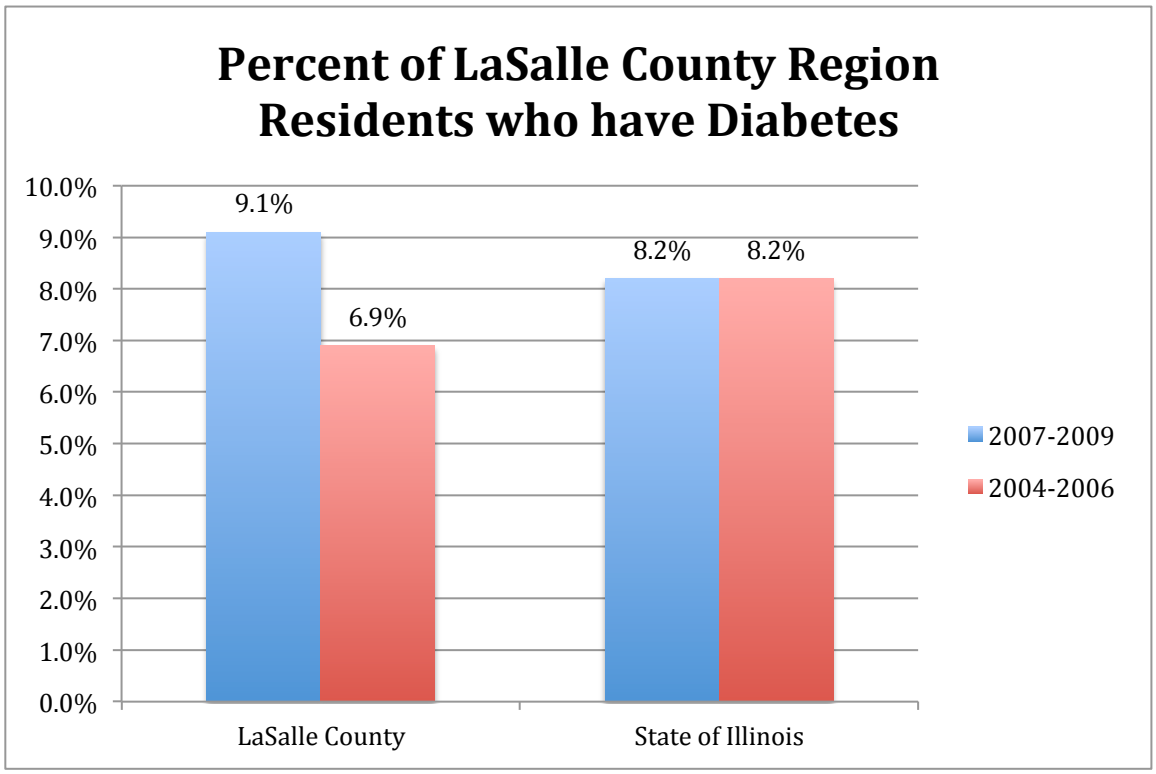
Source: COMPdata 2012

Table 4.5-2 Inpatient Type I Cases at Ottawa Area Hospitals from LaSalle County Region



Source: COMPdata 2012

Table 4.5-3 Percent of LaSalle County Region Residents who have Diabetes



Source: Illinois Department of Public Health

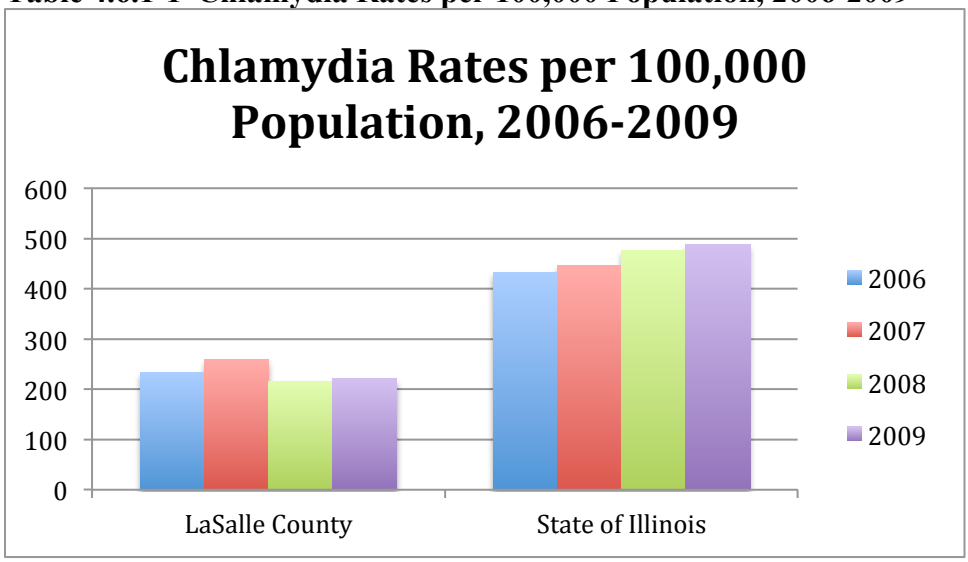
4.6 Infectious Diseases

Importance of the measure: Infectious diseases, including sexually transmitted infections and hepatitis, are impacted by high-risk sexual behavior, drug and alcohol abuse, limited access to health care, and poverty. It would be highly cost-effective for both individuals and society if more programs focused on prevention rather than treatment of infectious diseases.

4.6.1 STIs

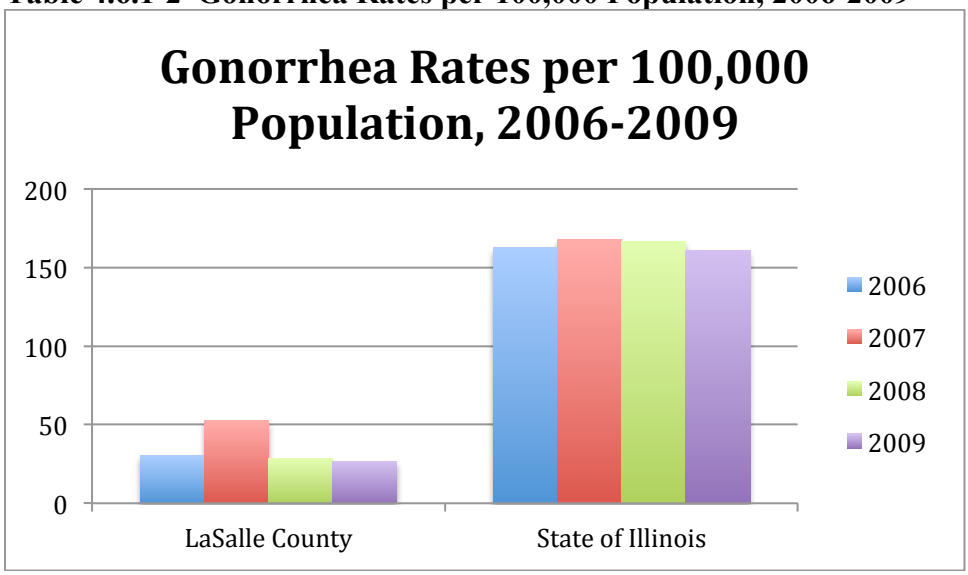
The rates for both Chlamydia and Gonorrhea in LaSalle County seem to have somewhat declined and they are considerably less than the state averages.

Table 4.6.1-1 Chlamydia Rates per 100,000 Population, 2006-2009



Source: Illinois Department of Public Health

Table 4.6.1-2 Gonorrhea Rates per 100,000 Population, 2006-2009



Source: Illinois Department of Public Health

4.7 Secondary Diagnoses

Importance of the measure:

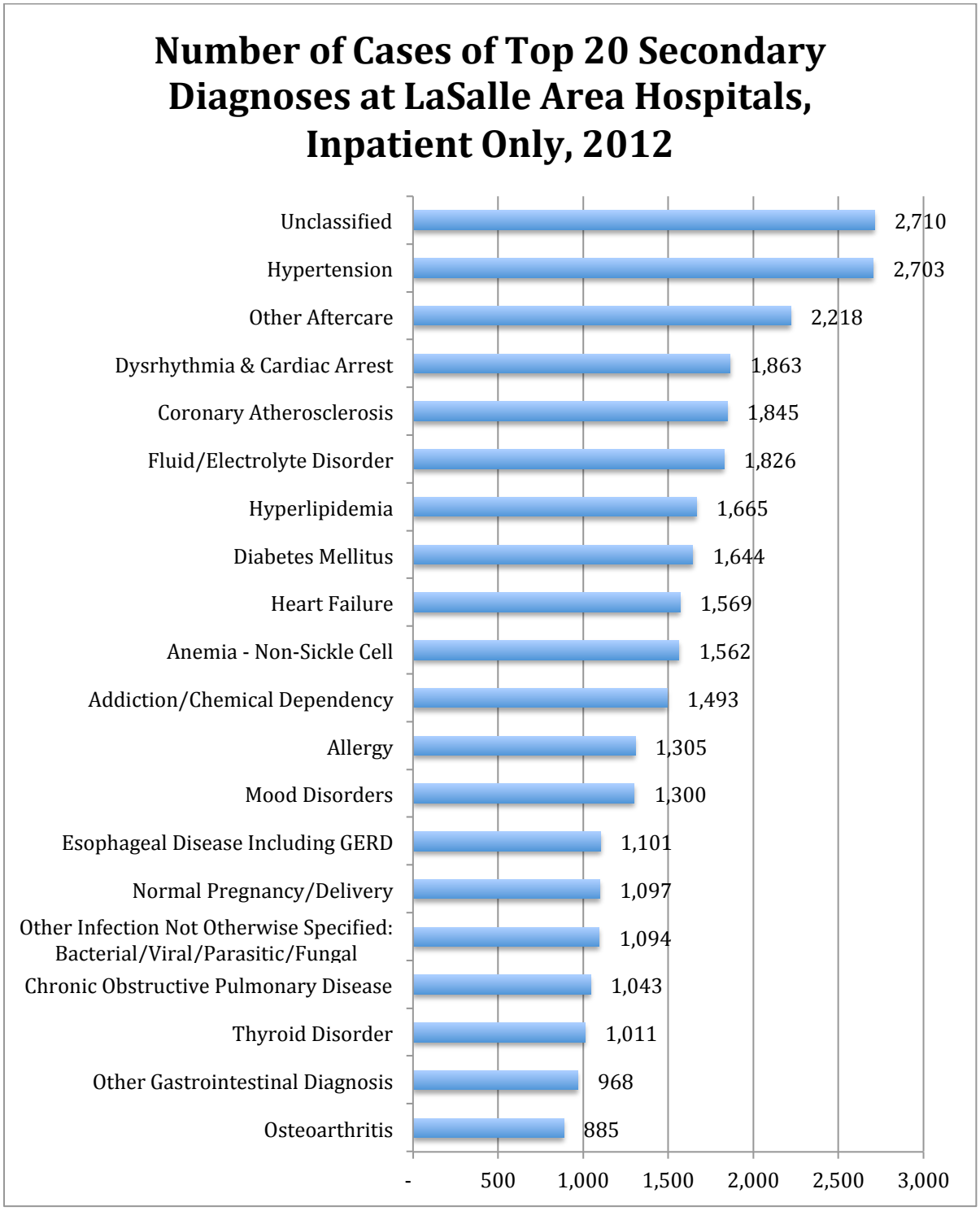
Secondary diagnoses are additional conditions diagnosed upon hospital intake. These diagnoses may complicate treatment efforts aimed at alleviating the primary diagnosis and exacerbate health care costs.

Tables 4.7.1-1 and 4.7.1-2 identify the top 20 secondary diagnoses in LaSalle County. While "unclassified" comprises the largest number of secondary diagnoses, hypertension is the second most prevalent secondary diagnosis.

Between 2009 and 2012, the number of cases categorized as "addiction/chemical dependency" increased nearly 11% and "allergies" increased 10%.

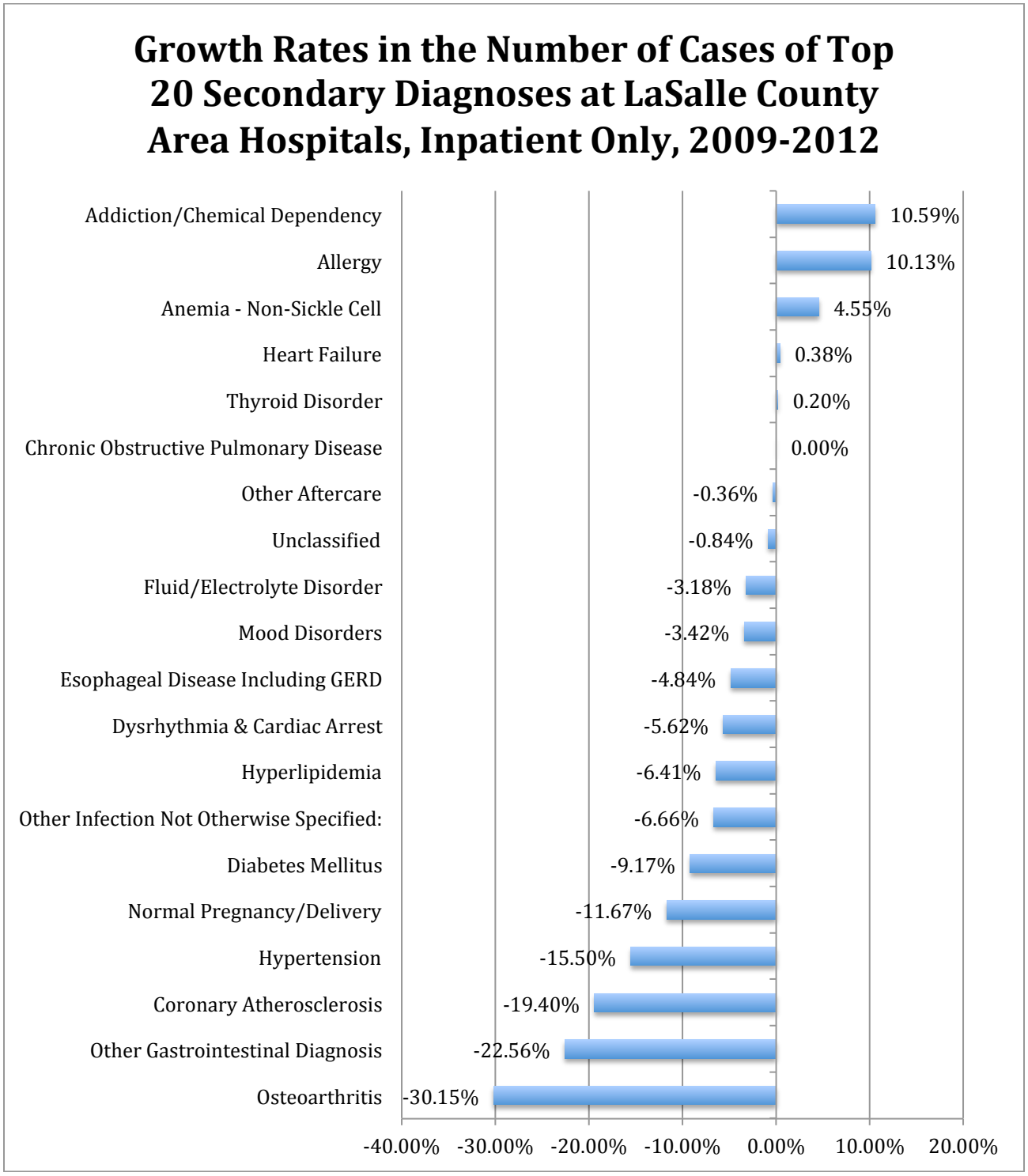
It should be noted that the same patient may have multiple secondary diseases.

Table 4.7.1-1 Number of Cases of Top 20 Secondary Diagnoses at LaSalle Area Hospitals, Inpatient Only, 2012



Source: COMPdata 2012

Table 4.7.1-2 Growth Rates in the Number of Cases of Top 20 Secondary Diagnoses at LaSalle County Area Hospitals, Inpatient Only, 2009-2012



Source: COMPdata 2012

4.8 Injuries

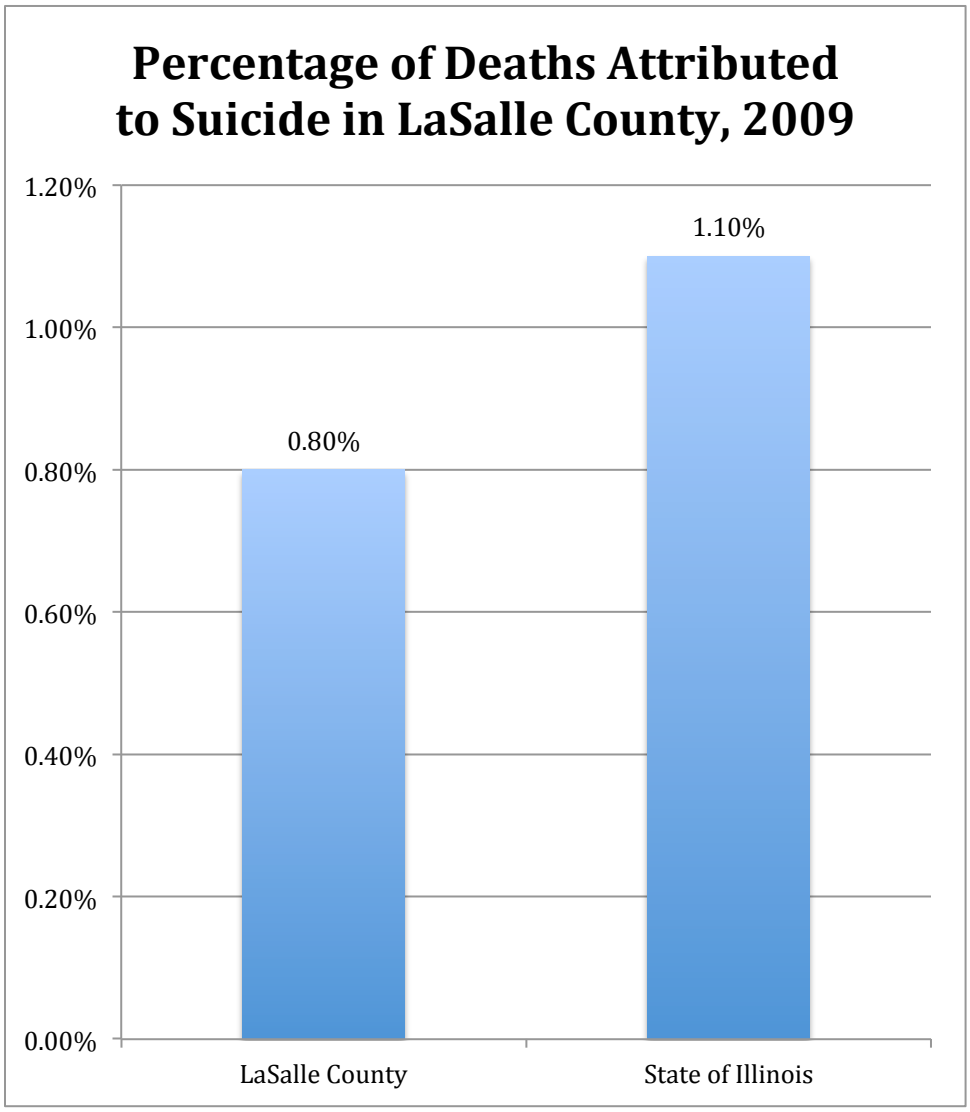
Importance of the measure:

Unintentional injuries are injuries that can be classified as accidents resulting from car accidents, falls and unintentional poisonings. In many cases, these types of injuries—and the deaths resulting from them—are preventable. Suicide is intentional self-harm resulting in death. These injuries are often indicative of serious mental health problems requiring the treatment of other trauma-inducing issues.

4.8.1 Intentional – suicide

For LaSalle County in 2009, the percentage of deaths attributed to suicide is less than 1% and less than the State of Illinois average.

Table 4.8.1-1 Percentage of Deaths Attributed to Suicide in LaSalle County, 2009

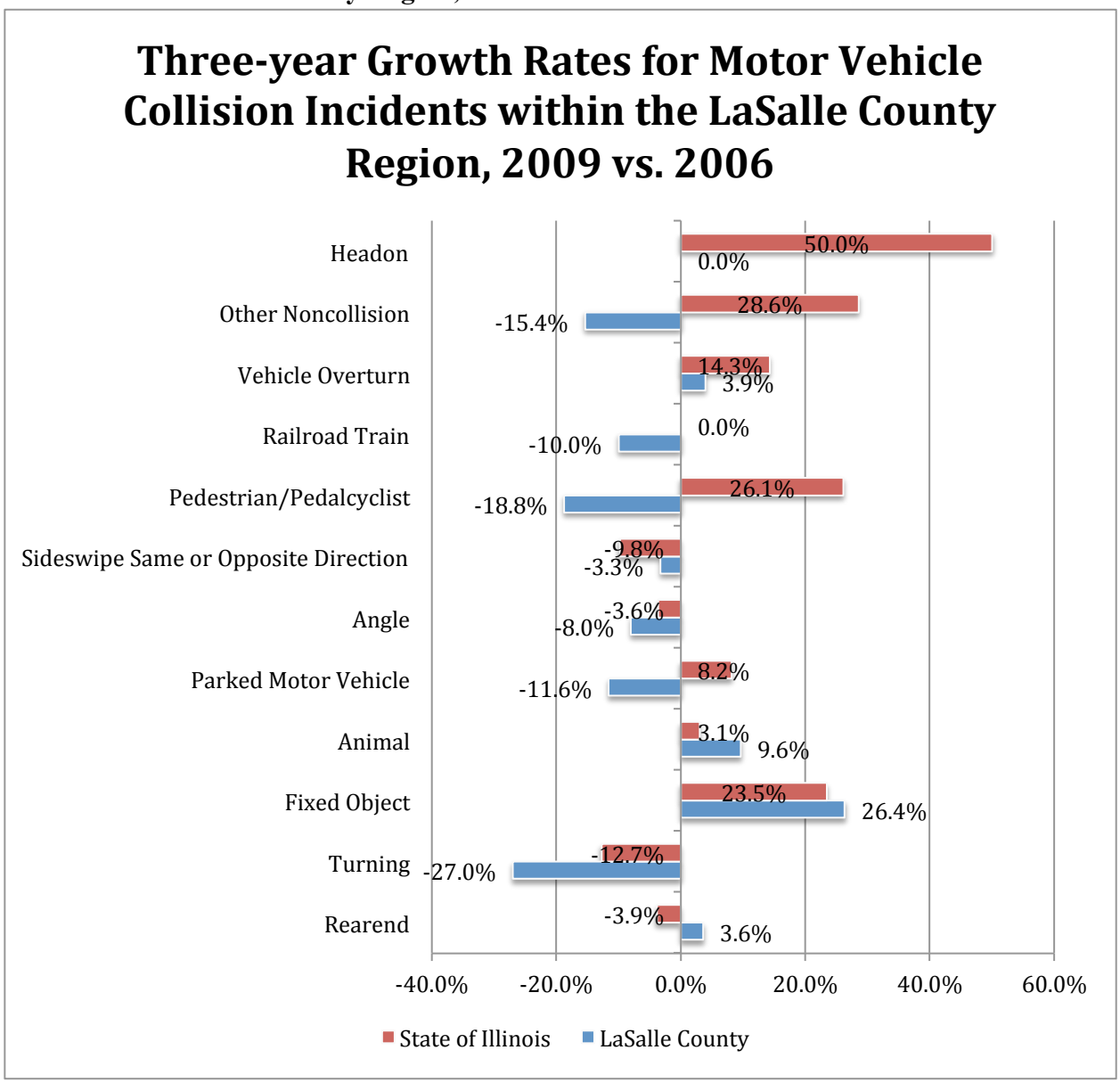


Source: Illinois Department of Public Health

4.8.2 Unintentional – motor vehicle

Research suggests that car accidents are a leading cause of unintentional injuries. In LaSalle County, the three-year growth rate between 2006 and 2009 for several types of motor vehicle collisions exceeds the State of Illinois average including animal, fixed-object, and rear-end accidents.

Table 4.8.2-1. Three-year Growth Rates for Motor Vehicle Collision Incidents within the LaSalle County Region, 2009 vs. 2006



Source: Illinois Department of Transportation

Diseases/Morbidity: Strategic Implications

Emphasize prenatal health and infant care:

It is essential that infants and children begin life healthy and preferably, at normal birth weights. Research suggests that infants born at low birth weight are at greater risk for life-threatening complications including infections, breathing problems, neurological problems and Sudden Infant Death Syndrome (SIDS).[1] Other studies suggest that low birth weight babies are also at a higher risk for developmental disabilities, such as learning disabilities and attention deficits, than babies with normal birth weights. Cognitive function of low birth weight babies may also be diminished leading to higher rates of sub-average IQ (< 85) than normal birth weight babies. [2]

Regular prenatal care is a vital aspect in producing healthy babies and children. The employment of screening and treatment for medical conditions as well as identification and interventions for behavioral risk factors associated with poor birth outcomes are important aspects of prenatal care. Research suggests that women who receive adequate prenatal care are more likely to have better birth outcomes, such as full term and normal weight babies.[3] Prenatal care can provide health risk assessments for the mother and fetus, early intervention for medical conditions and education to encourage healthy habits, including nutritional and substance-free health during pregnancy. According to a study by The National Public Health and Hospital Institute, cost of care and other financial barriers were cited as reasons expectant mothers did not get adequate prenatal care.[4]

As noted in Table 4.1.2-1, Kotelchuck Index scores in LaSalle County lag the State of Illinois average for 2009.

Emphasize the link between blood pressure and cardiovascular diseases:

Research from the Center for Disease Control estimated that the total cost of cardiovascular diseases in the United States for 2010 was $444 billion. [5] In essence, one out of every six dollars spent on health care is spent on the diagnosis and treatment of cardiovascular diseases. [6] However, controlling one's blood pressure and decreasing one's intake of cholesterol also reduces the risk of cardiovascular diseases. For example, research from the CDC suggests a "12–13 point reduction in average systolic blood pressure over 4 years can reduce heart disease risk by 21%, stroke risk by 37%, and risk of total cardiovascular death by 25%." [7]

Hypertension increased by 30% between 2009 and 2012 in the three hospitals in LaSalle County. Cases of carditis at the three hospitals in the LaSalle County Region have increased by 62.5% between 2009 and 2012. The number of cases of heart failure for individuals aged 45-64 years of age increased by 52.1% during the same time frame and cases of other cardiovascular disease at the three Ottawa area hospitals have increased by 19.5% between FY 2009 and FY 2012 for inpatient admissions. With regard to cases of brain tumor, the number of cases has increased by 120% during the same time for inpatient admissions (11 cases in FY 2012 vs. 5 cases in FY 2009).

Endnotes Chapter 4

[1] Lucile Packard Children's Hospital at Stanford University, *High-Risk Newborn: Low Birthweight*. Retrieved from http://www.lpch.org/DiseaseHealthInfo/HealthLibrary/hrnewborn/lbw.html.

[2] Kessenich, M. (2003). Developmental Outcomes of Premature, Low Birth Weight, and Medically Fragile Infants. ***Newborn and Infant Nursing Reviews,* 3, 3, 80-87.**

[3] Kiely, J.L. & Kogan, M.D. (1994). Prenatal Care. In *Public Health Surveillance for Women, Infants, and Children.* Atlanta, GA: U.S. Center for Disease Control

[4] The National Public Health and Hospital Institute. *Barriers to Prenatal Care Study: A Survey of Women Who Deliver at Public Hospitals,* 2003.

[5] U.S. Center for Disease Control and Prevention. *Heart Disease and Stroke Prevention – At A Glance 2011*.

[6] Ibid.

[7] Ibid.

CHAPTER 5. MORTALITY

Importance of the measure: Presenting data that focuses on diseases provides an opportunity to analyze the ratio of sick individuals to healthy individuals in the LaSalle County Region and, in addition, define and quantify what diseases are causing the most death and disability.

The top two leading causes of death in the State of Illinois and LaSalle County are similar as a percentage of total deaths. Diseases of the Heart comprise 29% of deaths in LaSalle County and Cancer comprises 23% of deaths in LaSalle County. While Diseases of the Heart and Accidents contribute to more deaths in LaSalle County than the State of Illinois as a whole, the incidence of cerebrovascular disease in LaSalle County is less prevalent than across the State of Illinois as a whole.

Table 5.1-1. Top 5 Leading Causes of Death for all Races by County, 2009

Rank	LaSalle County	State of Illinois
1	Diseases of Heart (29%)	Diseases of Heart (25%)
2	Malignant Neoplasm (23%)	Malignant Neoplasm (24%)
3	Accidents (6%)	Chronic Lower Respiratory Disease (5%)
4	Chronic Lower Respiratory Disease (5%)	Cerebrovascular Disease (5%)
5	Cerebrovascular Disease (4.5%)	Accidents (4%)

Source: Illinois Department of Public Health

Mortality: Strategic Implications

Minimize unnecessary medical interventions to decrease mortality rates:

Three decades of research suggests that more care for patients is associated with higher mortality.[1] This paradox is best explained by the fact that all medical procedures possess risk and by increasing the number of interventions a patient receives, the more risk incurred by the patient. More risk increases the chances of errors and additional physicians becoming involved to treat the patient. The Institute of Medicine contends that this fragmentary nature of the US health care delivery system is one of the major drivers of poor quality and higher costs. [2]

Poor quality disproportionately impacts those with chronic illnesses. Statistically, an estimated 90 million Americans live with at least one chronic illness, 70% of Americans die from chronic disease, and 90% of deaths among the Medicare population are attributed to just nine chronic illnesses: congestive heart failure, chronic lung disease, cancer, coronary artery disease, renal failure, peripheral vascular disease, diabetes, chronic liver disease, and dementia.[3]

The costs to treat chronic diseases are staggering, as inefficiencies drive up the cost of care. Patients with chronic conditions are often treated by primary care providers in addition to specialists. In most cases, little is done to coordinate treatments. Over time, as the chronic condition becomes more debilitating, patients require more care and the cost of care increases. According to the Dartmouth Institute for Health Policy and Clinical Practice, patients with chronic illnesses in their last two years of life account for nearly 32% of total Medicare spending. [4] Furthermore, overtreatment in the U.S. wastes an estimated 20 to 30 cents on every health care dollar spent.[5]

Address the diverse needs of underserved populations:

Research suggests individuals of color are at greater risk to be afflicted with violent crime, perinatal conditions, and chronic diseases. The U.S. Bureau of Justice notes that a racial divide impacts the prevalence of individuals being stricken by violent crime. In 2005, national homicide rates for African Americans were six times higher than the rates for whites. [6] Adverse perinatal conditions include poor maternal health and nutrition, inadequate care during pregnancy and childbirth, and problems relating to premature births.

With regard to chronic diseases including heart disease and cancer, the U.S. Department of Health and Human Services' Office of Minority Health suggests African Americans are 30% less likely to be diagnosed with heart disease than Whites, but are more likely to die from it. Furthermore, African Americans are 1.5 times more likely than Whites to have high blood pressure and African American women are 1.7 times more likely to be obese.[7]

The incidence of strokes disproportionately impacts African Americans, as they are 70% more prone to having a stroke than Whites. With mortality rates, Black men are 60% more likely to die from a stroke. For stroke survivors, African Americans are more often disabled than Whites.[8]

For cancer, Black men are 30% more likely than Whites to have new cases of prostate cancer and are twice as likely to be diagnosed with stomach cancer. The 5-year survival rates for African Americans are lower for lung and pancreatic cancer, and they are 2.4 times as likely to die from prostate cancer. Black women are 10% less likely to be diagnosed with breast cancer than Whites, but they are 34% more likely to die from it. Black women are twice as likely to be diagnosed with stomach cancer and are 2.4 times more likely to die.[9]

Endnotes for Chapter 5

[1] The Dartmouth Institute for Health Policy and Clinical Practice. (2008). *Tracking the Care of Patients with Severe Chronic Illness.*

[2] Institute of Medicine. (2001). *Crossing the Quality Chasm*: *A New Health System for the 21st Century.*

[3] The Dartmouth Institute for Health Policy and Clinical Practice. (2008). *Tracking the Care of Patients with Severe Chronic Illness.*

[4] Ibid.

[5] Skinner, J.S., Fisher, E.S., & Wennberg, J.E. (2005). The Efficiency of Medicare. In D. Wise (ed.) *Analyses in the Economics of Aging*. Chicago: University of Chicago Press and NBER.

[6] U.S. Bureau of Justice Statistics, *Homicide Trends in the U.S.* Retrieved from http://bjs.ojp.usdoj.gov/content/homicide/race.cfm

[7] U.S. Department of Health and Human Services' Office of Minority Health.

[8] Ibid.

[9] Ibid.

PHASE II – PRIMARY DATA RESEARCH FOR COMMUNITY HEALTH NEEDS

To meet requirements of section 501(r)(3) of Schedule H Form 990, "…a community health needs assessment must take into account input from persons who represent the broad interests of the community served by the hospital(s), including those with special knowledge of or expertise in public health …" Moreover, for strategic planning purposes of each hospital, perceptions of various stakeholder groups can provide important insights into perceptions of the community regarding general health-care effectiveness.

Numerous opportunities may exist that are related to impacting community health benefits, but are not published in secondary research sources. Rather they are discovered through unbiased data collection, rigorous statistical modeling and analyses, and simple, common-sense interpretations and conclusions. Through this type of research, the health-care community can expect to identify areas for self-improvement, opportunities for addressing community needs and underlying perceptions of how demographics impact the community's perceptions and effectiveness.

Phase II research consists of providing structure, information, documentation and practical interpretation of data. Five specific objectives are accomplished in the primary research:

- Create a statistically valid research instrument to collect necessary information;
- Collect data using a partnership process (rather than respondent mentality);
- Assess perceptions of current/potential community issues;
- Segment markets based on key demographics;
- Draw conclusions and discuss potential future directions to improve the health of the community.

In Phase II of the community health needs assessment, there are four chapters that assess different aspects of the general community as well as specific health-related issues for the at-risk population. The chapters are as follows:

CHAPTER 6. GENERAL CHARACTERISTICS OF RESPONDENTS

CHAPTER 7. FINDINGS AND RESULTS COMMUNITY PERCEPTIONS

CHAPTER 8. ACCESSIBILITY TO HEALTH CARE

CHAPTER 9. HEALTH-RELATED BEHAVIORS

CHAPTER 6. GENERAL CHARACTERISTICS OF RESPONDENTS

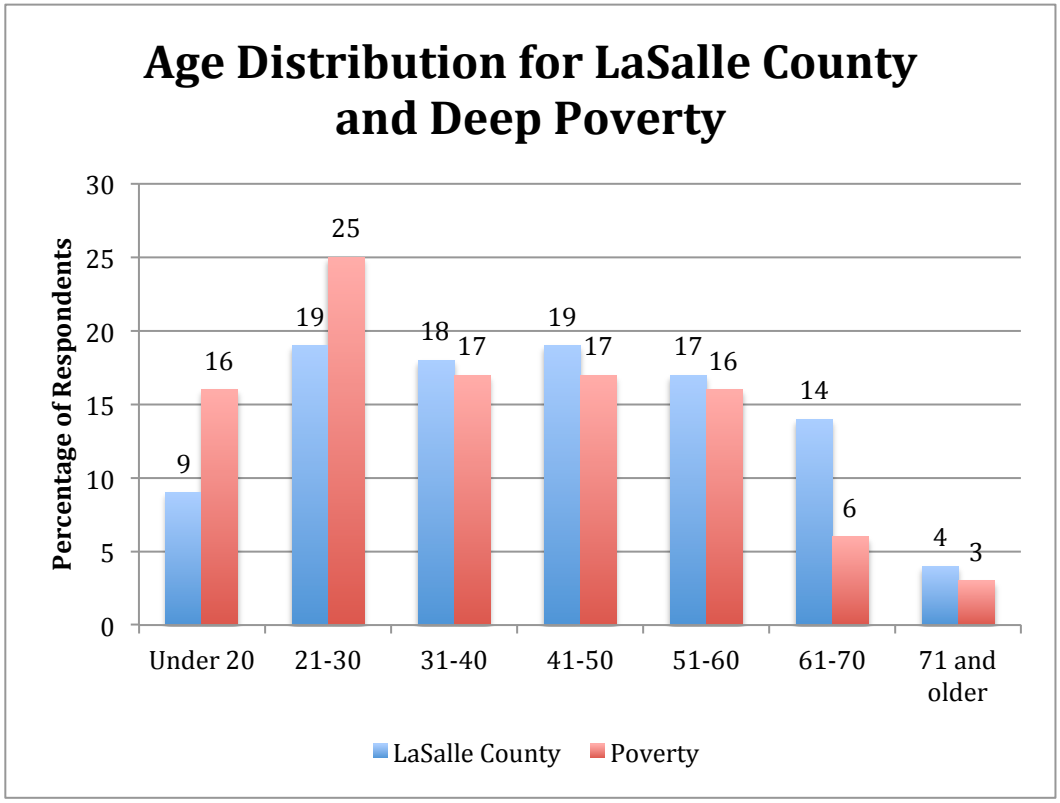
As mentioned in the Methods section of this study, data were collected via on-line surveys and paper surveys.. In this chapter, the characteristics of the sample are presented. A total of 659 surveys were completed. All data includes the entire sample, except where specifically noted.

Note that for most characteristics in this chapter, data are analyzed for: (1) the overall sample and (2) the at risk population. According to the CDC, at risk populations are characterized by economic disadvantage. Specifically, according to the CDC *Public Health Workbook*, at risk populations are defined as those individuals living in deep poverty, which for this study is operationalized as those with a household income of less than $20,000. Note that 374 respondents were in this income category.

6.1 Age

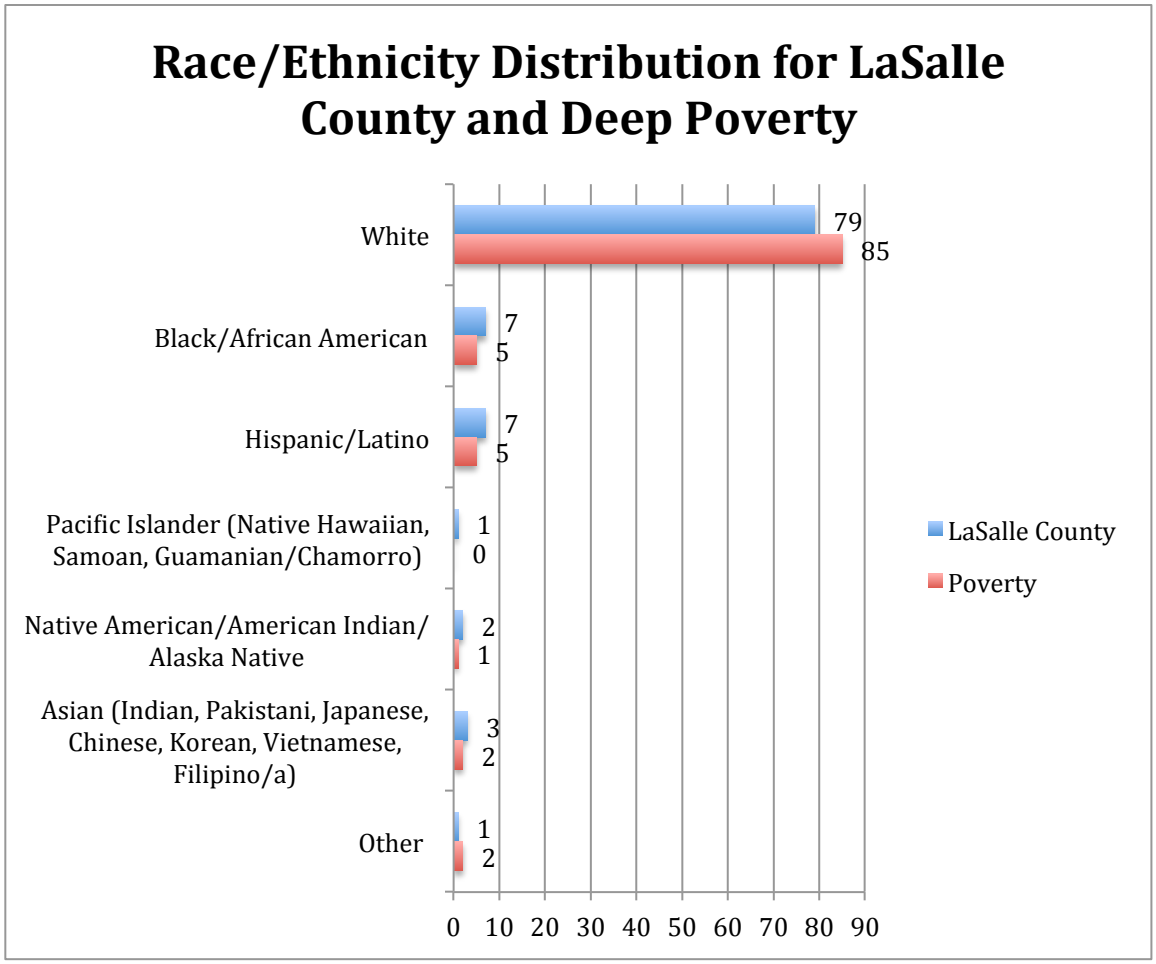
The average age of respondents was 43.2 years old. The distribution is reflective of the 2010 Census data, however, the mean age of surveyed respondents is slightly older, compared to the Census average age of 41.0 years old. This occurred because survey respondents were all adults, age 18 and above.

Table 6.1 Age Distribution for LaSalle County and Deep Poverty



6.2 Race and Ethnicity

Table 6.2 Race/Ethnicity Distribution for LaSalle County and Deep Poverty

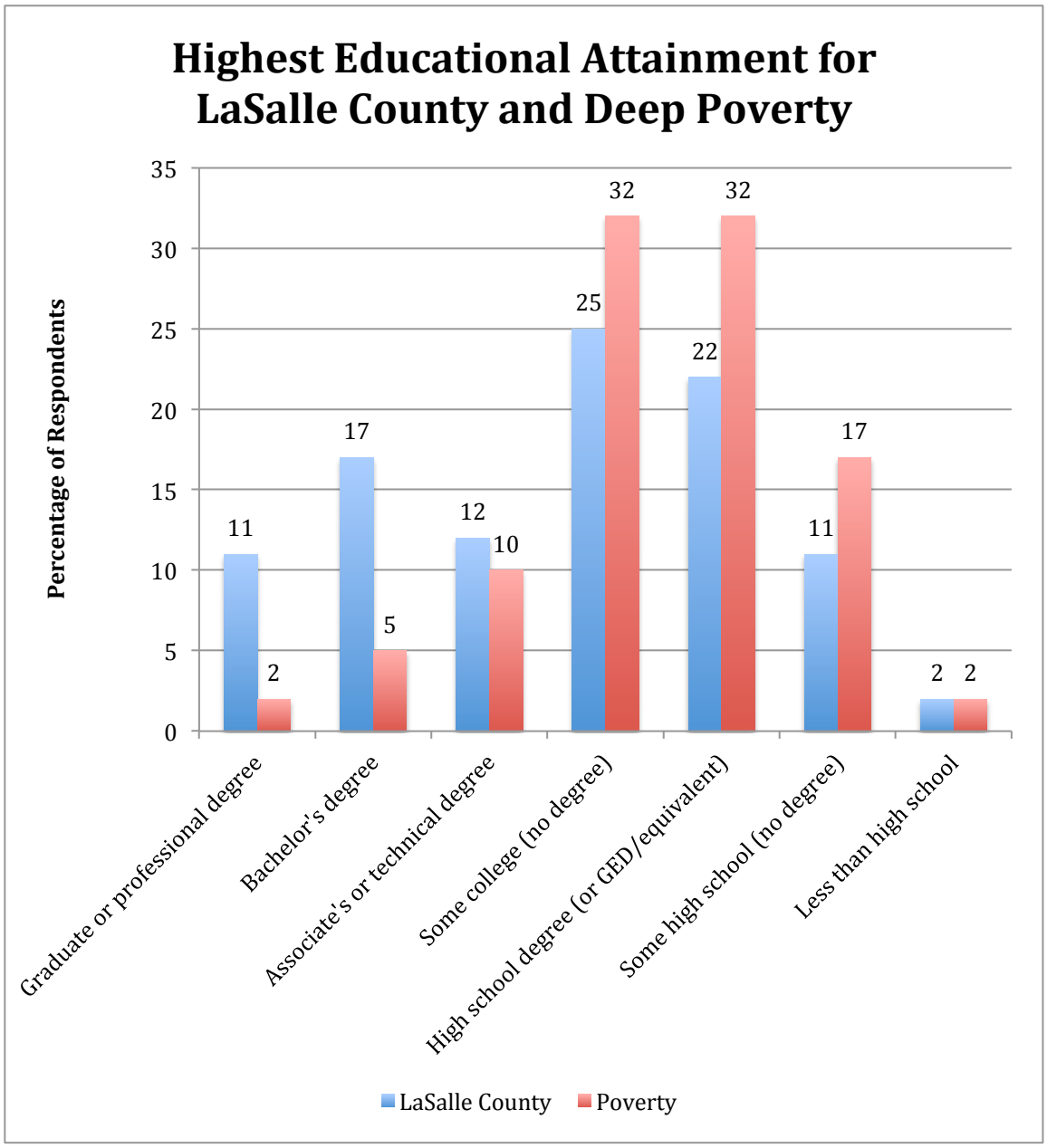


Overall demographics for race/ethnicity mirrored the secondary data assessed in Phase I. Comparing to Census data, the survey respondents, most ethnic backgrounds were similar to one another. While the percentage of individuals identifying as White was lower in the survey data, higher percentages of individuals identifying as Black/African American were included in the study.

6.3 Educational Attainment

Level of education for survey respondents was similar to Census data; however, note that 19% of those living in poverty have not completed high school.

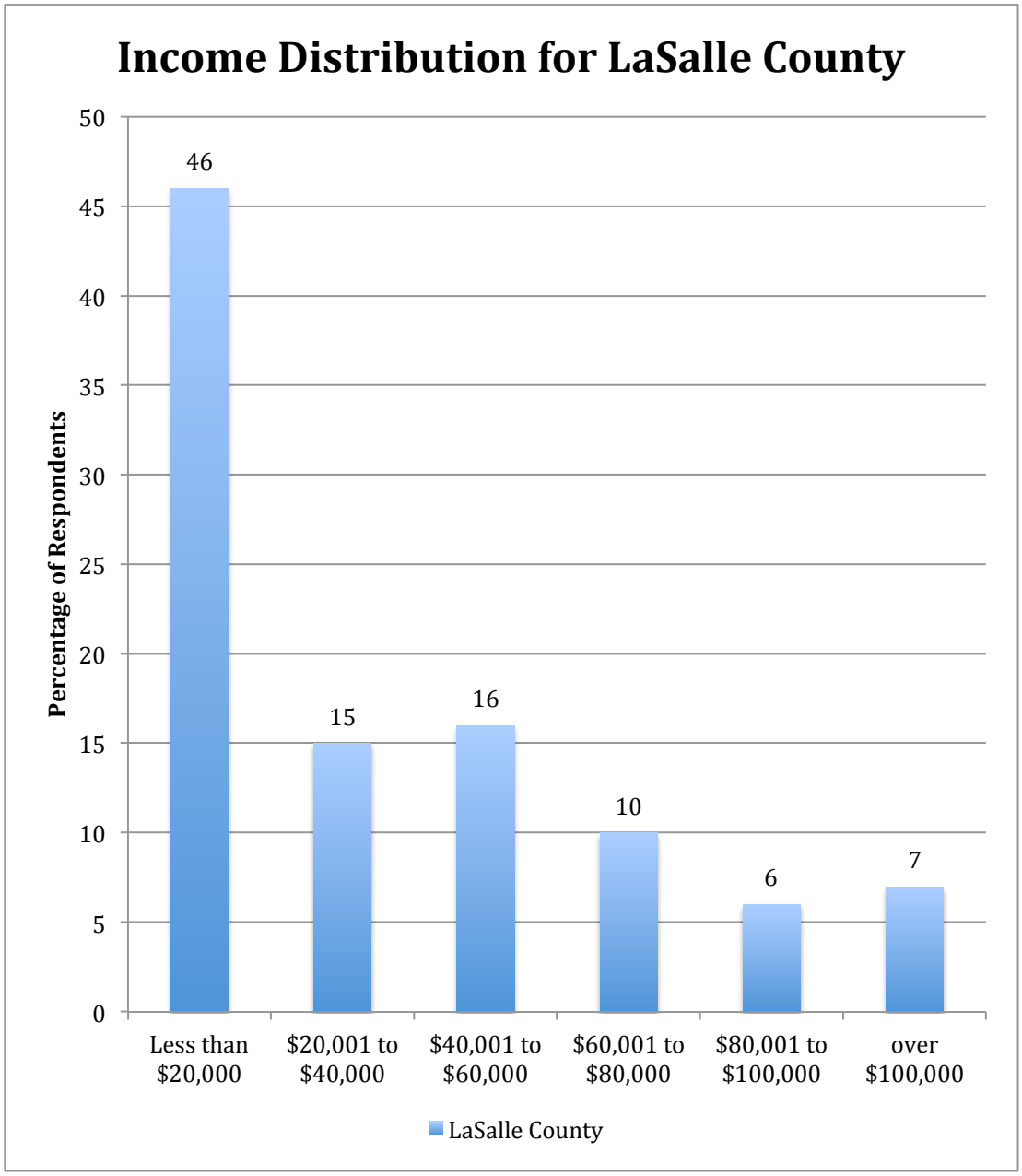
Table 6.3 Highest Educational Attainment for LaSalle County and Deep Poverty



6.4 Income Distribution

Note that income distribution for survey respondents is skewed low, as 46% of the overall sample had an income level of less than $20,000. This is a result of the targeted efforts to survey the at-risk population.

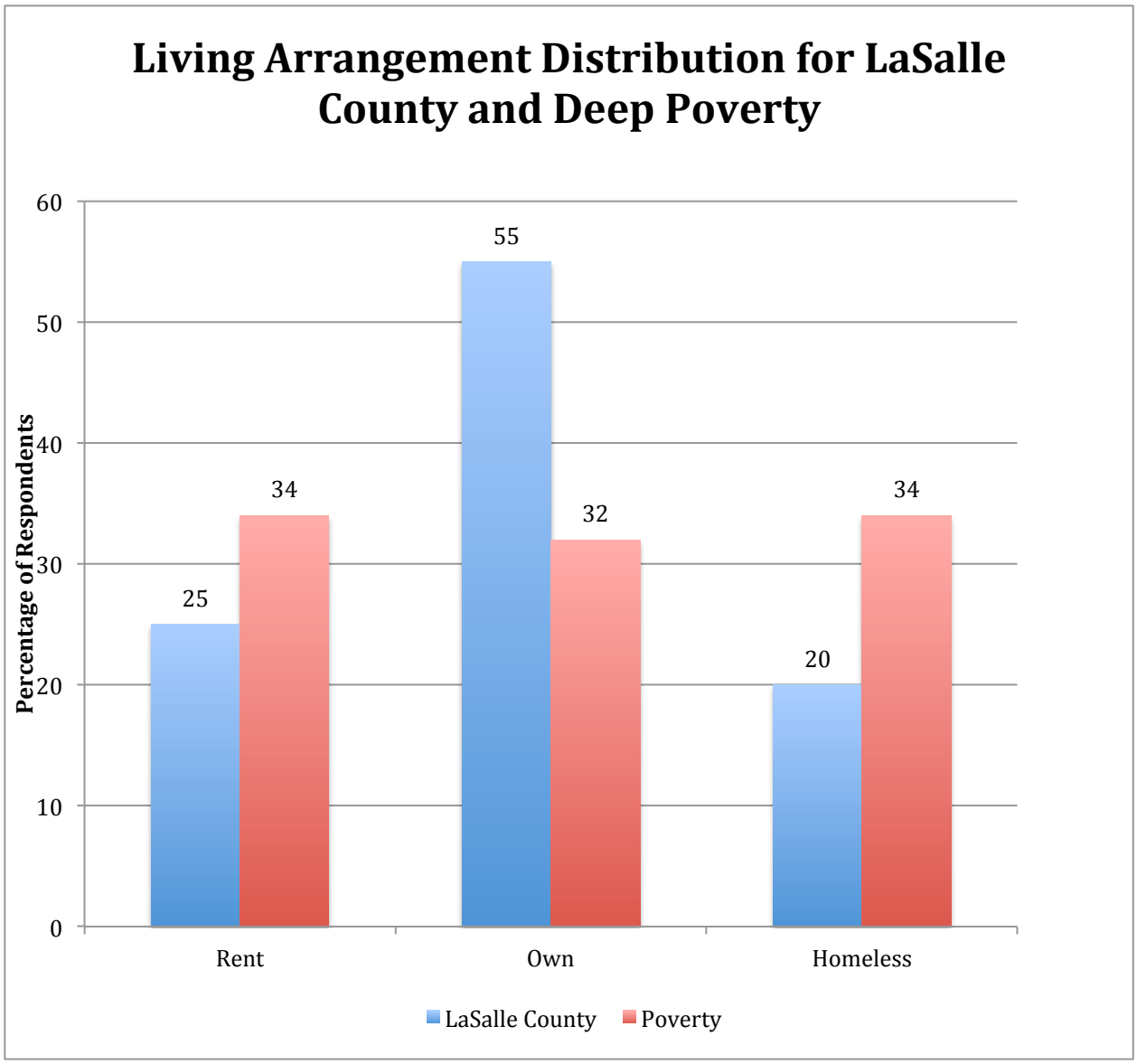
Table 6.4 Income Distribution for LaSalle County



6.5 Living Arrangements

Note that overall, nearly twice as many respondents indicated they owned homes compared to those individuals who rented. To protect the dignity of homeless survey respondents, a specific choice of homeless was not available, rather there was a category for "other."

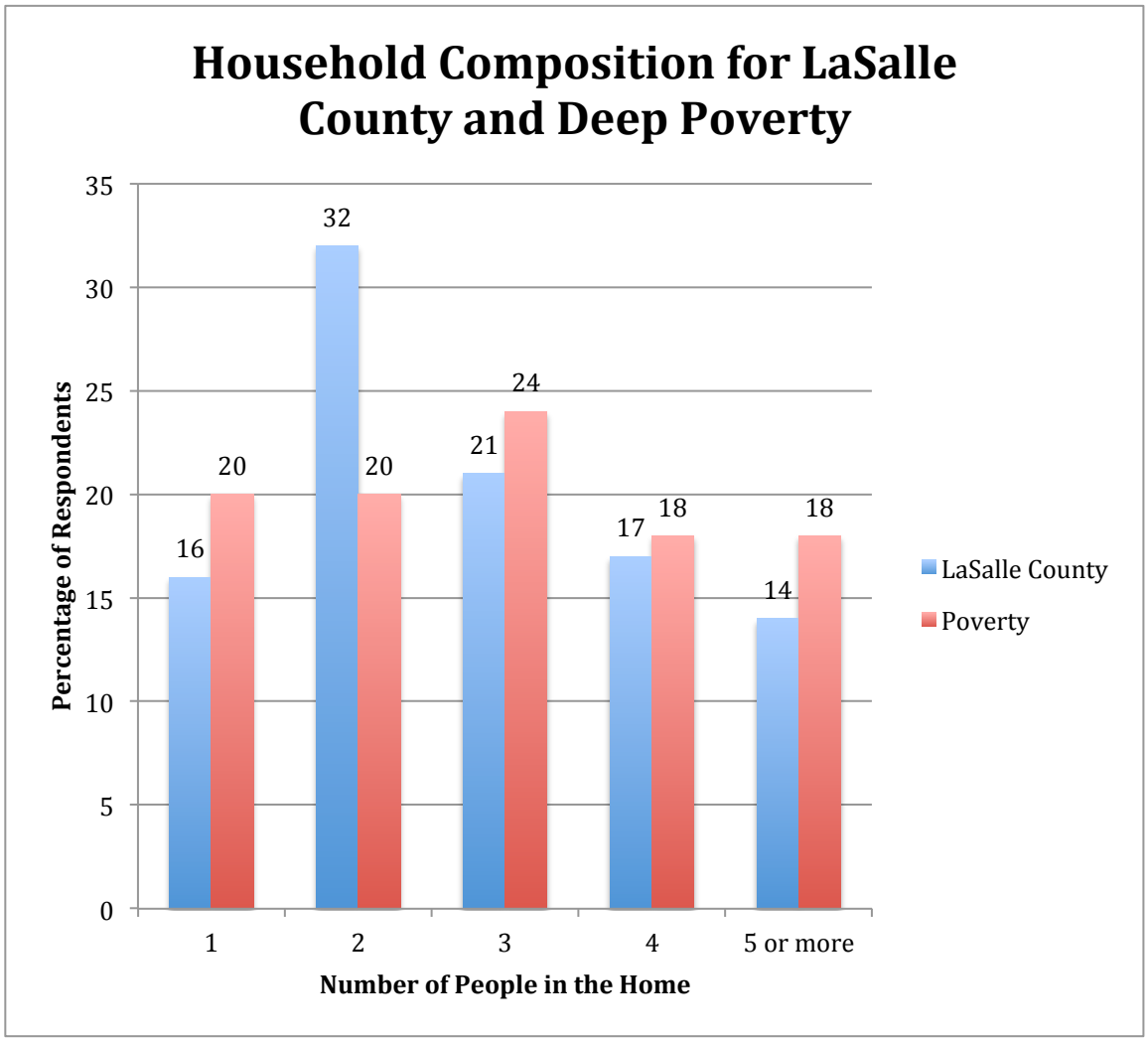
Table 6.5 Living Arrangement Distribution for LaSalle County and Deep Poverty



6.6 Household Composition

Household composition is based on the number of individuals living in a household. Overall the most prevalent response was 2 people per household, with the exception of those living in deep poverty, where the most prevalent response was three individuals living in a household.

Table 6.6 Household Composition for LaSalle County and Deep Poverty



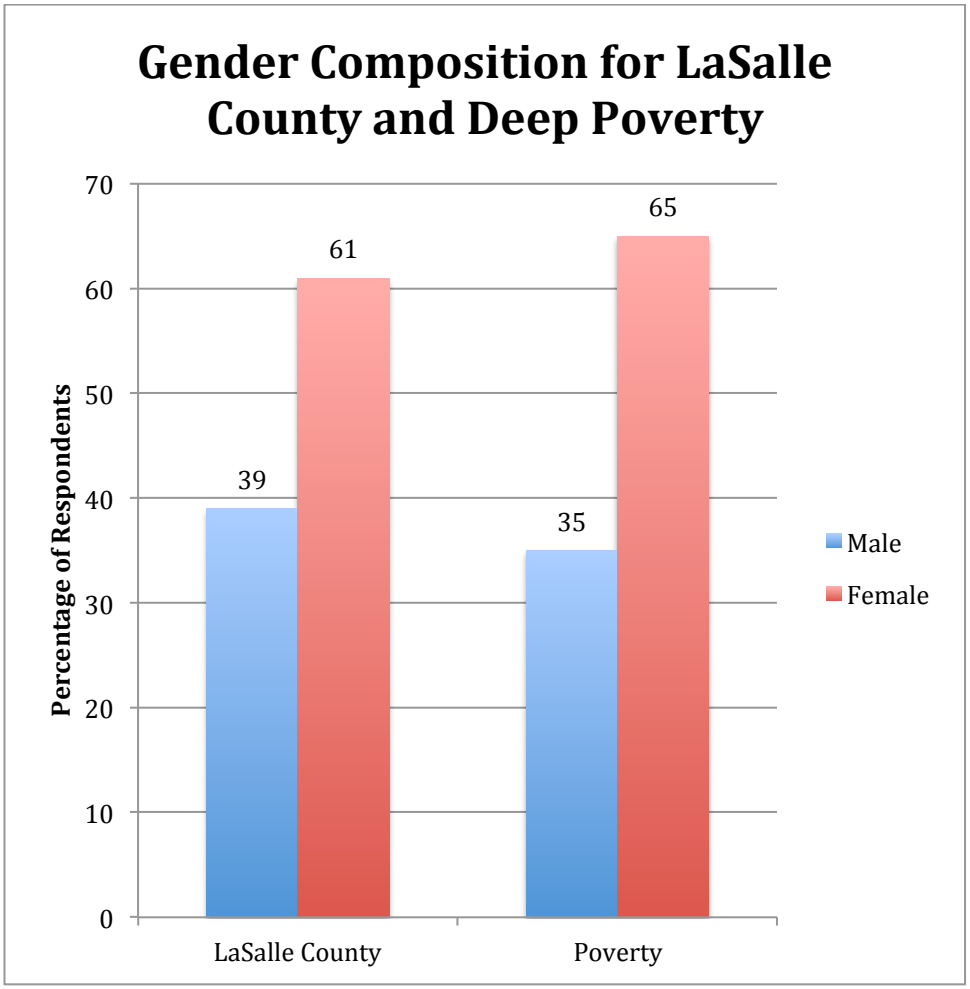
6.7 Employment Status

For employment status, overall, 42% of respondents were employed full time, 19% were employed part time, and 15% were unemployed. The rest of the population was either retired, in school, disabled, or served in the armed forces or was a homemaker.

6.8 Gender

The one demographic variable that was significantly skewed was gender. Overall 61% of respondents were women and 39% of respondents were men. For this type of survey, it is expected that women would be more likely to fill out the survey compared to men. Note that in a research study performed by the Heart of Illinois United Way in 2011, a positive correlation was found between women and concern for health-care related issues. Stated differently, women are more interested in participating in these types of surveys then men.

Table 6.8 Gender Composition for LaSalle County and Deep Poverty



CHAPTER 7. COMMUNITY PERCEPTIONS

In this chapter results of the first three sections of the survey are analyzed and discussed. Specifically, perceptions of Health Problems in the Community, Unhealthy Behaviors and factors impacting Quality of Life are presented. First, aggregate scores are presented. Then responses are presented for those living in deep poverty. After each category, correlation analyses between perceptions and demographic variables are presented in order to identify where certain demographic characteristics influence the way respondents perceive specific attributes of the community.

Note that for aggregated perceptions of the LaSalle County community, modifications to data were made given the skewed income data and skewed gender data. Therefore specific cases were selected randomly based on income and gender, in order to replicate the demographics of the community based on Census data. The sample used for aggregated analyses contains 611 responses.

7.1 Health Problems in the Community

7.1.1 Aggregated Results

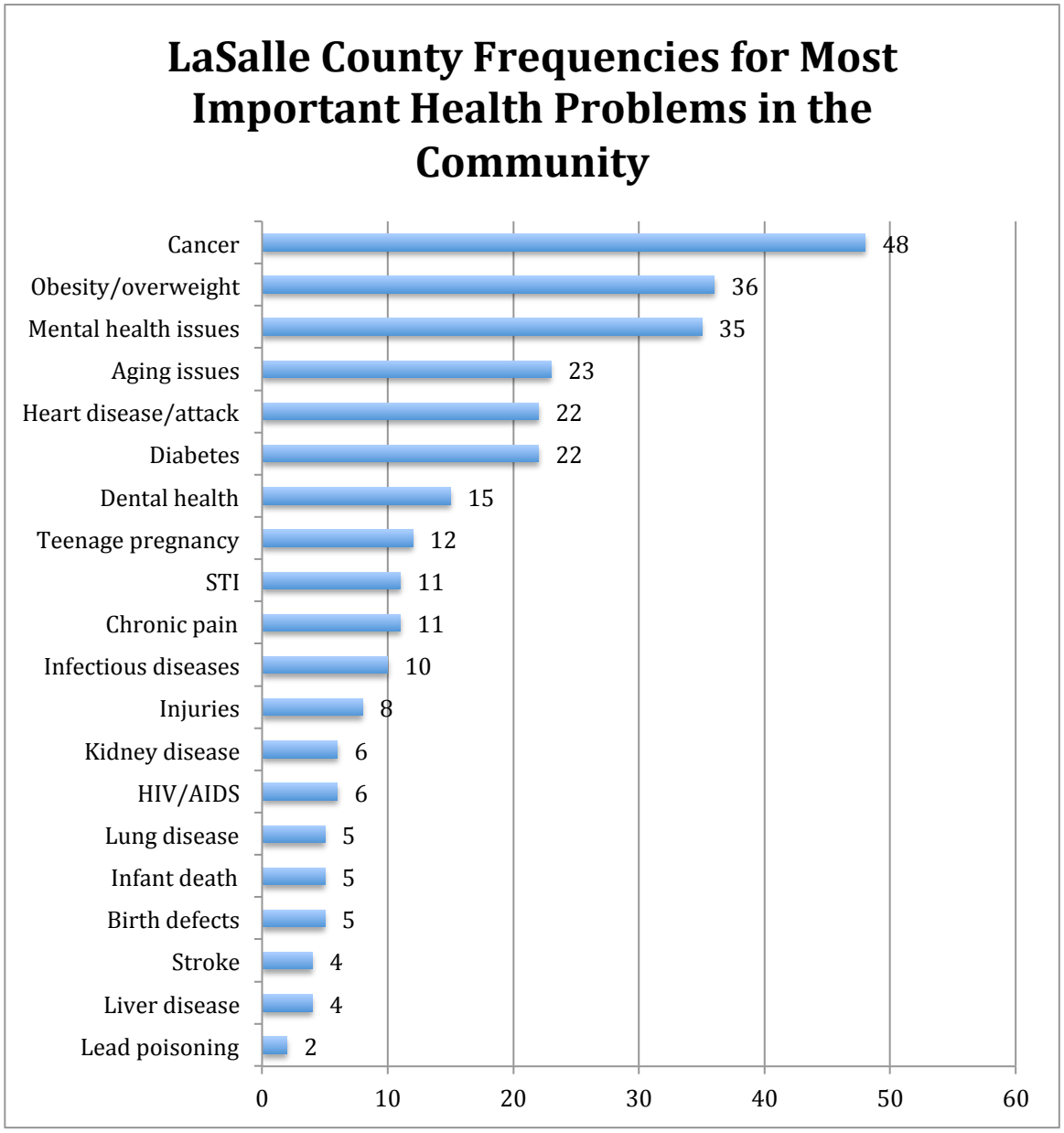
The first dimension of the survey asked respondents to rate the three most important health problems in the community. Respondents had a choice of 20 different options. The health problem that rated highest was cancer. It was significantly higher than other categories based on *t-tests* between sample means.

This was followed by obesity and mental health issues, identified nearly 35% of the time. The next set of health problems identified were aging issues, heart disease, and diabetes. Statistically, all three of these choices were rated similarly. Other categories were only identified 15% of the time or less.

Note that perceptions of the community were accurate in some cases, but inaccurate in others. For example, while cancer is a leading cause of mortality in LaSalle County, the number of cases treated has been steadily declining for some cancer types. Also, obesity is an important issue and the survey respondents accurately identified obesity as an important health problem.

In contrast, heart disease/heart attacks rated 5th on the list. This is the leading cause of death in LaSalle County.

Table 7.1.1 LaSalle County Frequencies for Most Important Perceived Health Problems in the Community

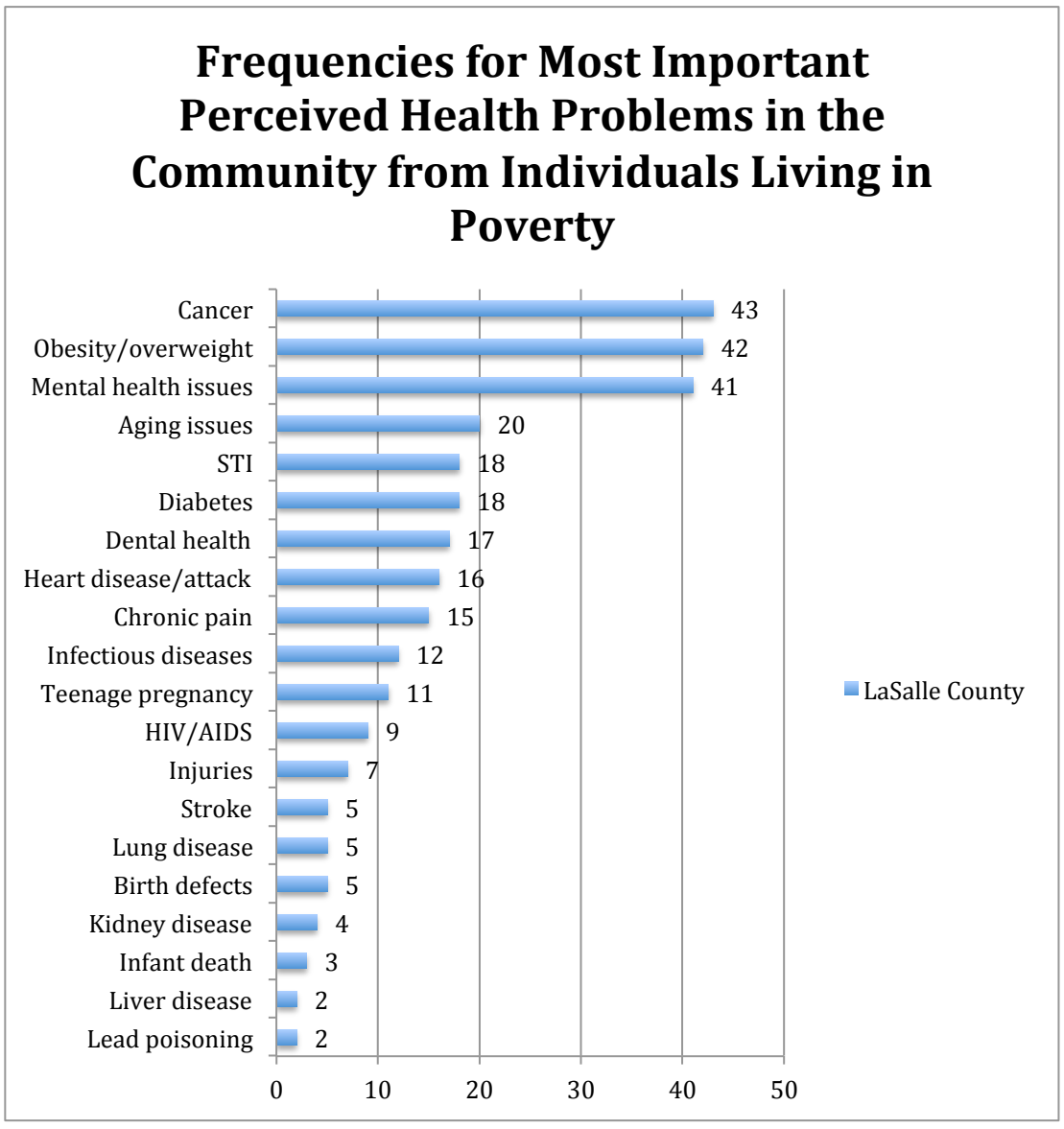


Note: n=611

7.1.2 Perceptions of Individuals Living in Poverty

When assessing perceptions of those living in poverty, it can be seen that some of the health problems change in terms of importance. For example, while the top four perceived health problems remain constant, STIs become more important, as 18% of individuals living in poverty identified this as a concern. However, other problems, like heart disease/attack, become even less important than the overall LaSalle County scores.

Table 7.1.2 Frequencies for Most Important Perceived Health Problems in the Community from Individuals Living in Poverty



7.1.4 Relationships between Perceptions and Demographics

Only significant relationships are reported in this section. The threshold used for significant correlations is ($p < .05$) given the sample size. The following relationships can be identified.

Aging Issues tend to be rated higher by individuals with the following characteristics: Older, educated, and White ethnicity. Aging issues tend to be rated lower by individuals identifying with Black ethnicity.

Birth Defects tend to be rated higher by individuals of Black ethnicity and less education and lower by individuals of White ethnicity.

Cancer tends to be rated higher by individuals with the following characteristics: older, White ethnicity, and more education. Cancer tends to be rated lower by individuals identifying with Black ethnicity.

Chronic pain tends to be rated higher by individuals with the following characteristics: Less educated.

Dental health tends to be rated higher by individuals with the following characteristics: Higher income.

Diabetes tends to be rated higher by individuals with higher income and more education.

Heart disease/attack tend to be rated higher by people with the following characteristics: Lower income and less education.

HIV/AIDS tends to be rated higher by people with the following characteristics: Younger. Individuals of White ethnicity tend to rate HIV/AIDS lower.

Infant death tends to be rated higher by individuals identifying with Black ethnicity, Latino/a ethnicity, and lower income

Lead poisoning tends to be rated higher by individuals identifying with Black ethnicity.

Liver disease tends to be rated higher by individuals with less education.

Mental Health Issues tend to be rated higher by females, younger individuals, individuals with more education, and individuals of White ethnicity.

Obesity/Overweight tends to be rated higher by people with the following characteristics: White ethnicity and higher education.

STIs tend to be rated higher by people with the following characteristics: younger, less educated, and lower income.

Stroke tends to be rated higher by individuals with lower incomes.

"Teenage Pregnancy" tends to be rated higher by people with the following characteristics: younger.

Table 7.1.3 Significant Correlations among Most Important Perceived Health Problems in the Community and Demographic Variables

	Gender	Age	Race (White)	Race (Black)	Latino/a	Education	Income
Aging issues		+	+	-		+	
Birth defects			-	+		-	
Cancer		+	+	-		+	
Chronic pain						-	
Dental health							+
Diabetes						+	+
Heart disease/ Heart attack						-	-
HIV/AIDS		-	-				
Infant death				+	+	-	
Infectious diseases							
Injuries							
Kidney disease							
Lead poisoning				+			
Liver disease						-	
Lung disease							
Mental health issues	+	-	+			+	
Obesity/ overweight			+			+	
STI		-				-	-
Stroke							-
Teenage pregnancy		-					

7.2 Unhealthy Behaviors

Respondents were asked to select the three most important unhealthy behaviors in the community out of a total of 14 choices based on importance. Again note that the modified sample of 611 was used for aggregated responses in order to more accurately reflect the characteristics of the LaSalle County population.

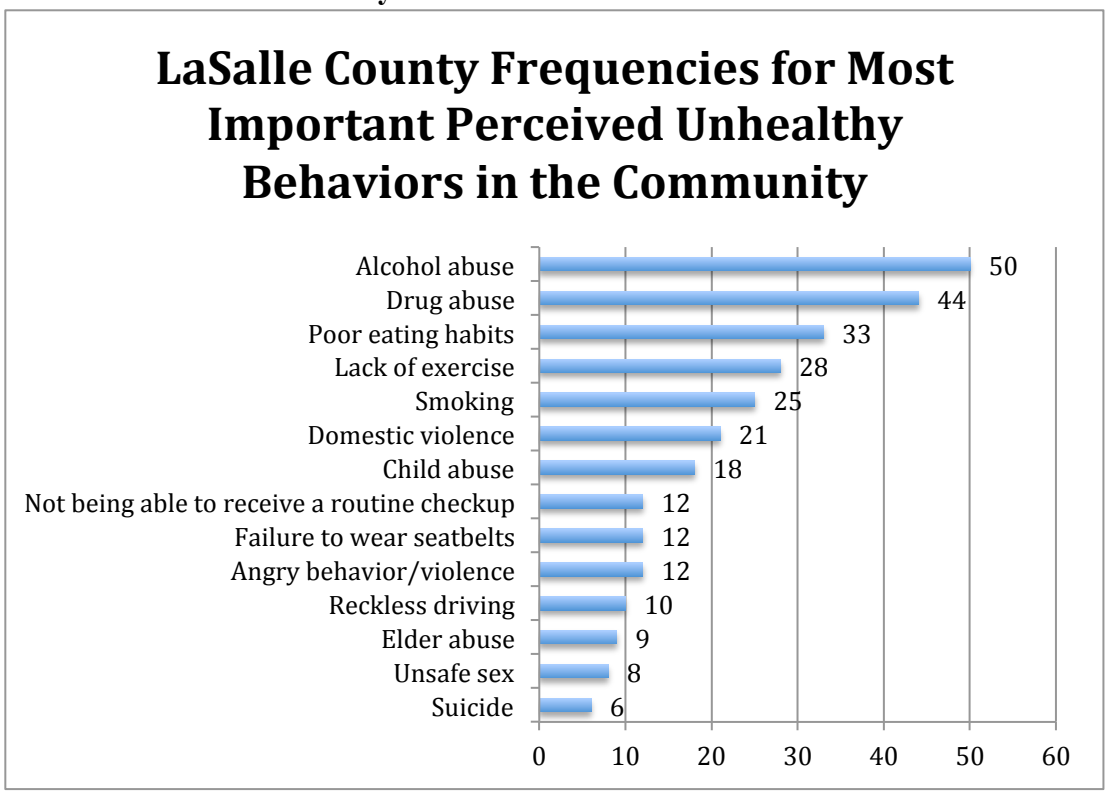
7.2.1 Aggregate Unhealthy Behaviors

The unhealthy behaviors that rated highest were alcohol abuse and drug abuse. They were both significantly higher than other categories based on *t-tests* between sample means.

This was followed by poor eating habits, lack of exercise, smoking, and domestic violence. Statistically, these four choices were rated similarly. The next unhealthy behavior was child abuse. Other categories were only identified 12% of the time or less.

Note that perceptions of the community were accurate in some cases, but inaccurate in others. For example, while drug and alcohol abuse are concerns LaSalle County, the percentage of youths in 8th and 12th grades that smoke exceeds the State of Illinois averages.

Table 7.2.1 LaSalle County Frequencies for Most Important Perceived Unhealthy Behaviors in the Community

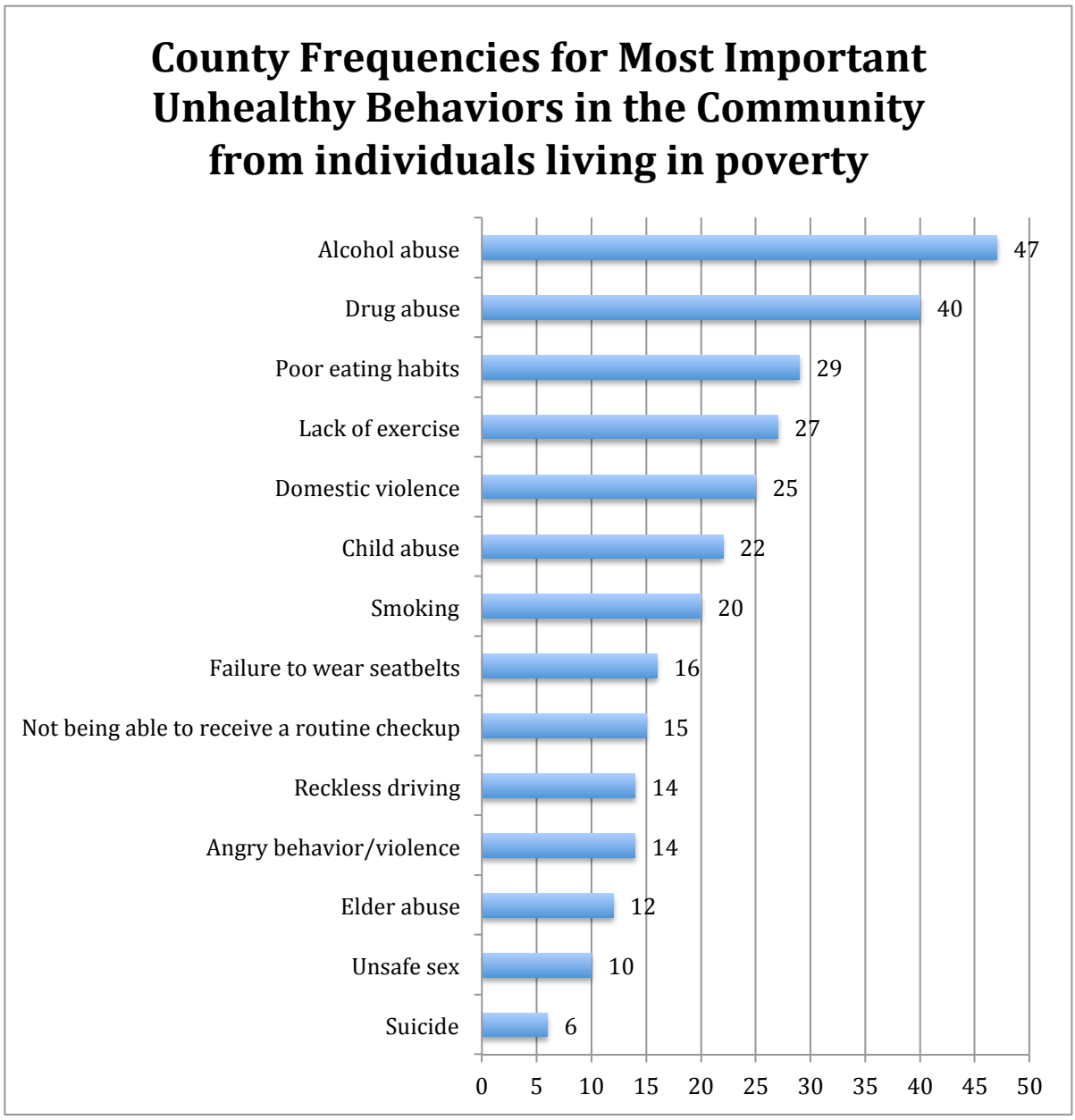


Note: n=611

7.2.2 Perceptions of Individuals Living in Poverty

When assessing perceptions of those living in poverty, it can be seen that major issues like domestic abuse and child abuse become slightly more important, indicating that individuals in poverty perceive more problems with violence in the home. Similarly elder abuse and angry behavior/violence are more important.

Table 7.2.3 Frequencies for Most Important Perceived Unhealthy Behaviors in the Community from Individuals Living in Poverty



7.2.3 Relationships between Perceptions and Demographics

Only significant relationships are reported in this section. The threshold used for significant correlations is ($p < .01$) given the large sample size. The following relationships can be identified.

Anger/Violence tends to be rated higher by individuals with the following characteristics: White ethnicity.

Alcohol abuse tends to be rated higher by individuals with the following characteristics: White ethnicity, more educated, and higher income. Individuals of Black ethnicity and Latino/a ethnicity tend to rate alcohol abuse lower.

Child abuse tends to be rated higher by individuals with the following characteristics: Black ethnicity, lower income, and less educated.

Failure to wear a seatbelt tends to be rated higher by individuals with the following characteristics: Younger and Black ethnicity.

Drug abuse tends to be rated higher by individuals identifying with White ethnicity.

Elder abuse tends to be rated higher by individuals identifying with lower education.

Lack of exercise tends to be rated higher by people with the following characteristics: White ethnicity.

Smoking tends to be rated higher by people with the following characteristics: Older, more education, and higher income.

Unsafe sex tends to be rated lower by individuals with the following characteristics: White ethnicity.

Table 7.2.3 Significant Correlations among Most Important Perceived Unhealthy Behaviors in the Community and Demographic Variables

	Gender	Age	Race (White)	Race (Black)	Latino/a	Education	Income
Angry behavior/violence			+				
Alcohol abuse			+	-	-	+	+
Child abuse				+		-	-
Domestic violence							
Failure to wear seatbelts		-		+			
Drug abuse			+				
Elder abuse						-	
Lack of exercise			+				
Not being able to receive a routine checkup				+			-
Poor eating habits							
Reckless driving							
Smoking		+				+	+
Suicide							
Unsafe sex			-				

7.3 Issues with Quality of Life

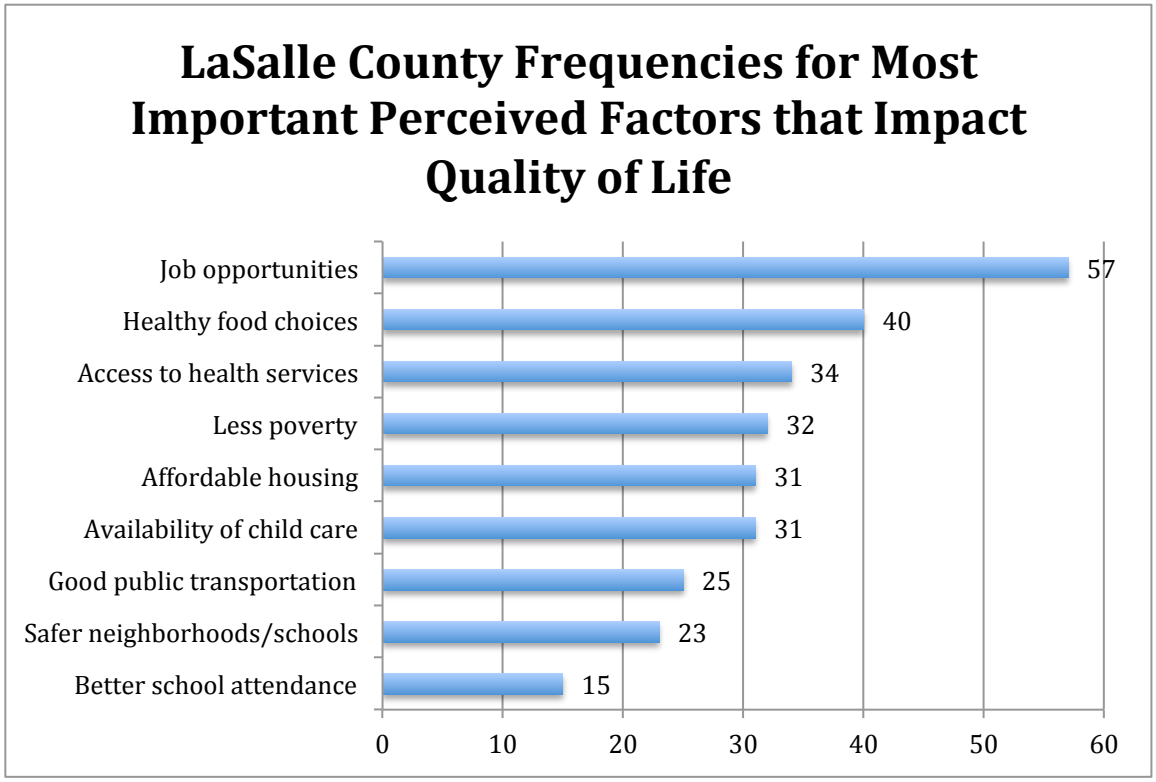
Respondents were asked to select the three most important issues impacting quality of life in the community out of a total of 9 choices based on importance. Again note that the modified sample of 611 was used for aggregated responses in order to more accurately reflect the characteristics of LaSalle County.

7.3.1 Aggregate issues impacting quality of life

The issues impacting quality of life that rated highest were job opportunities and healthy food choices. They were both significantly higher than other categories based on *t-tests* between sample means. It is not surprising that job opportunities was rated high given the recent recession.

This was followed by access to health services, less poverty, affordable housing, and availability of child care. Statistically, these four choices were rated similarly. This was followed by safer neighborhoods and transportation.

Table 7.3.1 LaSalle County Frequencies for Most Important Perceived Factors that Impact Quality of Life

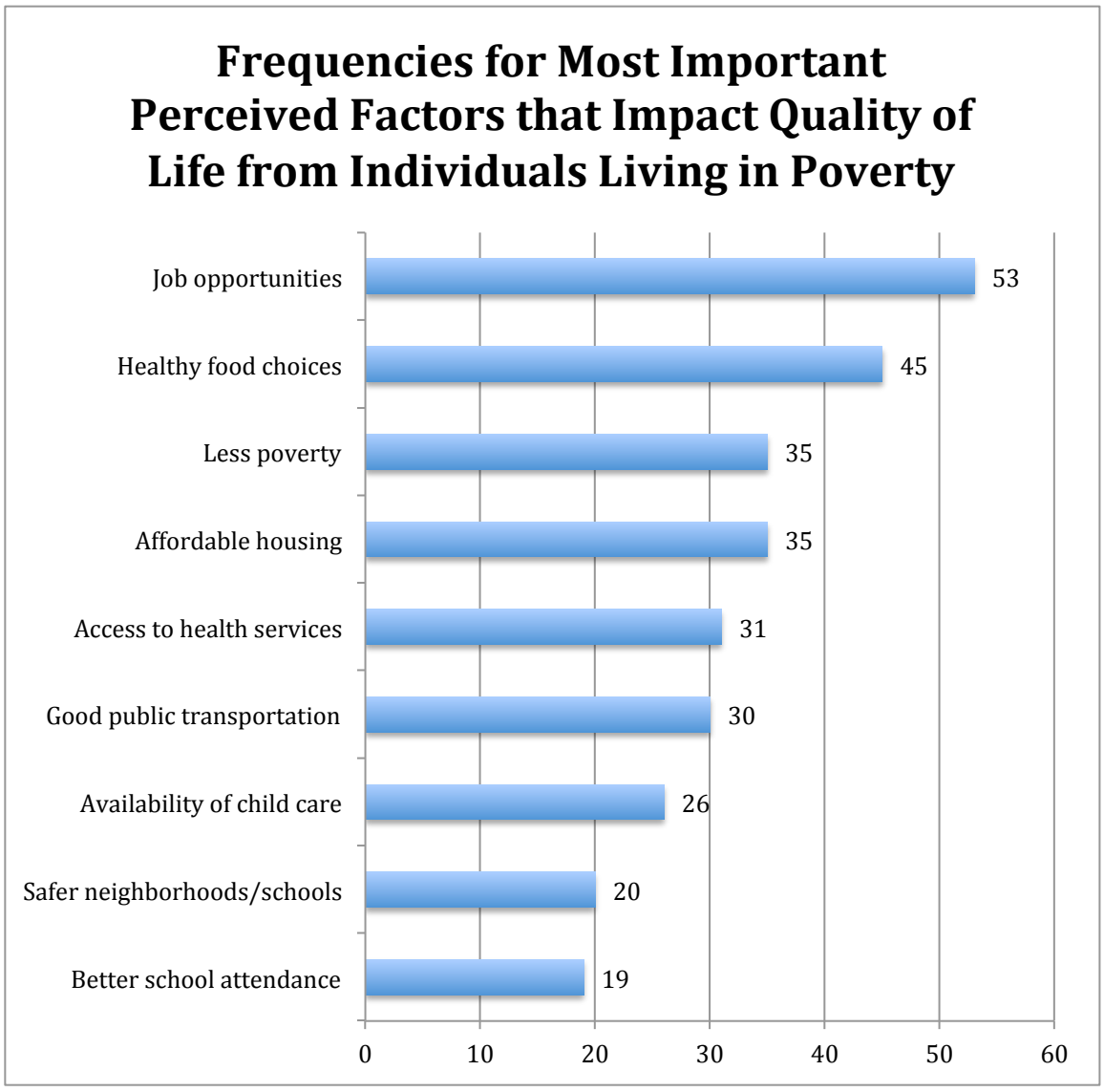


Note: n=611

7.3.2 Perceptions of Individuals Living in Poverty

When assessing perceptions of those living in poverty, it can be seen that perceptions are similar to the aggregated sample. Good public transportation, safer neighborhoods, and better school attendance are relatively more important to individuals living in poverty than those from the aggregated sample.

Table 7.3.2 Frequencies for Most Important Perceived Factors that Impact Quality of Life from Individuals Living in Poverty



7.3.3 Relationships between Perceptions and Demographics

Only significant relationships are reported in this section. The threshold used for significant correlations is ($p < .01$) given the large sample size. The following relationships can be identified.

Access to health services tends to be rated higher by individuals with the following characteristics: Women, older, White ethnicity, and more educated.

Affordable housing tend to be rated higher by people with the following characteristics: Men and less educated.

Availability of childcare tends to be rated higher by younger people, individuals of Black ethnicity, and less educated people. Individuals of White ethnicity tend to rate it lower.

Better school attendance tends to be rated higher by younger people. Individuals identifying with White ethnicity tend to rate it lower.

Job opportunities tend to be rated higher by individuals identifying with White ethnicity and lower by individuals identifying with Latino/a ethnicity.

Public transportation tends to be rated higher by younger people.

Less poverty tends to be rated higher by individuals identifying with Latino/a ethnicity.

A safer neighborhood tends to be rated higher by White ethnicity.

7.3.3 Significant Correlations among Most Important Perceived Factors that Impact Quality of Life and Demographic Variables

	Gender	Age	Race (White)	Race (Black)	Latino/a	Education	Income
Access to health services	+	+	+			+	
Affordable housing	-					-	
Availability of child care		-	-	+			
Better school attendance		-	-				
Job opportunities			+		-		
Good public transportation		-					
Healthy food choices							
Less poverty					+		
Safer neighborhoods/schools			+				

Community Perceptions: Strategic Implications

Heart disease appears to be perceived relatively low compared to actual causes of mortality. Specifically, younger people and low-income respondents appear to have the largest misperceptions regarding the importance of understanding heart disease in the community.

Additionally, dental health seems to be rated relatively low, even though annual dental checkups are lower than state averages. Respondents with higher incomes appeared to have the largest misperceptions.

Finally, there appears to be a misperception between perceived issues with diabetes and actual cases of diabetes. Specifically, more educated respondents with higher incomes tend to misperceive the importance of diabetes in the community.

CHAPTER 8. ACCESSIBILITY TO HEALTH CARE

In this chapter, results examining access to health services are presented. Specifically, access to medical care, prescription medication, dental care and counseling are presented. First, scores are presented for LaSalle County. Next, responses are presented for those living in deep poverty. After each category, relationships between accessibility and demographic variables are presented in order to identify where certain demographic characteristics influence access to health services.

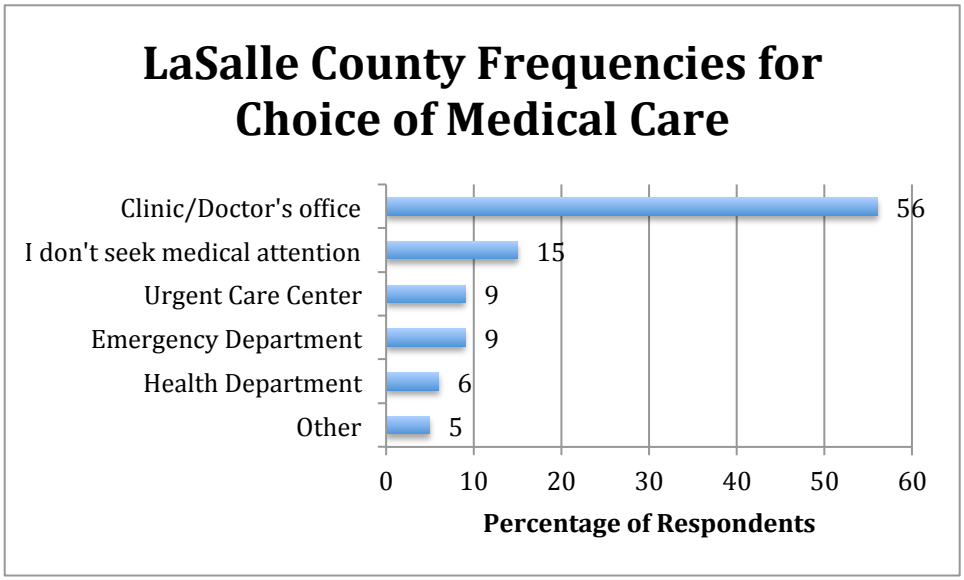
8.1 Choice of Medical Care

Respondents were asked to select the type of health care they used when they were sick. Six different alternatives were presented, including clinic or doctor's office, emergency department, urgent care facility, health department, no medical treatment, and other. The modified sample of 611 was used for aggregated responses in order to more accurately reflect the demographic characteristics for LaSalle County.

8.1.1 Aggregate Reponses

The most common response was clinic/doctor's office, where 56% of survey respondents chose this as their primary choice for medical care. This was followed by not seeking medical attention (15%), urgent care (9%), the emergency department at a hospital (9%), the health department (6%), and other (5%). Note however that Health Department numbers may be skewed lower, as no surveys were distributed at the Health Department to ensure accurate measures for accessibility to health care. Moreover, respondents may have interpreted the Health Department as a clinic.

Table 8.1.1 LaSalle County Frequencies for Choice of Medical Care

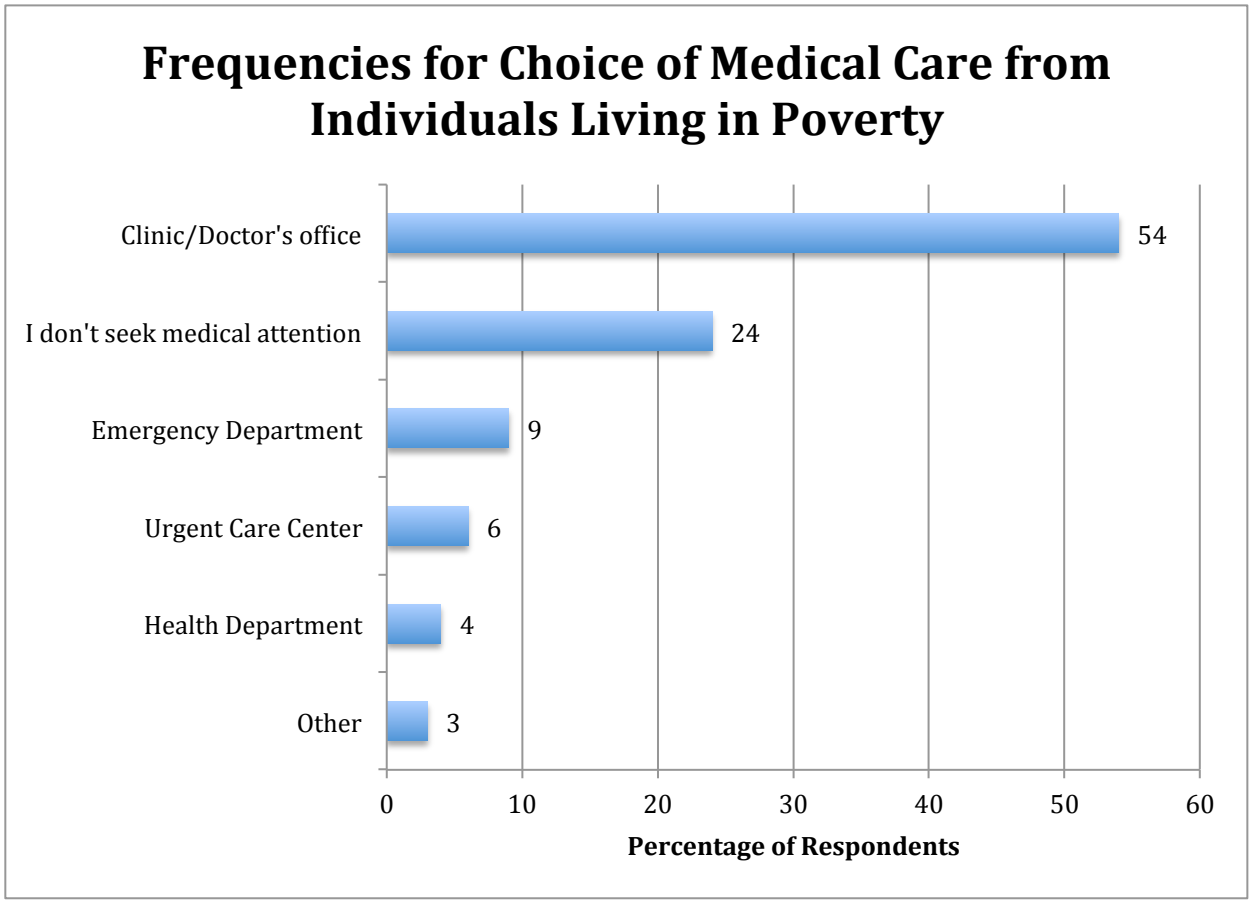


n=611

8.1.2. Perceptions of individuals living in poverty

Note that for individuals living in poverty, 54% choose a clinic/doctor's office as their first choice for medical care and 24% of individuals living in poverty do not seek medical attention. Nine percent utilize the emergency department when sick and 6% use an urgent care center.

Table 8.1.2 Frequencies for Choice of Medical Care from Individuals Living in Poverty



8.1.3 Relationships between Choice of Medical Care and Demographics

Note that for Chapter 8 and 9 the homeless are added as a demographic variable.

Health department tends to be rated higher by people with the following characteristics: higher income and less educated. Individuals identifying with White ethnicity tend to rate it lower.

Emergency department tends to be rated higher by people with the following characteristics: men, Black ethnicity, Latino/a ethnicity, and less education

Clinic/Doctor's office tends to be rated higher by people with the following characteristics: women, older, white ethnicity, Latino/a ethnicity, and higher income. Individuals of Black ethnicity and Latino/a ethnicity tend to rate it lower.

Don't seek medical treatment tends to be rated higher by people with the following characteristics: younger and lower income.

Table 8.1.3 Significant Correlations among Choice of Health Care and Demographic Variables

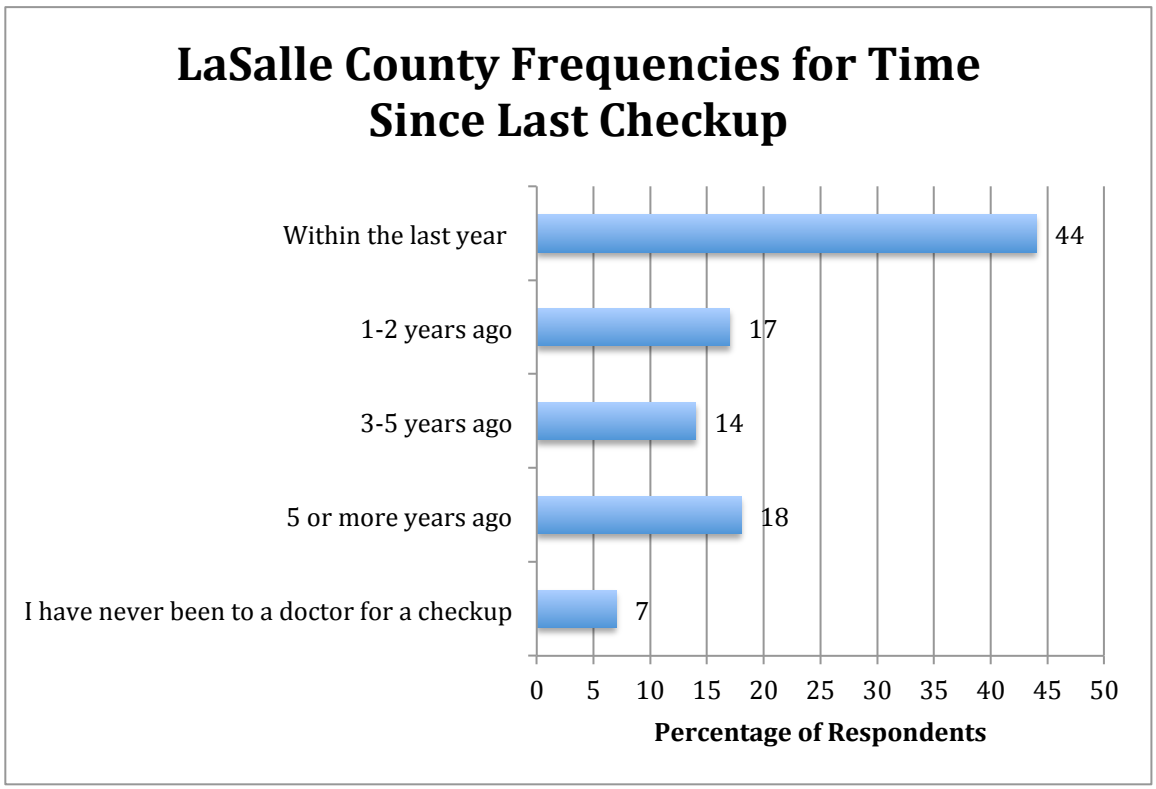
	Gender	Age	Race (White)	Race (Black)	Latino/a	Education	Income
Health Department			-			-	+
Emergency Department	-			+	+	-	
Clinic/Doctor's office	+	+	+	-	-		+
I don't seek medical attention		-					-
Urgent Care Center							

8.2 Frequency of Checkups

8.2.1 Aggregated responses

Respondents were asked how often they had a checkup. Of respondents, 44% received a checkup in the last year, 17% in the past 1-2 years, 14% in the last 3-5 years, 18% 5 years or more and 7% have never been to a doctor's office for a checkup. The modified sample of 611 was used for aggregated responses in order to more accurately reflect the demographic characteristics of LaSalle County.

Table 8.2.1 LaSalle County Frequencies for Time Since Last Checkup

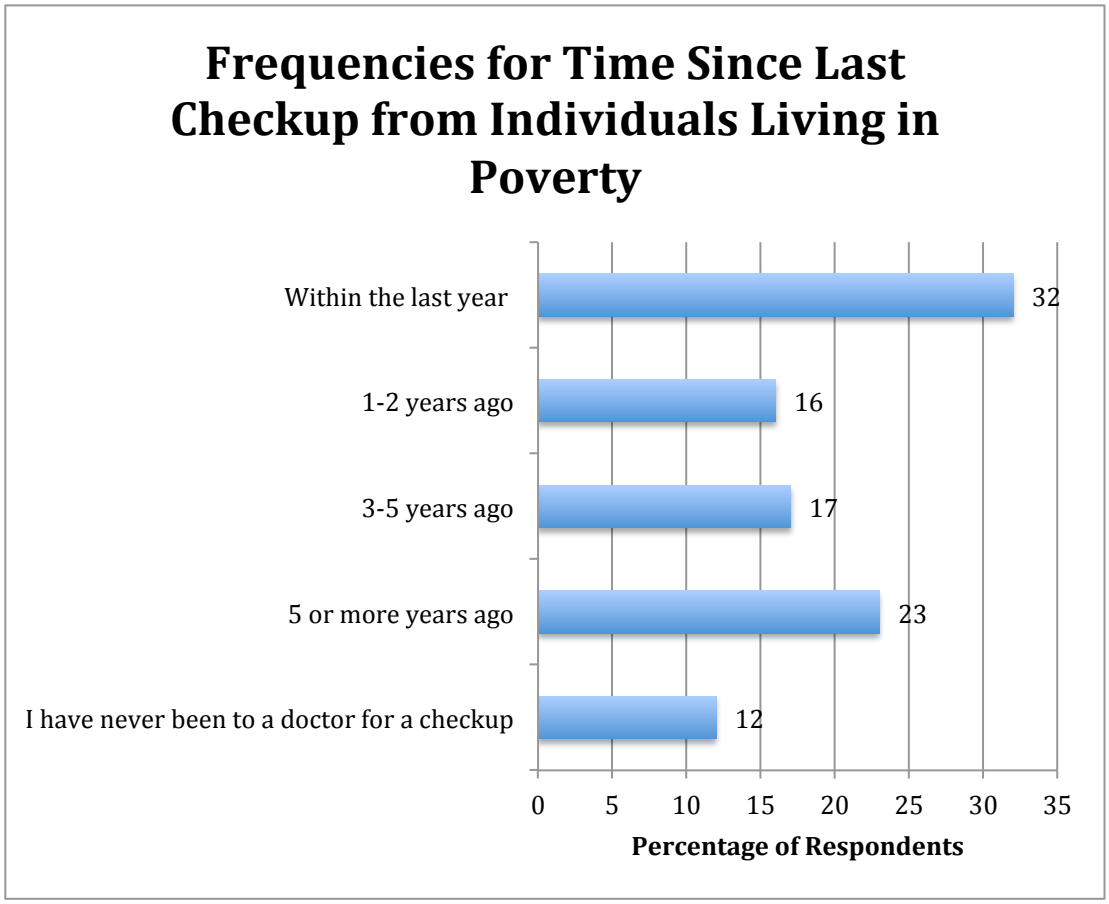


Note: n=611

8.2.2 People living in poverty

Note that people living in poverty were significantly different than the aggregated population when going to a doctor for a checkup. Specifically, only 48% of people living in deep poverty had seen a doctor for a checkup within the last two years.

Table 8.2.2 Frequencies for Time Since Last Checkup from Individuals Living in Poverty



8.2.3 Relationships between frequency of checkups and demographics

The data show that younger people, individuals with lower income, individuals with less education, and homeless individuals are less likely to get a checkup at a doctor's office. Moreover, results of Ordinary-Least-Squared regression models show that homelessness is the most important predictor, followed by income and age, based on significance levels of *beta* coefficients.

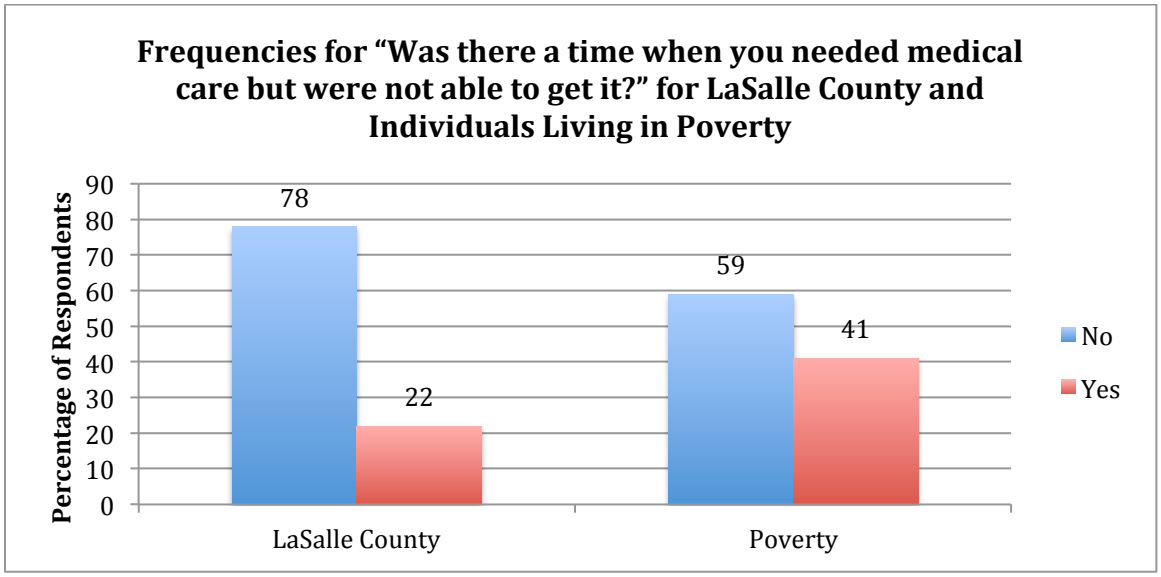
Table 8.2.3 Significant Correlations for Time Since Last Checkup

Age	-
Education	-
Income	-
Homeless	+

8.3 Access to Medical Care

Respondents were asked, "Was there a time when you needed medical care but were not able to get it?" 78% of LaSalle County residents were able to receive medical care, however compared to individuals living in deep poverty, only 59% were able to receive medical care. Put differently, 41% of individuals living in poverty could not get access to medical care when necessary.

Table 8.3.1 Frequencies for "Was there a time when you needed medical care but were not able to get it?" for LaSalle County and Individuals Living in Poverty



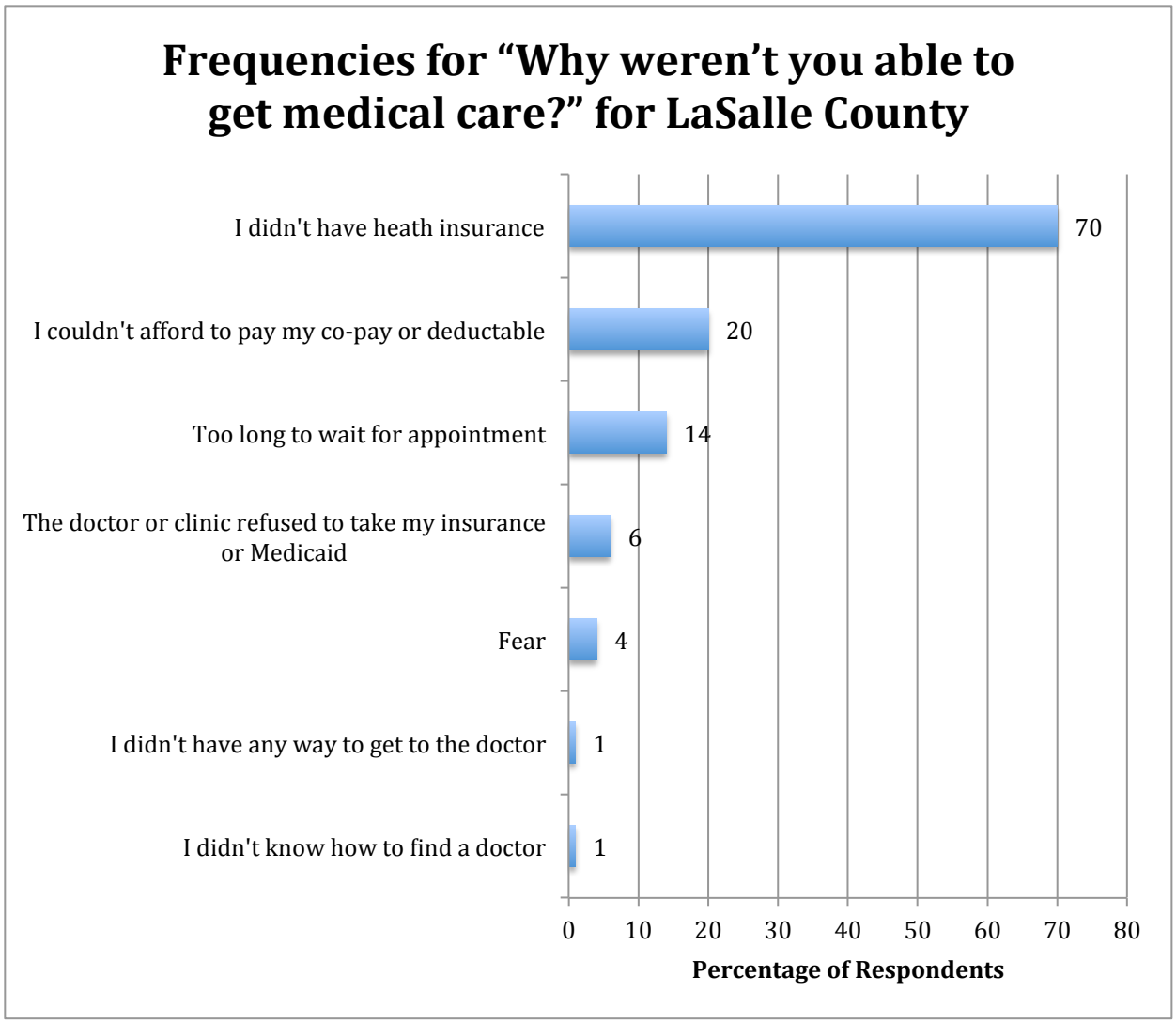
For relationships between access to medical care and demographics, note that the relationships are reverse coded. Therefore a survey respondent was more likely to answer that they did not have access to medical care if they were younger, less educated, possessed lower income, and were homeless. Logit regression results indicate that less education, younger people and homeless were the most important predictors respectively, based on significance levels of *beta* coefficients.

Table 8.3.2 Significant Correlations for "Was there a time when you needed medical care but were not able to get it?"

Age	-
Education	-
Income	-
Homeless	+

The leading causes of why someone did not have access to medical care were no insurance (70%) and the inability to afford copayments or deductibles (20%). This was followed by too long to wait for an appointment (14%) and the doctor refusing to accept insurance or Medicaid (6%). Note that total percentages do not equal 100% as respondents could choose more than one answer.

Table 8.3.3.1 Frequencies for "Why weren't you able to get medical care?" for LaSalle County



Note: n=161

8.3.3.2 Relationships between Needing Medical Care and Demographics

No insurance tends to be rated higher by people with the following characteristics: younger, White ethnicity, less educated, and lower income. Individuals identifying with Latino/a ethnicity tend to rate it lower.

Can't afford copay/deductible tends to be rated higher by people with the following characteristics: younger.

No way to get to the Doctor tends to be rated higher by people with the following characteristics: men.

Fear tends to be rated higher by older individuals.

Table 8.3.3.2 Significant Correlations for "Was there a time when you needed medical care but were not able to get it?"

	Gender	Age	Race (White)	Race (Black)	Latino/a	Education	Income	Homeless
No Insurance		-	+		-	-	-	
Can't afford copay/deductable		-						
No way to get to Doctor	-							
Refused my insurance/Medicaid								
I don't know how to find a doctor								
Too long for an appointment								
Fear		+						

8.4 Access to Prescription Drugs

Respondents were asked, "Was there a time when you needed prescription medicine but were not able to get it?" 79% of LaSalle County residents were able to receive prescription medicine, however compared to individuals living in deep poverty, only 66% were able to receive prescription drugs. Put differently, 34% of individuals living in poverty could not get access to medical care when necessary.

For relationships between access to prescription medications and demographics, logit regression results indicate that homeless was the most important predictor, based on significance levels of *beta* coefficients.

Table 8.4.1 Frequencies for "Was there a time when you needed prescription medicine but were not able to get it?" for LaSalle County and Individuals Living in Poverty

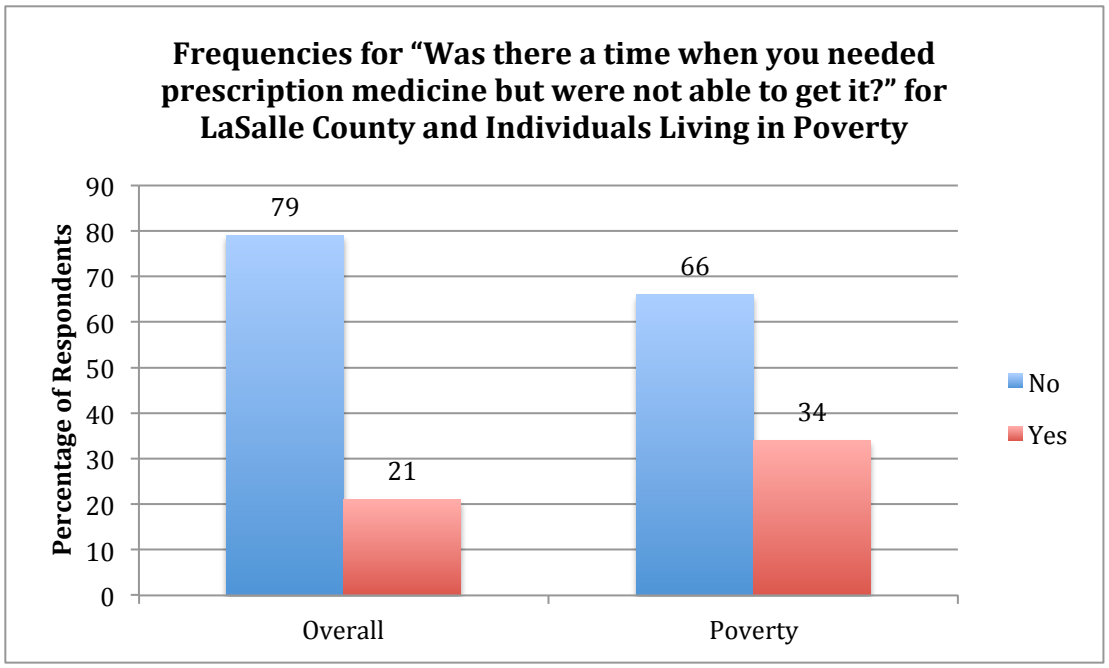


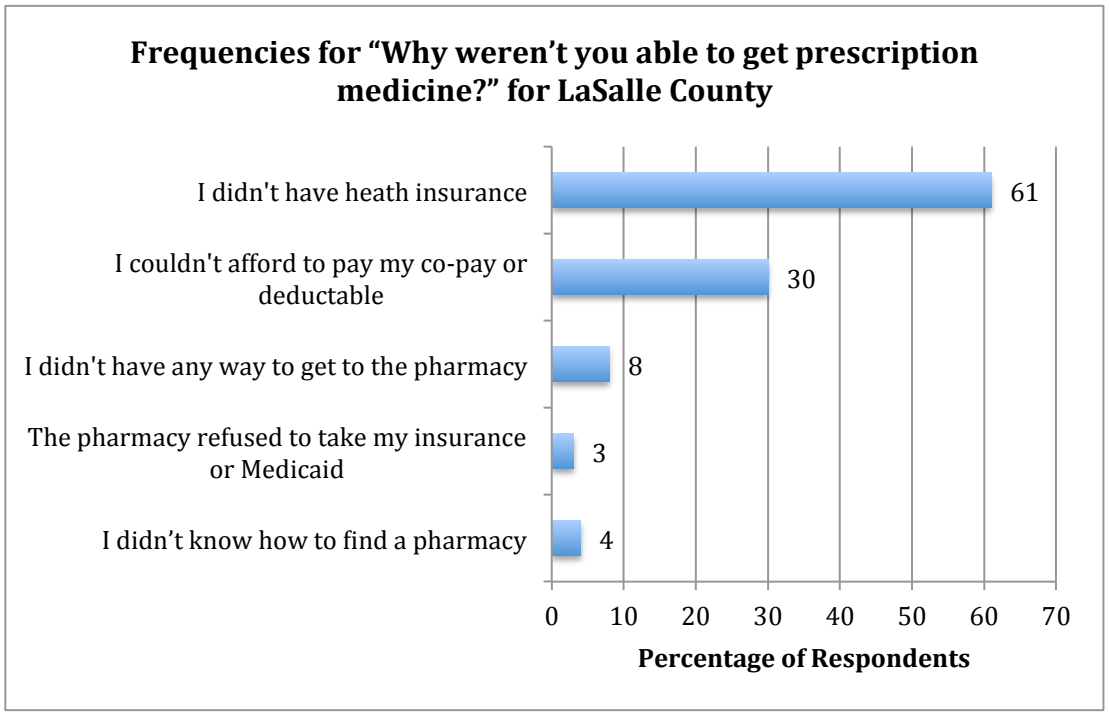
Table 8.4.2 Significant Correlations for "Was there a time in the last year when you needed prescription medication and were unable to get it?"

Race (Black)	+
Homeless	+

For relationships between needing prescription drugs and demographics, note that the relationships are reverse coded. Therefore a survey respondent was more likely to answer that they did not have access to prescription drugs if they were of Black ethnicity and were homeless.

The leading causes of why someone did not have access to prescription medicine were no insurance (61%) and the inability to afford copayments or deductibles (30%). This was followed by no way to get to the pharmacy (8%). Note that total percentages do not equal 100% as respondents could choose more than one answer.

Table 8.4.3 Frequencies for "Why weren't you able to get prescription medicine?" for LaSalle County



Note: n=161

Table 8.4.4 Significant Correlations for Reasons Why Individuals Were Not Able to Obtain Prescription Medication in the Past Year

	Education	Income
No Insurance	-	-
Can't afford copay/deductible		
I didn't know how to find a pharmacy		
Refused my insurance/Medicaid	+	
I didn't have any way to get to the pharmacy		

Note that "No Insurance" tends to be rated higher by people with the following characteristics: less educated, and lower income. Finally, individuals with higher incomes are more likely to rate "Refused my insurance/Medicaid" as reasons they were unable to obtain prescription drugs in the past year.

8.5 Access to Dental Care

Respondents were asked when was the last time that they had a dental checkup. Residents in LaSalle County indicated that 44% of residents have had a dental checkup in the last year. For those living in deep poverty, only 21% had a dental checkup in the last year.

Note that Ordinary-Least-Squared regression modeling indicates that age, Black ethnicity and non-White/non-Latino rated access to dental checkups lower, based on significance levels of *beta* coefficients.

Table 8.5.1 Frequencies for Time Since Last Dental Checkup for LaSalle County and Individuals Living in Poverty

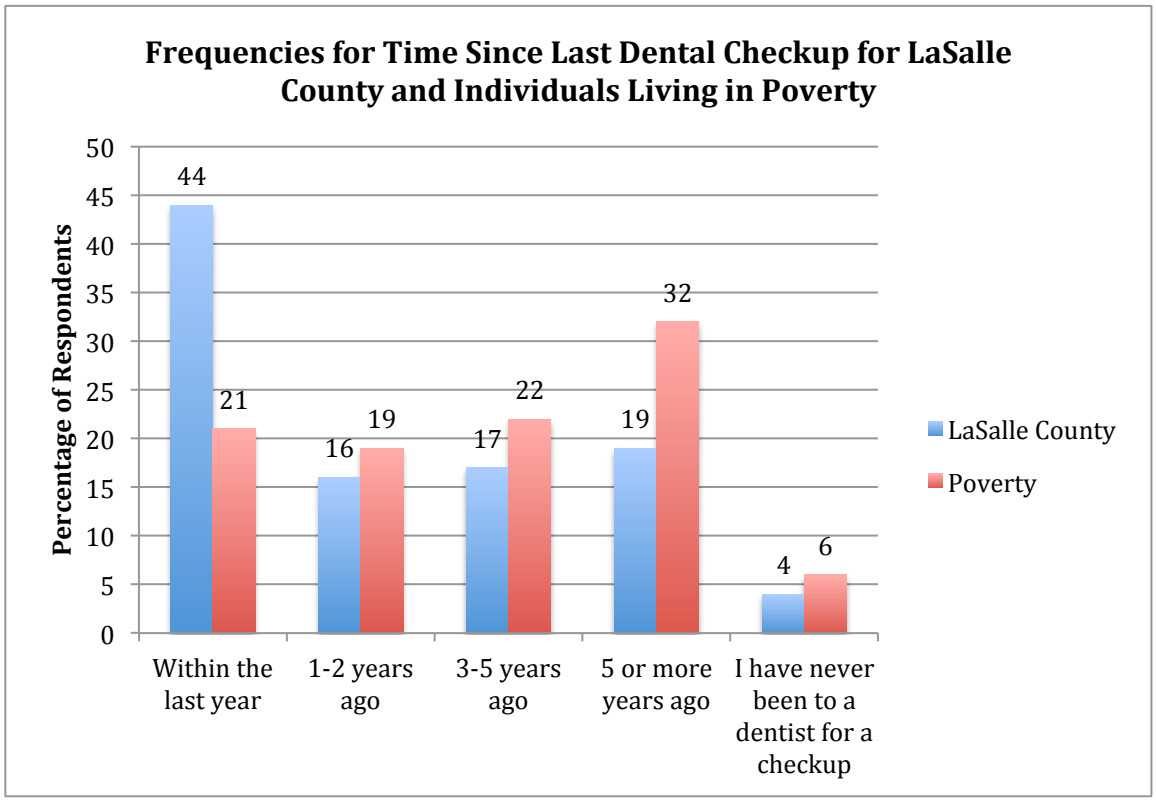


Table 8.5.2 Significant Correlations for Time Since Last Dental Checkup

Age	-
Race (White)	-
Race (Black)	+
Latino/a	-
Education	-
Homeless	+

For relationships between time since last dental checkup and demographic variables, note that the relationships are reverse coded. Therefore a survey respondent was more likely to answer that a longer time has passed since his or her last dental checkup if they were younger, they were of Black ethnicity, they possessed less education and were homeless.

Respondents were then asked, "Was there a time when you needed dental care but were not able to get it?" Note that for LaSalle County, only 27% respondents indicated that they were unable to obtain dental care when they needed it. Compared to the figures for people living in poverty, 46% indicated that they could not get access to dental care when necessary.

Logistic regression modeling indicated that lower income, younger age, lower education and non-White residents were more likely not to have access to dental care, based on significance levels of *beta* coefficients.

Table 8.5.3 Frequencies for "Was there a time when you needed dental care but were not able to get it?" for LaSalle County and Individuals Living in Poverty

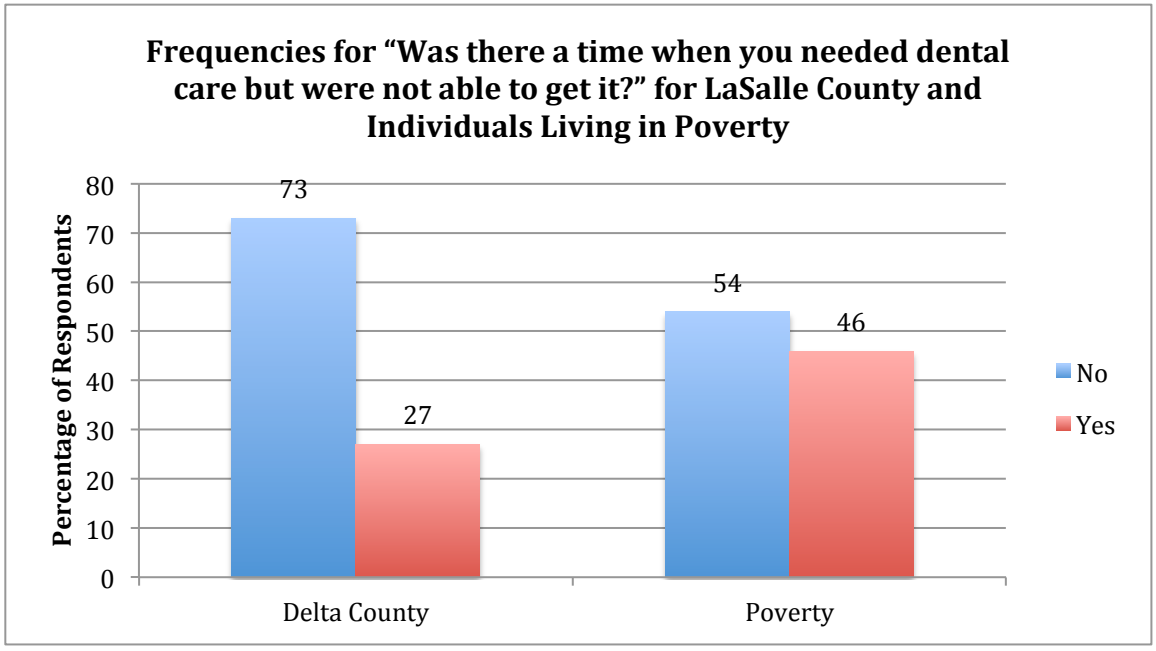


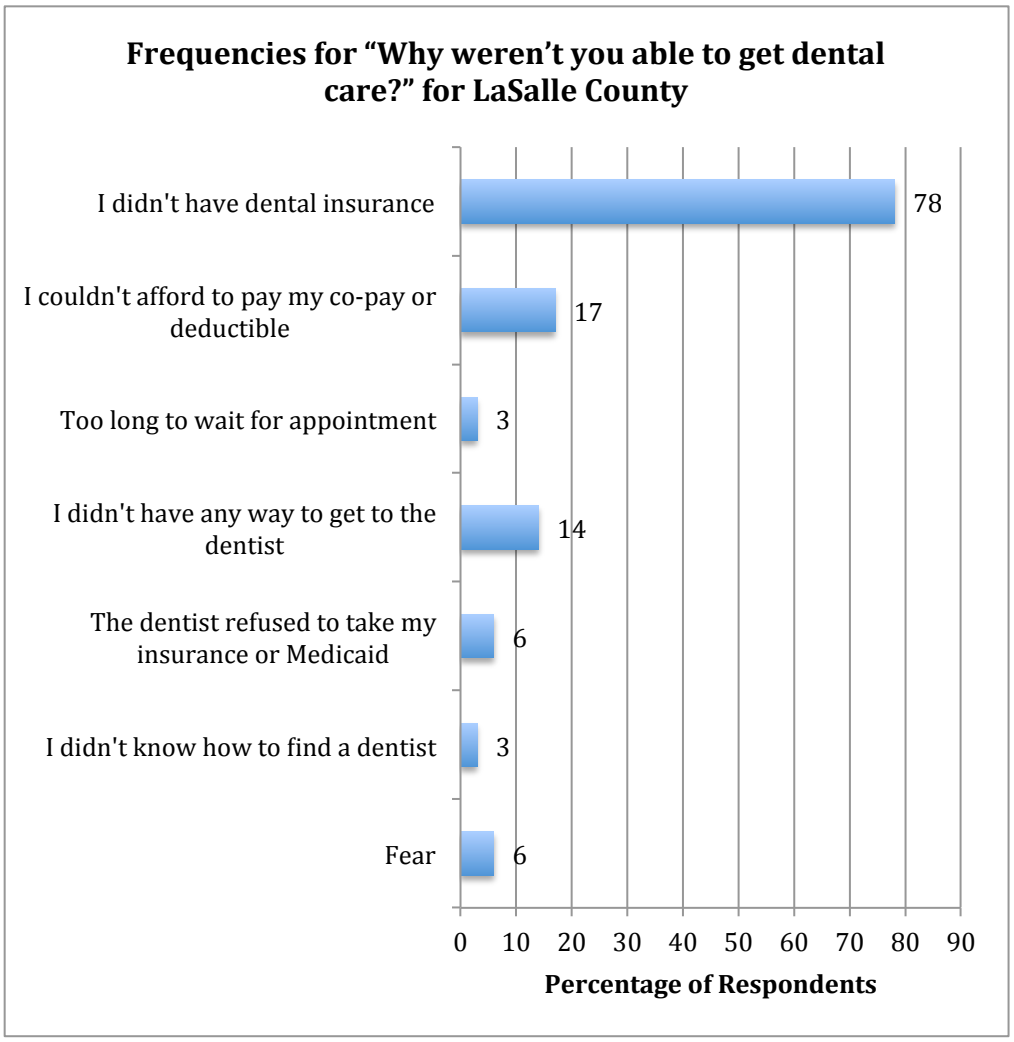
Table 8.5.4 Significant Correlations for "In the last year, was there a time when you needed dental care but could not get it?"

Age	-
Race (White)	-
Education	-
Income	-
Homeless	+

For relationships between needing dental care and demographic variables, note that the relationships are reverse coded. Therefore a survey respondent was more likely to answer that he or she needed dental care and were unable to receive it if they were younger, of non-White ethnicity, of lower income, homeless and possessed less education.

The leading causes of why someone did not have access to dental care were no insurance (78%) and the inability to afford copayments or deductibles (17%). While fear was a non-issue with access to medical care, 6% of respondents indicated they did not get access to dental care because they were uncomfortable going to the dentist. Note that total percentages do not equal 100% as respondents could choose more than one answer.

Table 8.5.5 Frequencies for "Why weren't you able to get dental care?" for LaSalle County



Note: n=161

Table 8.5.6 Significant Correlations for "Why weren't you able to get dental care?"

	Age	Race (White)	Race (Black)	Latino/a	Education
No Insurance		+	-		-
Can't afford copay/deductible	-				-
I didn't have any way to get to the dentist					-
Refused my insurance/Medicaid					
I didn't know how to find a dentist					
Too long to wait for appointment					
Fear				+	

Note several significant relationships between demographic variables and the reasons why individuals were not able to obtain dental care in the past year:

No Insurance tends to be rated higher by individuals of White ethnicity and lower education. Individuals of Black ethnicity tend to rate it lower.

Can't afford copay/deductible tends to be rated higher by younger individuals and by individuals with less education.

I didn't have any way to get to the dentist tends to be rated higher by people with less education.

Fear tends to be rated higher by individuals of Latino/a ethnicity.

8.6 Access to Counseling

Respondents were asked, "Was there a time when you needed counseling but were not able to get it?" 12% of respondents in LaSalle County agreed that when he or she needed counseling, he or she was unable to obtain it. The percentage for individuals living in poverty is nearly double (21%).

Logit regression results indicated that low income, younger people and homelessness were the most important predictors of no access to counseling, respectively.

Table 8.6.1 Frequencies for "Was there a time when you needed counseling but were not able to get it?" for LaSalle County and Individuals Living in Poverty

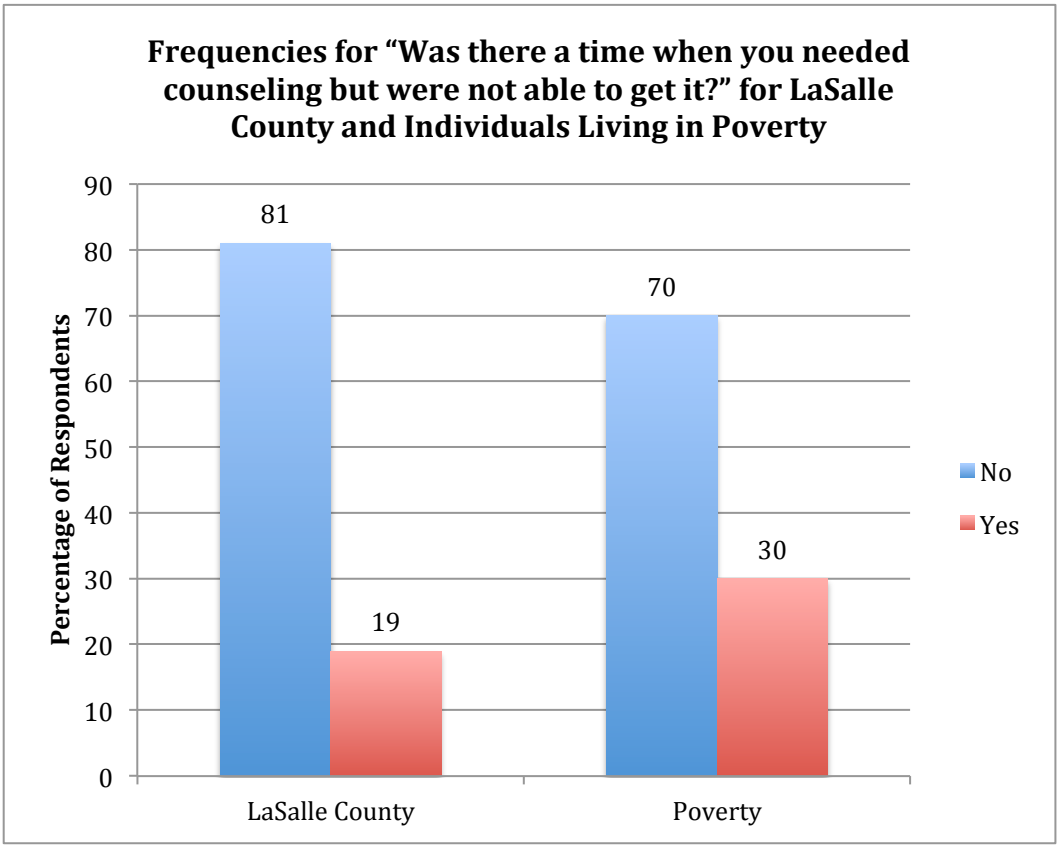


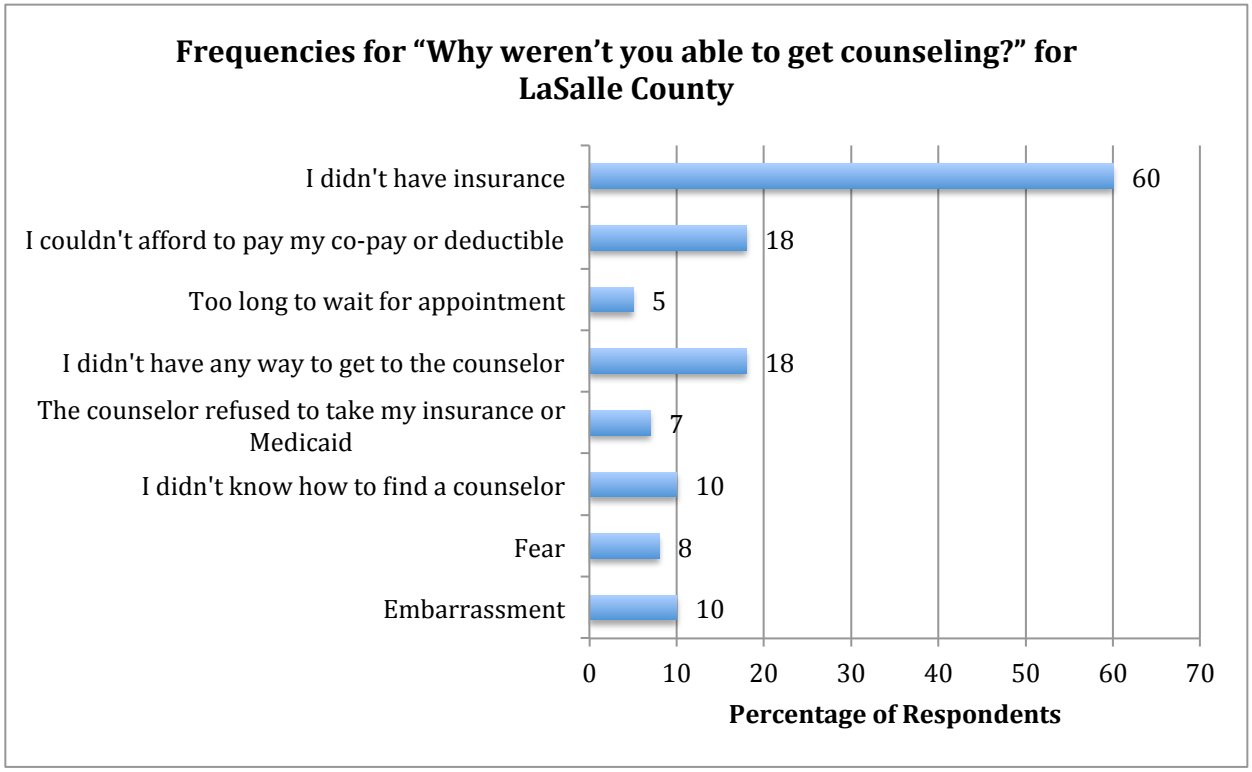
Table 8.6.2 Significant Correlations for "In the last year, was there a time when you needed counseling but could not get it?"

Age	-
Race (Black)	+
Education	-
Income	+
Homeless	+

For relationships between needing counseling and demographic variables, note that the relationships are reverse coded. Therefore a survey respondent was more likely to answer that he or she needed counseling and was unable to receive it if they were homeless, possessed less education, were of Black ethnicity, lower income, and were younger.

The leading causes of why someone did not have access to counseling were no insurance (54%) and the inability to afford copayments or deductibles (25%). Embarrassment was the third leading cause at 18%. Subsequent analyses revealed that members of the Homeless population were highly correlated to fear, embarrassment, refusal of insurance, and inability to pay one's deductible. Note that total percentages do not equal 100% as respondents could choose more than one answer.

Table 8.6.3 Frequencies for "Why weren't you able to get counseling?" for LaSalle County



Note: n=161

Table 8.6.4 Significant Correlations for Reasons Why Individuals Were Not Able to Obtain Counseling in the Past Year

	Race (White)	Race (Black)	Income
No Insurance	+	-	-
Can't afford copay/deductible			
I didn't have any way to get to the counselor		+	
Refused my insurance/Medicaid			
Too long to wait for appointment			
Fear			
Embarassment			

Note several significant relationships between demographic variables and the reasons why individuals were not able to obtain counseling in the past year:

No Insurance tends to be rated higher by individuals of White ethnicity and individuals with lower income. Individuals of Black ethnicity tend to rate it lower.

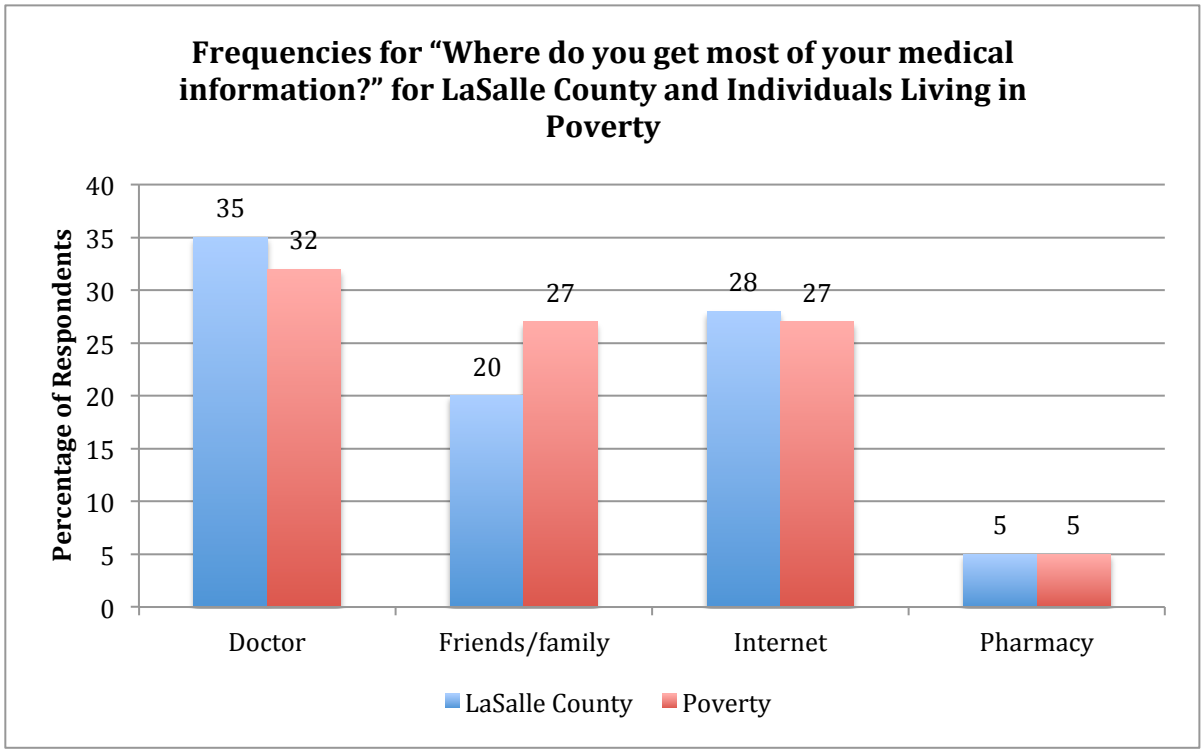
I didn't have any way to get to the counselor tends to be rated higher by individuals of Black ethnicity.

8.7 Access to Information

Respondents were asked, "Where do you get most of your medical information." The vast majority of respondents obtained information from their doctor. While the Internet was the second most common choice, it was significantly lower than information from doctors. Note that for individuals living in poverty, friends/family were as important the Internet.

There were no statistically significant relationships between access to information and demographic factors.

Table 8.7.1 Frequencies for "Where do you get most of your medical information?" for LaSalle County and Individuals Living in Poverty

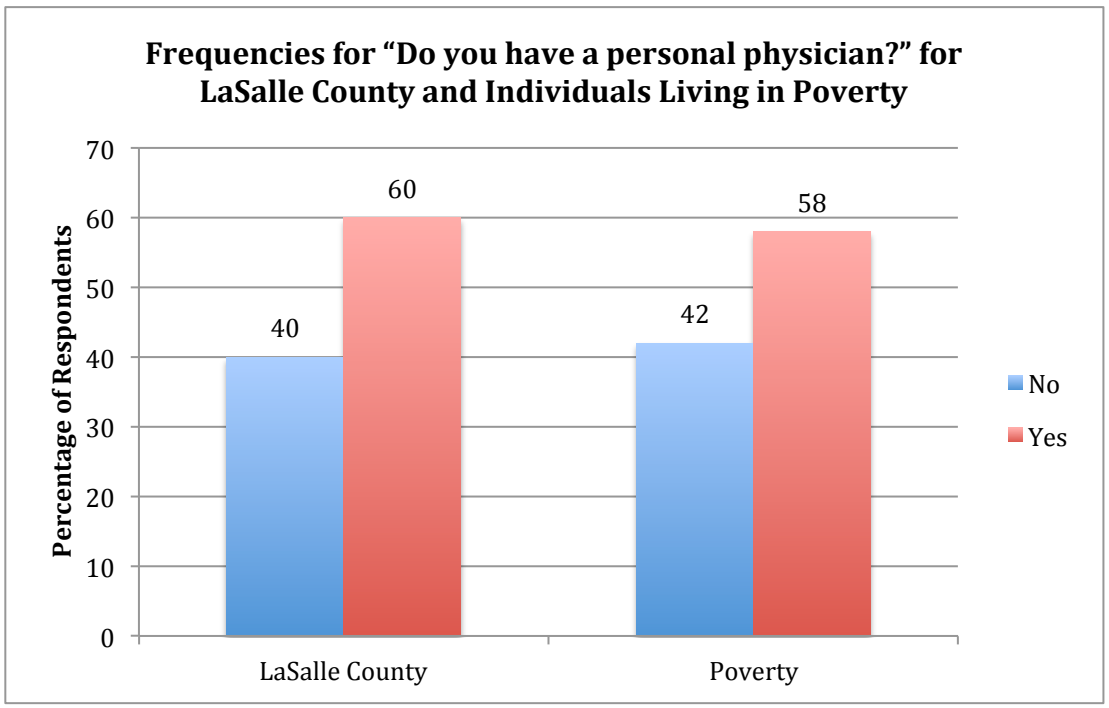


8.8 Personal physician

Respondents were asked if they had a personal physician. For LaSalle County, approximately 60% of respondents indicated that they had a personal physician.

Logit regression analyses reveal that people with higher incomes, women and older people positively impacted whether someone had a personal physician, and homelessness had a negative impact on whether someone had a personal physician.

Table 8.8.1 Frequencies for "Do you have a personal physician?" for LaSalle County and Individuals Living in Poverty



Numerous significant relationships exist between access to a personal physician and demographic variables. Specifically, a survey respondent was more likely to answer that he or she did not have a personal physician if they were homeless or were of Black ethnicity and was more likely to answer that he or she did have a personal physician if he or she was a woman, older, more educated, earn more income, and of White ethnicity.

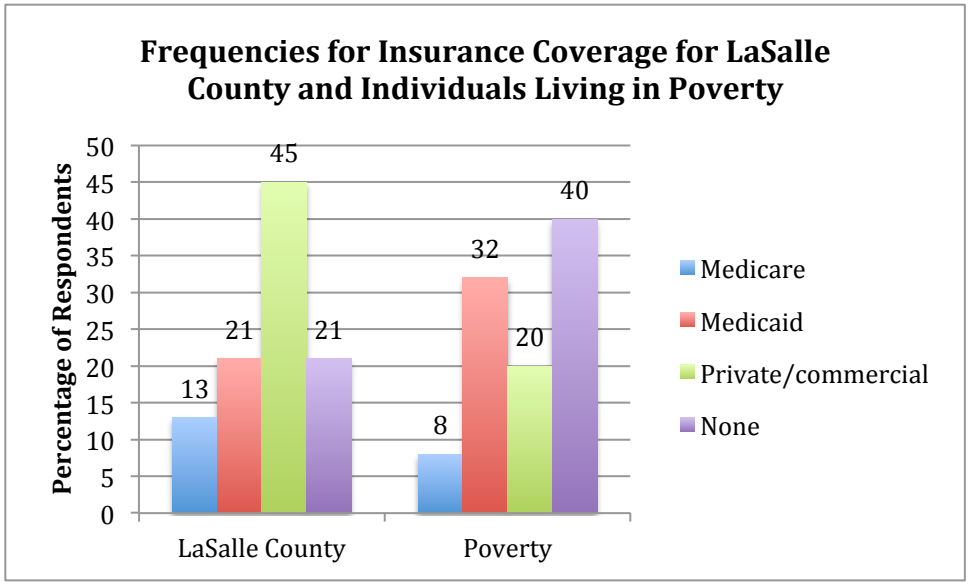
Table 8.8.2 Significant Correlations among Access to a Personal Physician and Demographic Variables

	Gender	Age	Race (White)	Race (Black)	Education	Income	Homeless
Do you have a personal physician?	+	+	+	-	+	+	-

8.9 Type of Insurance

Respondents were asked to identify the type of insurance that they had. In LaSalle County, the most prevalent type of insurance is private or commercial, however, those living in poverty are disproportionately more reliant on no insurance or Medicaid.

Table 8.9.1 Frequencies for Insurance Coverage for LaSalle County and Individuals Living in Poverty



Access to Health Care: Strategic Implications

Approximately 54% of people living in deep poverty seek medical services at a clinic or doctor's office. For this segment of the population, while 9% seek medical services from an emergency department, approximately 27% will not seek any medical services at all or "other" non-traditional sources of care. Those most likely to not seek any medical services when sick include younger individuals and individuals with lower incomes.

41% 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. According to regression results, this was more likely among individuals who were younger, less educated, possessed lower income, and were homeless. The leading causes were lack of insurance and inability to afford a copayment or deductible. Similar results were found for access to prescription medication. Regression results indicated that homeless individuals and individuals of Black ethnicity were less likely to have access to necessary prescription medication. Again the leading causes of the inability to have access to prescription medications were lack of insurance and inability to afford copayment or deductibles.

While significant research exists linking dental care to numerous diseases, including heart disease, 44% of LaSalle County residents had a checkup in the last year. Specifically, individuals who were younger, were of Black ethnicity, possessed less education and were homeless were less likely to visit a dentist. Moreover, note that almost half of people living in poverty (46%) indicated that they needed dental care in the last year, but were not able to get it. Lack of dental insurance and inability to afford copayments were the leading causes, however fear was significantly higher for seeing a dentist compared to seeing a doctor.

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, less education, and homelessness. While affordability and insurance were the leading reasons, embarrassment were also significant barriers to mental health services.

Across categories, residents of LaSalle County get most of their medical information from doctors and the next most prevalent is the Internet.

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

CHAPTER 9. HEALTHY BEHAVIORS

In this chapter, healthy behaviors of the community are presented. Specifically, frequency of physical exercise, healthy eating habits and smoking are examined. Additionally, overall self-perceptions of health are presented.

9.1 Physical Exercise

Respondents were asked how frequently they engage in physical exercise. The majority of the population across all categories does not engage in sufficient exercise. Note that these findings are more consistent with state averages when compared to data reported by the *Illinois Behavioral Risk Factor Surveillance System* data. For physical exercise, ordinary-least-square regression results show that younger people, Black ethnicity, homelessness and less educated people are less likely to engage in physical exercise, while homeless residents are not.

Numerous significant relationships exist between physical exercise and demographic variables. Specifically, a survey respondent was more likely to answer that he or she exercised regularly if they were younger, not of Black ethnicity, possessed higher income, were more educated, or were not homeless.

Table 9.1.1 Frequencies for "In the last week, how many times did you exercise?" for LaSalle County and Individuals Living in Poverty

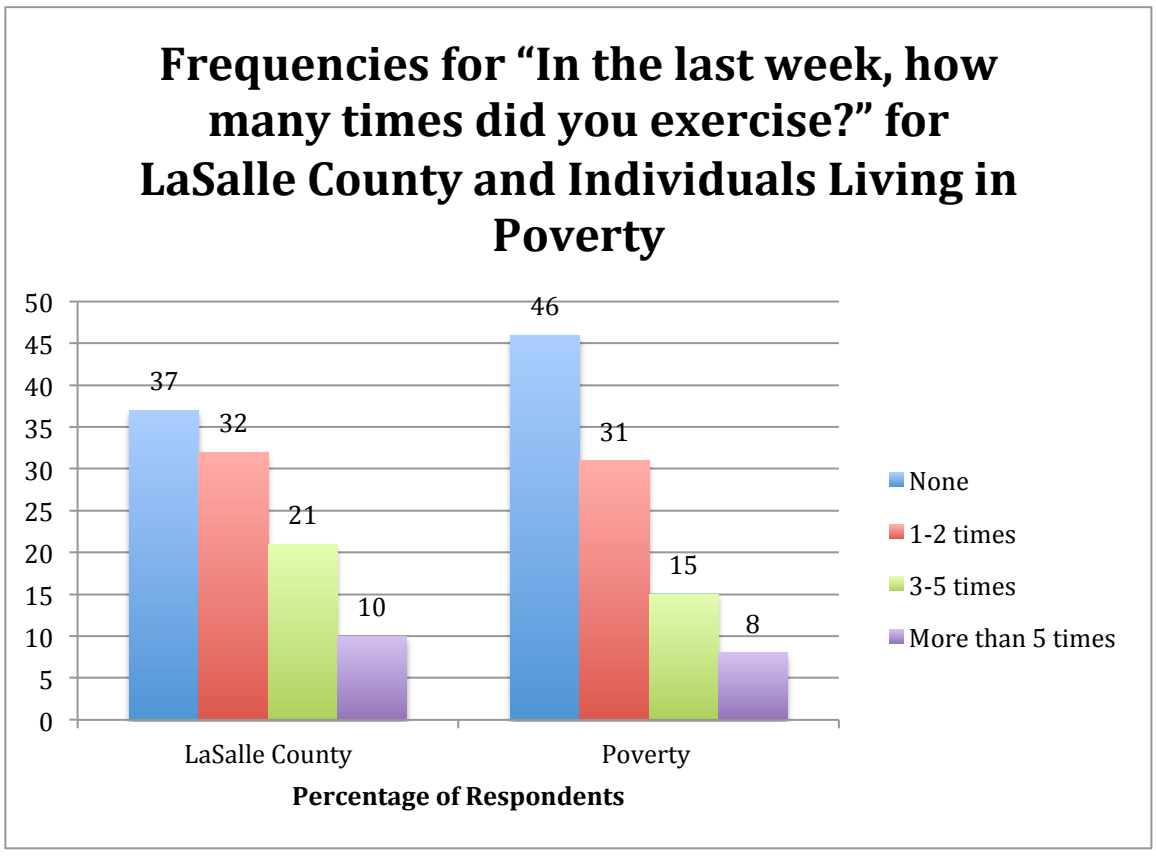


Table 9.1.2 Significant Correlations among "In the last week, how many times did you exercise?" and Demographic Variables

Age	-
Race (Black)	-
Education	-
Income	-
Homeless	-

9.2 Healthy Eating

For healthy eating habits, about 33% of the population consumes at least three servings of fruits/vegetables in a day. Moreover, only about 7% of the population consumes the minimal recommended daily amount of vegetables. These findings are consistent with the *Illinois Behavioral Risk Factor Surveillance System* data, suggesting approximately 9% of LaSalle County residents consume 5 or more servings of fruits and vegetables per day. Additional research by the CDC states that for a typical person consuming 2,200 calories per day, they should have 7 servings of vegetables.

Table 9.2.1 Frequencies for "On a typical day, how many servings of fruits and/or vegetables do you eat?" for LaSalle County and Individuals Living in Poverty

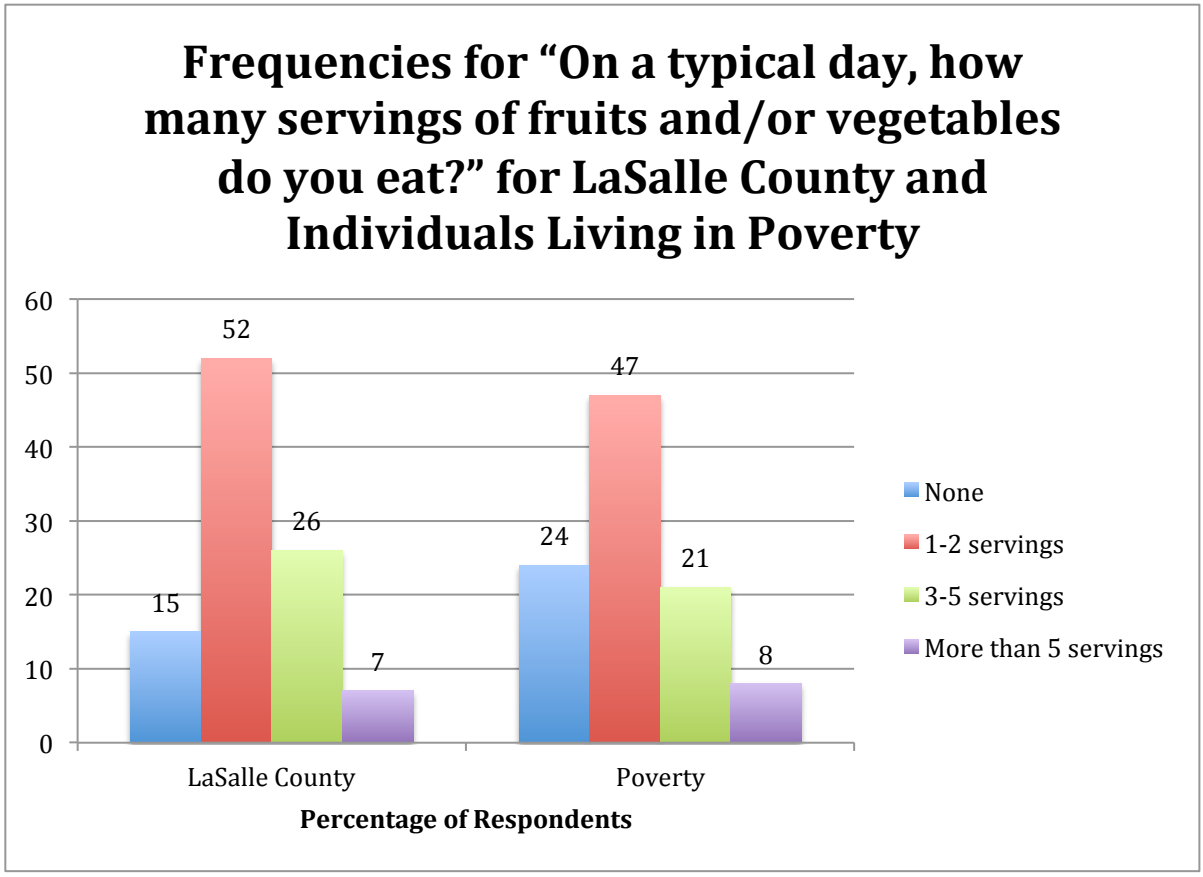


Table 9.2.2 Significant Correlations among Number of Servings of Fruits and Vegetables Consumed Daily and Demographic Variables

Education	+
Income	+
Homeless	-

Numerous significant relationships exist between consumption of fruits and vegetables and demographic variables. Specifically, a survey respondent was more likely to answer that he or she consumed more fruits and vegetables each day if they were had earned a higher income and had attained higher levels of education. Homeless individuals were less likely to consume more fruits and vegetables.

9.3 Smoking

Youth tobacco use in LaSalle County exceeds the State of Illinois averages, as seen in the secondary research presented earlier in this report. Primary data suggests that individuals living in poverty are significantly more likely to smoke. Note that when comparing these data to the *Illinois Behavioral Risk Factor Surveillance System* data, the CHNA survey assesses the frequency of smoking compared to whether a respondent smoked or did not smoke.

Table 9.3.1 Frequencies for "On a typical day, how many cigarettes do you smoke?" for LaSalle County and Individuals Living in Poverty

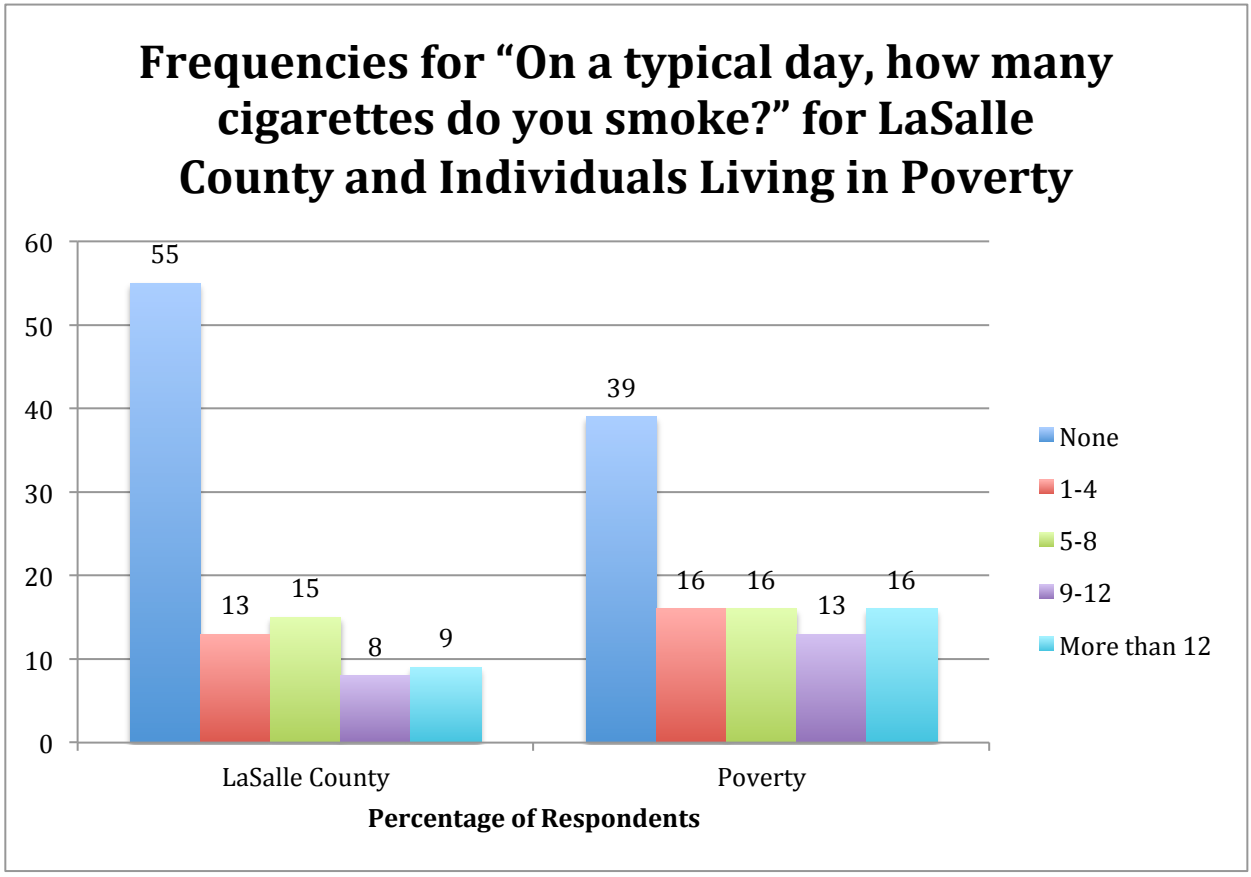


Table 9.3.2 Significant Correlations among Number of Cigarettes Smoked Daily and Demographic Variables

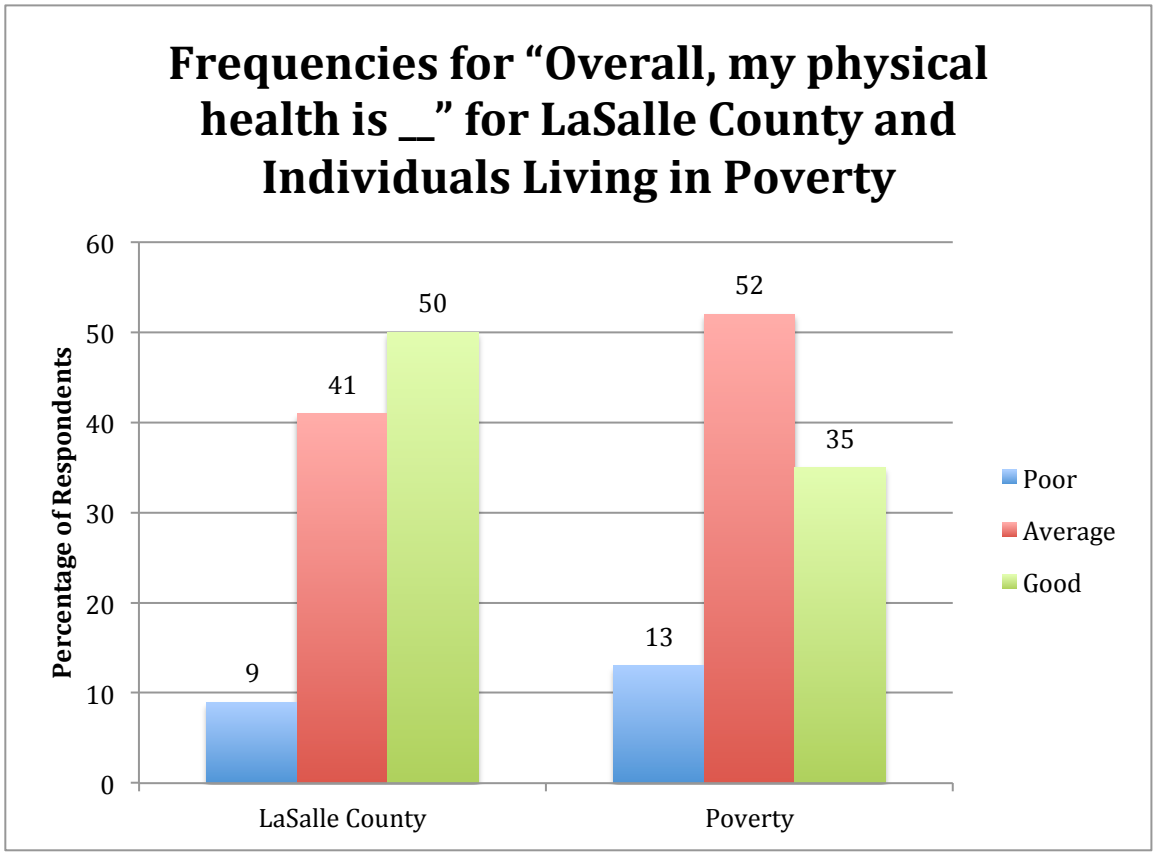
Age	-
Race (White)	-
Race (Black)	+
Latino/a	+
Education	-
Income	-
Homeless	+

Numerous significant relationships exist between cigarette smoking and demographic variables. Specifically, a survey respondent was more likely to answer that he or she smoked more cigarettes each day if they identified with Black ethnicity or Latino/a ethnicity, were younger, were homeless, were less educated, and earned less income. Individuals of White ethnicity were less likely to smoke.

9.4 Overall Health

In terms of self-perceptions of physical and mental health, 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.

Table 9.4.1 Frequencies for "Overall, my physical health is __" for LaSalle County and Individuals Living in Poverty

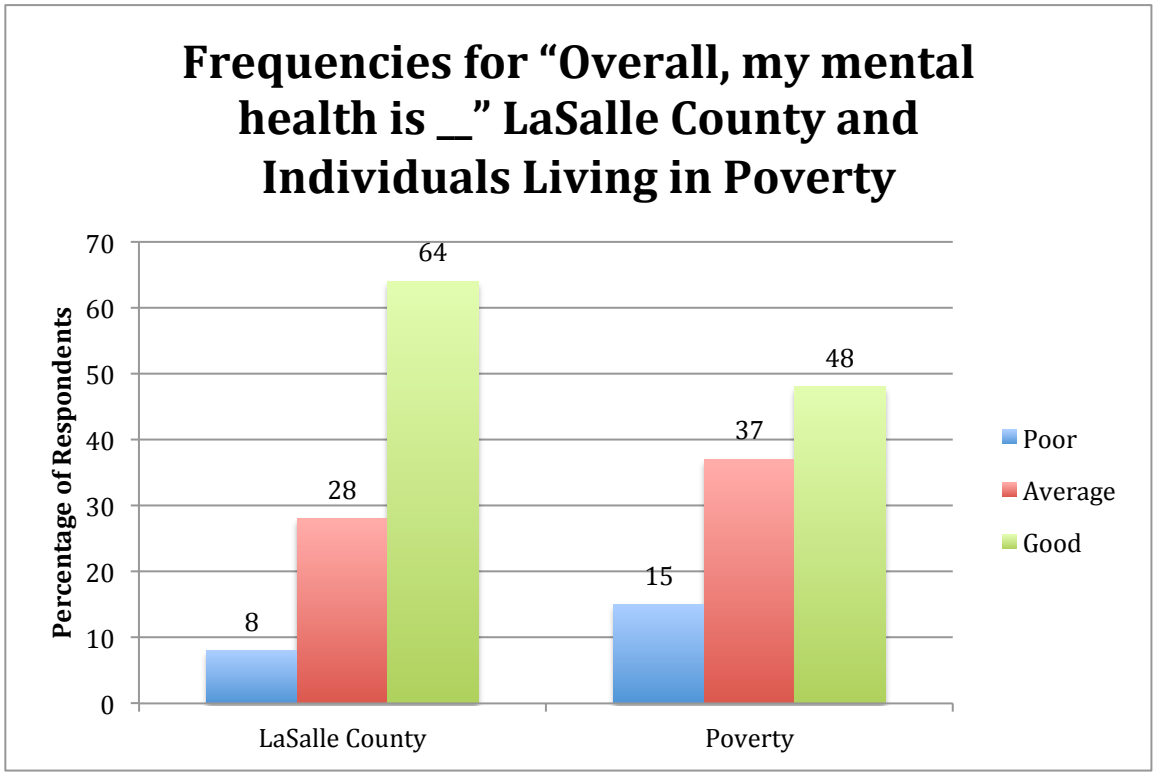


Numerous significant relationships exist between overall physical health and demographic variables. Specifically, a survey respondent was more likely to answer that he or she possessed better physical health if they earned a higher income and had attained higher levels of education. Conversely, a survey respondent was more likely to answer that he or she possessed poorer physical health if they were homeless.

Table 9.4.2 Significant Correlations among Overall Physical Health and Demographic Variables

Education	+
Income	+
Homeless	-

Table 9.4.3 Frequencies for "Overall, my mental health is __" LaSalle County and Individuals Living in Poverty



Numerous significant relationships exist between overall mental health and demographic variables. Specifically, a survey respondent was more likely to answer that he or she possessed better mental health if they earned a higher income and had attained higher levels of education. Conversely, a survey respondent was more likely to answer that he or she possessed poorer mental health if they were homeless.

Table 9.4.4 Significant Correlations among Overall Mental Health and Demographic Variables

Education	+
Income	+
Homeless	-

Healthy Behaviors: Strategic Implications

For healthy behaviors, LaSalle County residents who were older, of Black ethnicity, possessed higher income, were more educated, or were homeless are more likely to engage in physical exercise, although 31% of the population engages in exercise at least 3 times a week. Similarly for healthy eating habits, about 33% of the population consumes at least three servings of fruits/vegetables in a day. Those that are more likely to have healthy eating habits include people with higher educations and more income, and individuals who are not homeless. Given the documented research showing the benefits of physical exercise and healthy eating, this is a concern for the community, as most primary and secondary diagnoses in the LaSalle County community can be mitigated, to some extent, by healthy lifestyle.

Data suggests smoking is a concern in LaSalle County, with individuals identifying with Black ethnicity or Latino/a ethnicity, who were younger, were homeless, were less educated, and earning less income as being more likely to smoke.

In terms of self-perceptions of physical and mental health, 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.

PHASE III – PRIORITIZATION OF HEALTH-RELATED ISSUES

The identification and prioritization of the most important health-related issues in LaSalle County are identified in Phase III. To accomplish this, a summary of Phase I and Phase II were performed to provide a foundation for the prioritization process. 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 being addressed. Finally a collaborative team of leaders in the healthcare community used an importance/urgency methodology to identify the most critical issues in the area. Results are included in Chapter 10.

CHAPTER 10. PRIORITIZATION OF HEALTH-RELATED ISSUES

In this chapter, we identify the most critical health-related needs in the community. To accomplish this, first we identified the most important areas of concern. Next we completed a comprehensive inventory of community resources, and finally we identified the most important health concerns in the community.

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.

10.1 Summary of Community Health Issues

Based on findings from the previous analyses, a chapter-by-chapter summary of key takeaways was necessary to provide a foundation to identify the most important health-related issues in the community. Considerations for identifying key takeaways included prevalence of the issues, importance to the community, impact, trends and projected growth.

Demographics (Chapter 1) – Three factors were identified as the most important areas of concern from the demographic analyses: increasing elderly population, mental health rates and poverty.

Insurance (Chapter 2) – Lack of insurance contributes to decreased accessibility to health care, including both medical and dental insurance.

Symptoms and Predictors (Chapter 3) – Based on prevalence and growth rates, factors were identified as having significant impact on the community. These include, obesity, hypertension and risky behaviors, including drug and alcohol abuse and smoking.

Diseases/Morbidity (Chapter 4) – By evaluating magnitude of morbidities and growth rates of morbidities, several specific issues were identified. These included asthma, cardiovascular disease, diabetes (specifically Type II diabetes), hypertension and women's health.

Mortality (Chapter 5) – The two leading causes of mortality were heart disease and cancer. While there were other categories for mortality, heart disease and cancer were significantly more prevalent than all other categories.

Characteristics of Survey Respondents (Chapter 6) – Not applicable for this analysis.

Community Misperceptions (Chapter 7) – Based on results from the survey, respondents to the survey incorrectly perceived "heart disease" and "diabetes" "dental health" as being relatively unimportant health concerns in the community.

Access to Health Services (Chapter 8) – Results from survey respondents defined as living in deep poverty indicated that access to healthcare services is limited. This includes medical, prescription, dental and mental healthcare.

Health-Related Behaviors (Chapter 9) – Results from survey respondents defined as living in deep poverty indicated that there are limited efforts at proactively managing one's own health. This includes limited exercise, poor eating habits and increased incidence of smoking

Identification of Health-Related Community Issues.

In order to provide parsimony in the prioritization of key community health-related issues, results are aggregated into 12 key categories. Based on similarities and duplication, the 12 areas are:

- **Obesity**
- **Risky Behavior-Substance Abuse**
- **Mental Health**
- **Healthy Behavior**
- **Access to Health Services**
- **Respiratory Issues**
- **Heart Disease**
- **Cancer**
- **Diabetes**
- **Community Health Misperceptions**
- **Dental Issues**
- **Women's Health**

10.2 Community Resources

After summarizing issues in the Community Health Needs Assessment, a comprehensive analysis of existing community resources was performed to identify the efficacy to which these 12 health-related issues were being addressed.

There are numerous forms of resources in the community. They are categorized as recreational facilities, county health departments, community agencies and area hospitals/clinics.

10.2.1 Recreational Facilities (4)

Illinois Valley YMCA
Obesity, Healthy Behaviors, Heart Disease, Women's Health
The Illinois Valley YMCA is a community based service organization dedicated to building the mind, body and spirit for members of the Peru and Mendota area communities. By offering value-based programs emphasizing education, health and recreation for individuals regardless of sex, race or socio-economic status the YMCA is increasing the quality of life in the Illinois Valley Area.

Ottawa Parks and Recreation
Obesity, Healthy Behaviors, Heart Disease
The Ottawa Parks and Recreation district offers a variety of summertime programs for infants, toddlers, early childhood, youth, adults, and seniors.

Streator Family YMCA
Obesity, Healthy Behaviors, Heart Disease, Women's Health
The Streator Family YMCA provides a full range of aquatics and other fitness, child care, adult literacy, health and leisure, and community service programs.

YMCA of Ottawa
Obesity, Healthy Behaviors, Heart Disease, Women's Health
The YMCA of Ottawa offers high quality after school programs, swimming and gymnastics instruction, youth sports, teen programs, Day Camp and a variety of recreational experience for children and adults of all ages.

10.2.2 Health Departments (1)

LaSalle County Health Department
Obesity, Risky Behaviors, Mental Health, Healthy Behaviors, Access to Health Services, Community Health Misperceptions, Dental, Women's Health
The LaSalle County Health Department sponsors programs in the following areas: environmental health, personal health, and health education.

10.2.3 Community Agencies/Private Practices (8)

A Domestic Violence and Sexual Assault Service (ADV & SAS)
Healthy Behaviors
ADV & SAS assists individuals seeking to free themselves from violence through crisis intervention, supportive counseling, advocacy and prevention education.

American Cancer Society
Cancer
The American Cancer Society is dedicated to eliminating cancer as a major health problem by preventing cancer, saving lives, and diminishing suffering from cancer, through research, education, advocacy, and service.

Community Health Partnership of Illinois – Mendota
Access to Health Services, Dental
CHP is committed to improving the health and well-being of migrant and seasonal farmworkers. We support these communities by providing quality medical and dental care to workers and their families from a team of dedicated, bilingual-bicultural professionals, in an atmosphere that fosters a sense of belonging.

North Central Behavioral Health Systems
Risky Behaviors, Mental Health, Healthy Behaviors, Access to Health Services
North Central Behavioral Health Systems provides a comprehensive continuum of mental health and addiction services throughout Central and North Central Illinois. Services include, Emergency & Crisis Intervention, Information and Referral, Assessment & Evaluation, Mental Health Counseling/Therapy, Substance Use/Addictions Counseling, Psychiatric Evaluation, Medication Management, Clinical Consultation, Community Support Services, Permanent Supportive Housing Program, Psychosocial Rehabilitation, Community Integrated Living Arrangements (CILA), Health Promotion & Wellness through Prevention and Intervention and Community Outreach, Parent & Teacher Risk Prevention, Student Assistance Programs, Community & Industry Education & Training, Employee Assistance Programs (EAP), DUI Evaluation & Risk Education, and Mental Health First Aid Trainings (MHFA).

Ottawa Friendship House
Healthy Behaviors
Ottawa Friendship House improves the quality of life for people with disabilities through informed choice and empowerment, continued education, recreation, paid work training, living supports, community integration, and community employment.

Planned Parenthood
Women's Health
Planned Parenthood is a sexual and reproductive health care provider to improve women's health and prevent unintended pregnancies.

United Way of Eastern LaSalle County
United Way of Illinois Valley
Access to Health Services, Community Health Misperceptions
The United Way is a recognized leader in helping solve community problems by gathering and distributing, in an efficient and accountable manner, community resources that respond to priority health and human service needs.

Youth Services Bureau of Illinois Valley
Mental Health, Healthy Behaviors
YSB responds to the needs of children and youth through a variety of programs with the purpose of enhancing the quality of life for all children, youth and families.

10.2.4 Hospitals/Clinics (4)

Health Center of Eastern LaSalle County
Healthy Behavior, Access to Health Services, Respiratory Issues, Heart Disease, Diabetes
The Health Center of Eastern LaSalle County is a clinic run by volunteers and utilizing 13 primary care physicians from Ottawa who donate their time on a rotating basis. Medical services are provided to low-income residents of Eastern LaSalle County who do not have access to health insurance, do not qualify for state or federal programs and do not have the financial resources to secure the health care they need.

OSF Saint Elizabeth Medical Center
Obesity, Risky Behaviors, Mental Health, Healthy Behaviors, Access to Health Services, Respiratory Issues, Heart Disease, Cancer, Diabetes, Community Health Misperceptions, Women's Health
OSF Saint Elizabeth Medical Center, formally known as Ottawa Regional Hospital & Healthcare Center, is a 99-bed acute care facility. OSF Saint Elizabeth provides a full range of services, including inpatient and outpatient medical and surgical care, emergency care, pre-natal and post-partum care, physical therapy, behavioral health services, home health and hospice care. Specific centers of interest include the OSF Dieticians/"Conversations on Diabetes" (*Obesity, Diabetes*), OSF LifeFit (*Heart Disease, Obesity*), Community Health Seminars (*Community Health Misperceptions, Healthy Behaviors*), Women's Health Center (*Women's Health),* Saint Elizabeth Body Builders Program (*Women's Health*), Saint Elizabeth Community Relations (*Access to Health Services*), Behavioral Health CHOICES (*Mental Health*).

Ottawa Regional Medical Center
Obesity, Access to Health Services, Respiratory Issues, Heart Disease, Diabetes, Dental, Women's Health
A part of OSF HealthCare, the Ottawa Regional Medical Center operates two primary-care facilities and one walk-in facility in LaSalle County.

Fox River Cancer Center
Cancer
The Fox River Cancer Center is a collaboration between Radiation Oncology of Northern Illinois, Illinois CancerCare, and OSF Saint Elizabeth Medical Center. Services include oncology/hematology and radiation oncology.

Table 10.2 illustrates the relationships between the community resources and the 11 summary areas identified in section 10.1. Assessment of these relationships was performed to identify potential gaps in coverage as the collaborative team prioritized health-related issues in the community.

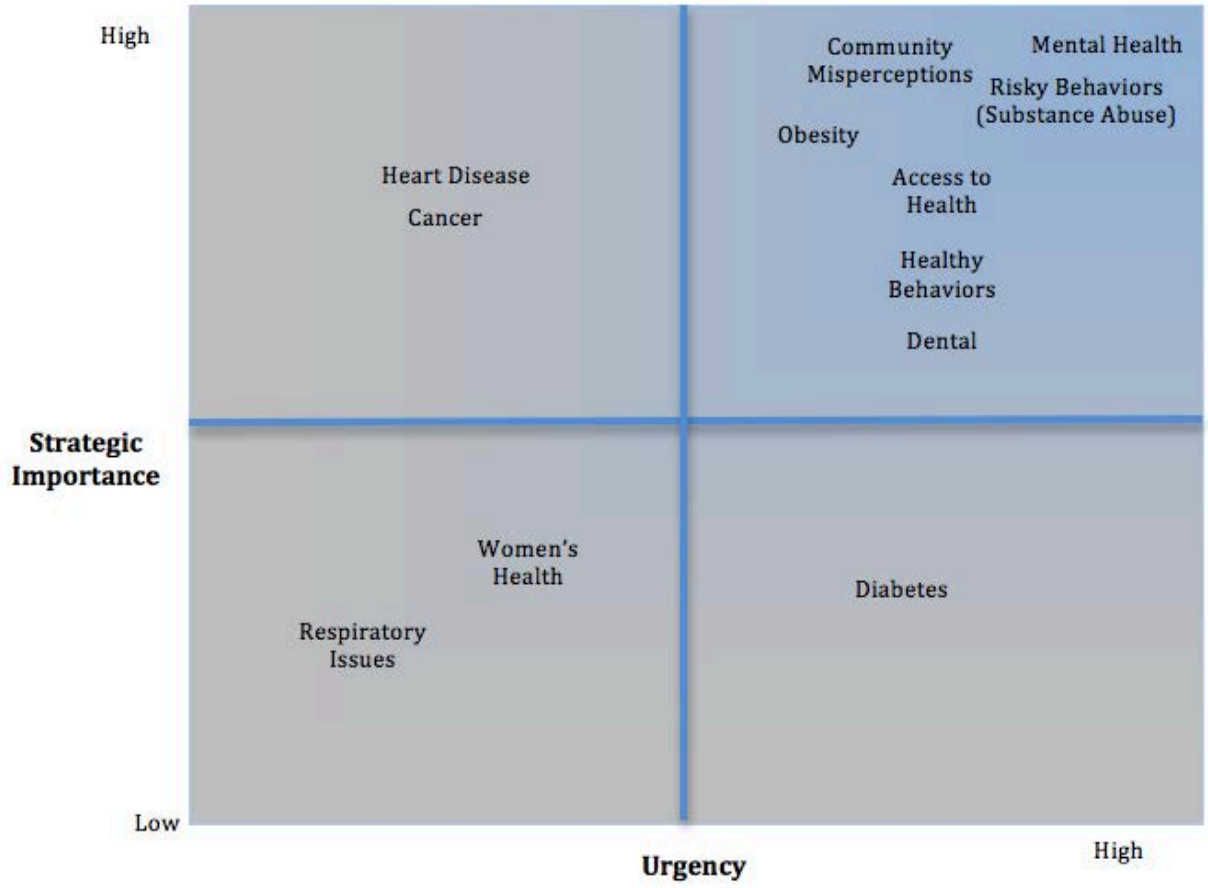
Table 10.2 Relationship between Community Resources and Community Needs

	Organization Name	Obesity	Risky Behaviors	Mental Health	Healthy Behaviors	Access to Health Services	Respiratory Issues	Heart Disease	Cancer	Diabetes	Community Health Misperceptions	Dental	Women's Health
Recreational Facilities (4)	Illinois Valley YMCA	X			X			X					X
	Ottawa Parks and Recreation	X			X			X					
	Streator Family YMCA	X			X			X					X
	YMCA of Ottawa	X			X			X					X
Health Departments (1)	LaSalle County Health Department	X	X	X	X	X					X	X	X
Community Agencies (8)	A Domestic Violence and Sexual Assault Service (ADV & SAS)				X								
	American Cancer Society								X				
	Community Health Partnership of Illinois – Mendota					X						X	
	North Central Behavioral Health Systems		X	X	X	X							
	Ottawa Friendship House					X							
	Planned Parenthood												X
	United Way					X					X		
	Youth Services Bureau of Illinois Valley			X	X								
Hospitals/Clinics (4)	Health Center of Eastern LaSalle County			X		X	X	X		X			
	OSF Saint Elizabeth Medical Center	X	X	X	X	X	X	X	X	X	X		X
	Ottawa Regional Medical Center	X				X	X	X		X		X	X
	Fox River Cancer Center								X				

10.3 Prioritization of Community Health-Related Issues

In order to prioritize the previously identified dimensions, the collaborative team considered health needs based on: (1) short-term urgency – issues that need immediate attention; and (2) long-term strategic importance – issues that will have the most significant impact on the future health of the community. Additional considerations included the magnitude of the issues (e.g., what percentage of the population was impacted by the issue), growth rate or projected trend of the issue, magnitude to the community, existing community resources, and the potential to make a significant impact to the community. Using these criteria, the collaborative team prioritized the previously identified health issues. Results can be seen in Figure 10.3.

Figure 10.3 Importance/Urgency Matrix for Community Health Needs



In conclusion, the collaborative identified the seven most critical health-related issues in the LaSalle County region as:

MENTAL HEALTH

Mental health issues grew by 38% for residents of LaSalle County between 2006 and 2009. In terms of absolute percentage increase, LaSalle County residents experienced an increase of 7%, where in 2006 18.3% of residents they felt mentally unhealthy on 1-7 days per month, compared to 2009 where 25.3% of residents felt mentally unhealthy on 1-7 days per month. For comparison, there was actually a slight decrease in the percentage of Illinois residents reporting they felt mentally unhealthy on 1-7 days per month between 2006 (24.9%) and 2009 (24.8%). Mental health was also rated the third most important health concerning the community for both the aggregate population as well as those living in poverty.

RISKY BEHAVIORS-SUBSTANCE ABUSE

In LaSalle County, 19.2% of respondents engage in binge drinking versus 17.5% in the State of Illinois. Both figures exceed the US national 90th percentile benchmark of 8%. Youth substance usage in LaSalle County exceeds the State of Illinois averages for both 8th graders (alcohol, tobacco, and marijuana usage) and 12th graders (alcohol and tobacco usage).
With regard to smoking, 45% of LaSalle County residents living in poverty smoke 5 or more cigarettes per day. Additionally, according to survey respondents, for both LaSalle County's aggregate population and those living in poverty, drug and alcohol abuse were perceived as the two most important unhealthy behaviors in the community.

HEALTHY BEHAVIORS

According to the BRFSS, 36.6% of LaSalle County residents report that their last routine checkup was more than 1 year ago. This figure is 17.4% higher than State of Illinois average (19.2%). There was a slight decrease in the percentage of LaSalle County residents reporting they had received a flu shot in the last 12 months between 2006 (32.3%) and 2009 (31.4%). For comparison, there was a 24% increase in the percentage of Illinois residents reporting they had received a flu shot in the last 12 months between 2006 (28.0%) and 2009 (34.6%). Results from survey respondents indicated that there are limited efforts at proactively managing one's own health. This includes limited exercise, as 69% of LaSalle County residents indicated they exercised 2 or less times per week. With regard to eating habits, 67% of LaSalle County residents consume less than 2 servings of fruits/vegetables per day. However, note that 91% of respondents believe they are average or above average in terms of physical health and 92% of respondents believe they are average or above average in terms of mental health.

COMMUNITY MISPERCEPTIONS

Based on results from the survey, respondents incorrectly perceived "diabetes," "heart disease," and "dental" as being relatively less important health concerns to the community. These results conflict with morbidity data that suggests diabetes rates in LaSalle County are higher than rates across the State of Illinois, mortality data that indicates heart disease is the leading cause of death in LaSalle County, and dental data illustrates LaSalle County residents have undergone annual dental checkups at a lower rate than rates for the State of Illinois. Moreover, for those respondents living in poverty, misperceptions of programs such as Medicaid and charity programs is evident given that respondents do not seek necessary medical care because they believe they cannot afford to pay. Finally, there are misperceptions with respondents' self perceptions of their own health, as 91% felt that they are either average or above average in terms of their overall health.

OBESITY/OVERWEIGHT

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 45% increase in the percentage of LaSalle County residents reporting they were overweight between 2006 (19.3%) and 2009 (28.0%). For comparison, there was a 9% increase 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 US in terms of obesity.

ACCESS TO HEALTH CARE SERVICES

Results from survey respondents living in poverty indicated that access to healthcare is limited. This includes medical, dental and mental healthcare. Poverty is a key factor, as 9% of people living in poverty in LaSalle County consider the Emergency Department their primary source of health care. Furthermore, 24% of people in poverty were unable to obtain medical care when they needed it in the past year. Results also suggest a strong correlation between ethnicity and one's ability to obtain medical care, as survey data suggest individuals who identify as Black and/or Latino/a are more likely to use the emergency department. With regard to prescription drugs, 34% of individuals living in poverty in LaSalle County were unable to fill a prescription in the past year because they lacked health care coverage. With regard to dental care, 46% of individuals living in poverty in LaSalle County needed dental care and were unable to obtain it last year and 30% of individuals living in poverty in LaSalle County needed counseling and were unable to obtain it in the last year. "Affordability" was cited as the leading impediment to various types of health care.

DENTAL

Research indicates that dental health can be related to numerous other morbidities, including heart disease. There was 25% growth in the percentage of LaSalle County residents reporting their last dental visit was more than 2 years ago between 2006 (17.4%) and 2009 (21.8%). For comparison, there was 15% growth in the percentage of Illinois residents reporting their last dental visit was more than 2 years ago or never between 2006 (17.2%) and 2009 (19.8%).

Note that while other factors, such as healthy behaviors, heart disease, women's health, diabetes, respiratory issues and cancer are all important attributes, in terms of importance and urgency, the collaborative team rated the other seven categories as more important. As a validity check, note that the findings from this study are similar with the health assessments completed by the County Health Department.

Appendix

COMMUNITY HEALTH-NEEDS ASSESSMENT SURVEY

INSTRUCTIONS
We want to know how you view our community, so we are inviting you to participate in a research study for community health-needs. Your opinions are important. This questionnaire will take approximately 10 minutes to complete. All of your individual responses are confidential. We will use results of the surveys to improve our understanding of health needs in the community.

Please read each question and mark the response that best represents your views of community needs.

I. HEALTH PROBLEMS IN THE COMMUNITY
Please identify the three **(3) most important health problems** in the community.

- ☐ Aging issues, such as Alzheimer's disease, hearing loss or arthritis
- ☐ Birth defects
- ☐ Cancer
- ☐ Chronic pain
- ☐ Dental health
- ☐ Diabetes
- ☐ Heart disease/heart attack
- ☐ HIV/AIDS
- ☐ Infant death
- ☐ Infectious/contagious diseases such as flu, pneumonia, food poisoning
- ☐ Injuries
- ☐ Kidney disease
- ☐ Lead poisoning
- ☐ Liver disease
- ☐ Lung disease (asthma)
- ☐ Mental health issues such as depression, anger, etc
- ☐ Obesity/overweight
- ☐ Sexually transmitted infections
- ☐ Stroke
- ☐ Teenage pregnancy
- ☐ Other _____

II. UNHEALTHY BEHAVIORS
Please identify the three **(3) most important unhealthy behaviors** in the community.

- ☐ Angry behavior/violence
- ☐ Alcohol abuse
- ☐ Child abuse
- ☐ Domestic violence
- ☐ Don't use seatbelts
- ☐ Drug abuse
- ☐ Elder abuse (physical, emotional, financial, sexual)
- ☐ Lack of exercise
- ☐ Not able to get a routine checkup
- ☐ Poor eating habits
- ☐ Reckless driving
- ☐ Smoking
- ☐ Suicide
- ☐ Multiple partners without a condom
- ☐ Other _____

III. ISSUES WITH QUALITY OF LIFE
Please identify the three **(3) most important factors that impact your quality of life** in the community.

- ☐ Access to health services
- ☐ Affordable housing
- ☐ Availability of child care
- ☐ Better school attendance
- ☐ Job opportunities
- ☐ Good public transportation
- ☐ Healthy food choices
- ☐ Less poverty
- ☐ Safer neighborhoods/schools
- ☐ Other _____

IV. Access to Health Care

The following questions ask about your own personal health and health choices. Remember, this survey will not be linked to you in any way.

1. When you get sick, where do you go? Please choose only one.

☐ Clinic/Doctor's office ☐ Health Department ☐ Urgent Care Center
☐ Emergency Department ☐ I don't seek medical attention ☐ Other _____

2. How long has it been since you have been to the doctor to get a checkup when you were well (not because you were already sick)?

☐ Within the last year ☐ 1-2 years ago ☐ 3-5 years ago
☐ 5 or more years ago ☐ I have never been to a doctor for a checkup.

3. In the last year, was there a time when you needed medical care but were not able to get it?

☐ No (please go to question 5) ☐ Yes (please go to the next question)

4. If you just answered "yes" to question 3, why weren't you able to get medical care? Choose all that apply.

☐ I didn't have health insurance.
☐ I couldn't afford to pay my co-pay or deductible.
☐ I didn't have any way to get to the doctor.
☐ Fear
☐ Other _____
☐ The doctor or clinic refused to take my insurance or Medicaid.
☐ I didn't know how to find a doctor.
☐ Too long to wait for appointment.

5. In the last year, was there a time when you needed prescription medicine but were not able to get it?

☐ No (please go to question 7) ☐ Yes (please go to the next question)

6. If you just answered "yes" to question 5, why weren't you able to get prescription medication? Choose all that apply.

☐ I didn't have health insurance.
☐ I couldn't afford to pay my co-pay or deductible.
☐ I didn't know how to find a pharmacy.
☐ The pharmacy refused to take my insurance or Medicaid.
☐ I didn't have any way to get to the pharmacy.
☐ Other _____

7. About how long has it been since you have been to the dentist to get a checkup (not for an emergency)?

☐ Within the last year ☐ 1-2 years ago ☐ 3-5 years ago
☐ 5 or more years ago ☐ I have never been to a dentist for a checkup.

8. In the last year, was there a time when you needed dental care but could not get it?

☐ No (please go to question 10) ☐ Yes (please go to the next question)

9. If you just answered "yes" to question 8, why weren't you able to get dental care? Choose all that apply.

☐ I didn't have dental insurance.
☐ I couldn't afford to pay my co-pay or deductible.
☐ I didn't have any way to get to the dentist.
☐ Fear.
☐ Other _____
☐ The dentist refused to take my insurance or Medicaid.
☐ I didn't know how to find a dentist.
☐ Too long to wait for appointment.

10. In the last year, was there a time when you needed counseling but could not get it?
☐No (please go to question 12) ☐ Yes (please go to the next question)

11. If you just answered "yes" to question 10, why weren't you able to get counseling? Choose all that apply.
☐ I didn't have insurance.
☐ I couldn't afford to pay my co-pay or deductible.
☐ I didn't have any way to get to a counselor.
☐ Fear.
☐ Embarrassment.
☐ The counselor refused to take my insurance or Medicaid.
☐ I didn't know how to find a counselor.
☐ Too long to wait for appointment.
☐ Other _____

12. In the last week how many times did you participate in deliberate exercise, (such as jogging, walking, golf, weight-lifting, fitness classes) that lasted for at least 30 minutes or more?
☐ None ☐ 1 - 2 ☐ 3 - 5 ☐ More than 5

13. If you answered "none" to the last question, why **didn't** you exercise in the past week? Choose all that apply.
☐ I don't have any time to exercise.
☐ It is not important to me.
☐ I don't have access to an exercise facility.
☐ I don't have child care while I exercise.
☐ Other _____
☐ I don't like to exercise.
☐ I can't afford the fees to exercise.
☐ I am too tired.
☐ I have a physical disability.

14. On a typical day, how many servings of fruits and/or vegetables do you have?
☐ None ☐ 1 - 2 ☐ 3 - 5 ☐ More than 5

15. On a typical day, how many cigarettes do you smoke?
☐ None ☐ 1 - 4 ☐5 - 8 ☐9 - 12 ☐ More than 12

16. Where do you get most of your medical information *(check **only one**)*
☐ Doctor ☐ Friends/family ☐ Internet ☐Pharmacy ☐ Other _____

17. Do you have a personal physician? ☐ No ☐ Yes

18. Overall, my physical health is: ☐ Good ☐ Average ☐ Poor

19. Overall, my mental health is: ☐ Good ☐ Average ☐ Poor

V. BACKGROUND INFORMATION

What county do you live in?
☐ LaSalle ☐ Other

What type of insurance do you have?
☐ Medicare ☐ Medicaid ☐ Private/commercial ☐ None

What is your gender? ☐ Male ☐ Female

Ottawa Regional Hospital & Healthcare Center Community Health-Needs Assessment

What is your age?
☐ Under 20 ☐ 21-30 ☐ 31-40 ☐ 41-50 ☐ 51-60 ☐ 61-70 ☐ 71 or older

What is your race?
☐ White ☐ Black/African American
☐ Hispanic/Latino ☐ Native American/American Indian/Alaska Native
☐ Asian (Indian, Pakistani, Japanese, Chinese, Korean, Vietnamese, Filipino/a)
☐ Pacific Islander (Native Hawaiian, Samoan, Guamanian/Chamorro)
☐ Other race not listed here: _____

What is your highest level of education?
☐ Less than high school ☐ Some high school ☐ High school degree (or GED/equivalent)
☐ Some college (no degree) ☐ Associate's or technical degree
☐ Bachelor's degree ☐ Graduate or professional degree
☐ Other: _____

What was your total income last year, before taxes?
☐ Less than $20,000 ☐ $20,001 to $40,000 ☐ $40,001 to $60,000
☐ $60,001 to $80,000 ☐ $80,001 to $100,000 ☐ over $100,000

Do you: ☐ Rent ☐ Own ☐ Other

How many people live in your home? _____

What is your job status?
☐ Full-time ☐ Part-time ☐ Unemployed ☐ Homemaker
☐ Retired ☐ Disabled ☐ Student ☐ Armed Forces

Is there anything else you would like to tell us about community concerns, health problems or services in the community?

_____

_____

_____

_____

Thank you very much for sharing your views with us!

This survey instrument was approved by the Committee on the Use of Human Subjects and Research (CUSHR), Bradley University Institutional Review Board (IRB) in May 2012.