Barnabas Health

CLARA MAASS MEDICAL CENTER
COMMUNITY HEALTH NEEDS ASSESSMENT
2013
ACKNOWLEDGEMENTS

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Barnabas Health

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Clara Maass Medical Center
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(1) The CHNA’s development consultants, New Solutions, Inc., have planned and conducted numerous community needs assessments and implementation plans with multiple organizations including individual hospitals, health systems, other health care and community organizations such as consortia comprised of a wide range of participant organizations. The NSI team, of which three are Ph.D. prepared, includes: planning consultants, market researchers, epidemiologists, computer programmers and data analysts. NSI has extensive regional and local community knowledge of health issues, community services and provider resources for the community reviewed by this assessment. This expertise, as well as the methodological and technical skills of the entire staff, was brought to bear in conducting this Needs Assessment and Health Improvement Plan.
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EXEClUFTV SUMMARY

Background

The Community Health Needs Assessment (CHNA) for the communities served by Clara Maass Medical Center (CMMC) was designed to ensure that the Medical Center continues to effectively and efficiently serve the health needs of the area. The CHNA was developed in accordance with all federal rules and statutes, specifically, PL 111-148 (the Affordable Care Act) which added Section 501(r) to the Internal Revenue Code. The Medical Center is a member of the Barnabas Health System (BH) which provided additional support and leadership in the development of the Plan. The Medical Center is also represented at the Board of the Greater Newark Health Care Coalition (GNHCC), which is made up of key stakeholders in the county (government, civic, community-based organizations, faith-based organizations and health care providers) who are focused on improving the health of community residents.

The GNHCC convened a meeting of its members and all of the public health officers in the county to review Essex County health indicator data and to identify the top issues facing the county. These recommendations were considered by CMMC and five were selected based on CMMC’s capacity, resources, competencies, and needs specific to the populations it serves.

The CHNA uses detailed secondary public health data at the county and community levels to identify health assets, gaps, disparities and trends. These data were supplemented by meetings and discussions with local health departments who shared data from their own needs assessments and by input from GNHCC Public Health Officers Symposium which provided additional insight and expertise and led to the identification of Plan priorities. The communities considered throughout this CHNA are pictured in page (i), and are primarily located within Essex County.

Essex County is the second most densely populated county in New Jersey. The county encompasses a land mass of 127 square miles and is made up of 22 urban and suburban municipalities.

Between 2000 and 2010, Essex County’s population decreased by 1.2%. This occurred predominantly in the urban areas of Irvington (-11.2%), Orange (-8.5%) and East Orange (-8.1%). The highest growth occurred in western suburban areas of Roseland (9.6%) and Livingston (7.7%).

Essex County’s 22 municipalities are widely diverse, encompassing large inner-city communities, such as Newark, Irvington, East Orange and Orange in the southeast, and suburban communities like Livingston, Essex Fells and Roseland to the west. The northeastern section of the county makes up most of CMMC’s primary service area, along with small sections of Hudson, Bergen and Passaic counties.

Service Area Map
Essex County’s economic wealth is not distributed uniformly across all residents, with large urban areas that include a large number of poor and minority populations.

The following is an example of the differences and disparities identified in this CHNA:

- In 2011, 11.7% of Essex County families had incomes below the poverty level. Two zip codes in CMMC’s service area (Newark 07107) and Newark (07104) had rates that were higher, 23.3% and 21.3%, respectively.
- In 2011, 10.8% of county residents were unemployed, which was higher than the State rate (9.3%). All of the urban areas of the county met or exceeded the county rate.
- In 2011, median household income in Essex County was $53,355 compared to $30,098 in Newark 07107, and $35,587 in Newark 07104.
- 16.5% of Essex County residents have limited English proficiency compared to nearly 25% of Newark’s population.
- CMMC’s Primary Service Area (PSA) is 39% Hispanic compared to 20% in Essex County and 18% in the State. The Secondary Service Area (SSA) is 37.8% African-American compared to 39.3% in the county and 12.8% statewide.

Disparities in Essex County and CMMC’s Primary Service Area (PSA) residents’ incidence and prevalence of illness identified by this CHNA include:

- Cancer is the second leading cause of death in the county. Age-adjusted rates vary by race, and rates among Blacks in Essex County were significantly higher than the rate for all county residents.
  - Black/Non-Hispanic = 235.2/100,000
  - Hispanic = 106.8/100,000
  - White = 167.8/100,000
- Septicemia is the fourth leading cause of death in Essex County. Age-adjusted rates vary by race and are significantly higher among Blacks than for all racial/ethnic groups.
  - Black, Non-Hispanic = 51.0/100,000
  - Hispanic = 23.7/100,000
  - White, Non-Hispanic = 19.4/100,000
- Diabetes is the fifth leading cause of death in Essex County. Rates among Black residents are significantly higher than for all county residents.
  - Black, Non-Hispanic = 42.1/100,000
  - Hispanic = 32.9/100,000
  - White, Non-Hispanic = 18.8/100,000
- Disparities are also present among maternal and child health indicators.
  - The percent of Black infant deaths is significantly higher than for all races, 13.4/100,000 compared to 8.5/100,000 overall.
  - Low and very low birth weight among African-Americans in Essex County remains significant higher than all other racial/ethnic groups.
    - The percentage of low birth weight babies born to White women is 8.6% compared to Hispanics 7.9%; and 14.7% for Black mothers.
    - The percentage of very low birth rate babies born to White women is 1.8% compared to Hispanics 1.4% and to Blacks 3.8%.
In 2010, the county’s teen birth rate was 30.0 per 1,000. However, three communities in CMMC’s PSA which have lower socioeconomic status or higher concentration of minorities exhibited rates that were higher.

- Newark 07104 = 59.0/1,000
- Newark 07107 = 37.0/1,000
- Harrison = 35.0/1,000

According to the 2010 BRFSS study, 3.4% of Essex County residents report they were told they had angina or Coronary Heart Disease. In a 2009 study, 8% of Newark residents reported angina or Coronary Heart Disease.

In the same 2010 study, 3.1% of Essex County residents report being told they had a heart attack. In 2009, 6% of Newark residents reported a heart attack.

In the 2010 study, 8.3% of Essex County residents reported asthma compared to 16% of Newark residents in 2009.

Areas within CMMC’s PSA had ED use rates that were higher than the county rate (408.9/1,000). These areas include Newark 07104, 637.0/1,000; and Newark 07104, 569.2/1,000.

Inpatient use rates in Newark 07104 (217.8/1,000) and Newark 07107 (201.1/1,000) were higher than the county-wide use rate (180.9/1,000).

Inpatient admissions and ED visits for mental health and substance abuse are higher than the State.

- Inpatient admissions for substance abuse and ED visits for mental health are higher than the county rates.

Healthy Community Indicators identify that:

- The homicide rate in Essex County (13.2/100,000) is nearly three times higher than the statewide rate (4.4/100,000).
- The violent crime rate in Essex County is more than twice the statewide rate, 674/100,000 compared to 309/100,000.
- Essex County has a higher annual number of unhealthy air quality days due to fine particulate matter and ozone than the State and a significantly higher number than the National Benchmark.
- Essex County and its major urban areas have a significantly larger amount of housing built before 1950 than exists statewide, 43.2% compared to 27.8%. Such housing presents a potential lead-based paint hazard.
- Essex County has higher percentage of fast food restaurants, 53%, and liquor stores, 25/100,000 than the State, 50%, and 20/100,000, respectively.
- Essex County residents report a statistically significantly higher number of physically unhealthy days per month, 3.3, and mentally unhealthy days, 3.6, than the National Benchmarks of 2.6 and 2.3, respectively.

**TOP FIVE HEALTH ISSUES**

Five health issues emerged as those most likely to benefit residents of the areas served by the Medical Center and to be within its purview, competency and resources to impact in a meaningful manner. These include:
1. **Access to Primary Care**

An individual’s ability to access health services has a profound impact on every aspect of their health. Yet, approximately 1 in 5 Americans (children and those under 65) do not have medical insurance. People without insurance are less likely to have a regular source of care, such as a primary care provider (PCP) and are more likely to skip routine medical care due to cost, increasing their risk of serious illness and disability.

Regular and reliable access to health services can:

- Prevent disease and disability.
- Detect and treat illnesses or other health conditions.
- Increase quality of life.
- Reduce the likelihood of premature death and increase life expectancy.

There are a number of factors which influence an individual’s access to primary care in addition to insurance coverage. These factors include services, timeliness, and workforce issues.

Improving healthcare services is predicated on the ability of people to have a usual and ongoing source of care. People with a usual source of care have better outcomes, fewer disparities, and lower costs. Improving services also includes access to evidence-based preventive services to prevent illness or detect disease at an earlier and more treatable stage.

Timeliness in healthcare relates to actual or perceived difficulties in obtaining care when one is ill or injured. Such measures include physician office and ED wait times and waits between diagnosis and treatment.

Workforce issues relate to the number of PCPs that are available to serve the needs of their communities. Over the last several decades there has been a decrease in the number of medical students interested in working in primary care in the U.S. Difficulties in accessing PCPs are expected to increase following full implementation of the Affordable Care Act, which is slated to increase insurance coverage to an additional 32 million Americans.

Access to primary care services impacts county and service area residents in the following ways:

- The number of years of potential life lost among Essex County residents is far higher than the County Health Ranking (CHR) Benchmark.
- Essex County has a lower rate of primary care physicians per 1,000 (99.7) than the CHR National Benchmark (158.55).
- A significantly higher percentage of Essex County residents lack healthcare coverage compared to the State.
- Essex County children use ED services for Ambulatory Care Sensitive Conditions (ACSC) at a significantly higher rate than children statewide, 104.0/1,000 compared to 78.2/1,000.
- The same can be said for adults. Those over 18 in Essex County had an ACSC ED visit rate of 75.4/1,000 compared to 51.2/1,000 statewide.
- Likewise, ED visits for adults for primary care conditions in Essex County were significantly higher than the State and have been rising since 2008.

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• The CMMC service area showed a need for 20 additional primary care physicians when calculated by traditional physician-to-population ratios.
• CMMC’s PSA adult rate of ED visits for ACSC (56.5/1,000) exceeded the statewide rate, 51.2/1,000. The same was true in the case of pediatric patient visits to the ED from the PSA.
• CMMC’s PSA had an inpatient admission rate for ACSC (23.6/1,000) that exceeded that of the State (22.6/1,000).

2. **Heart Disease**

Heart disease refers to a constellation of heart conditions including coronary artery disease, heart attack, cardiac arrest, congestive heart failure, and congenital heart diseases. Heart disease is the leading cause of death for both men and women, and most ethnicities. Approximately 1 in every 4 deaths in the U.S. is due to heart disease.²

Coronary heart disease is the most common type of heart disease killing more than 385,000 people annually.³ This condition alone costs the U.S. $108.9 billion annually for healthcare services, medications and lost productivity.

Some risk factors for heart disease such as age, family history of early heart disease, male gender or post-menopausal women, and race cannot be changed. Other risk factors are associated with lifestyle choices and can be changed.

Physical inactivity is a modifiable risk factor for heart disease and one that can impact other risk factors including obesity, high blood pressure, high triglycerides, low levels of HDL cholesterol, and diabetes. Regular physical activity can improve risk factor levels. High blood pressure usually has no symptoms and not only damages the heart, but the kidneys and brain as well. Overweight and obesity, or excess body fat, is often linked to LDL cholesterol and triglyceride levels, high blood pressure and diabetes. Diabetes increases the risk for heart disease. Nearly three-fourths of diabetics die from some form of heart vessel disease.

Excessive alcohol use leads to increased blood pressure, and increases the risk for heart disease. It also increases blood levels of triglycerides which contribute to atherosclerosis. Other lifestyle choices like cigarette smoking increase the risk of developing heart disease and heart attack by 2 to 4 times. Cigarette smoking promotes atherosclerosis, and increases the levels of blood clotting factors. Nicotine raises blood pressure and carbon monoxide reduces the amount of oxygen the blood can carry to the lungs. Second hand smoke can increase the risk of heart disease to non-smokers, as well.⁴

Dietary choices can also increase one’s risk for heart disease and obesity. Diets high in saturated fats and cholesterol raise blood cholesterol levels and promote atherosclerosis. High salt content in diets can raise blood pressure levels.

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The impact of heart disease on the populations served by CMMC as well as the incidence of lifestyle behaviors is seen in the following ways:

- The age-adjusted rate of heart disease per 100,000 population is nearly double the Healthy People 2020 target.
- In 2009, 8% of Newark residents reported angina or coronary heart disease compared to 3.9% statewide.
- In 2009, 6% of Newark residents reported having a heart attack compared to 3.8% statewide.
- The percentage of people reporting high cholesterol in Essex County is nearly three times higher than the Healthy People 2020 target.
- The percentage of smokers in Essex County is significantly higher than the CHR benchmark.
- Excessive drinking among Essex County residents (14%) ranks nearly double the CHR benchmark (8%).
- Congestive heart disease ranked #1 for all ACSC for which Essex County residents were hospitalized. The same was true in CMMC’s PSA.

3. **Obesity**

Between 1980 and 2000, obesity rates doubled among children and adults and tripled among adolescents. Obesity is a major risk factor for Type 2 Diabetes. This form of diabetes which was once believed to affect only adults is now being diagnosed in children. Overweight children with diabetes are at risk for serious complications of the disease which include kidney disease, blindness and amputations.

Overweight and obesity are associated with increased risks for many types of cancer, including cancer of the breast, colon, endometrial, esophagus, kidney, pancreas, gall bladder, thyroid, ovary, cervix and prostate, as well as multiple myeloma and Hodgkin’s lymphoma.

Although healthy lifestyle habits like healthy eating and physical activity can lower the risk of obesity and diabetes, too few adults or children eat the recommended five or more servings of fruits or vegetables a day or get the recommended amount of physical activity to provide health benefits.

Healthy lifestyle activities are influenced by a number of sectors of society – families, communities, schools, medical providers, faith-based organizations, the media, food and beverage industries, and entertain industries. Schools play a particularly critical role by offering safe environments for physical activities and policies that support healthy lifestyle choices. The following points highlight how the issues of disease incidence and risk factors play out in communities served by CMMC.

- The percentage of Essex County residents reporting diabetes is on the increase rising from 7.8% to 10.2% between 2006 and 2010.
- Obesity in Essex County rose from 24.2% in 2006 to 27.3% in 2010.
- The percentage of people engaging in regular physical activities declined from 46% in 2005 to 43.1% in 2009, and is significantly lower than the Healthy People 2020 target.
- The percentage of Essex County residents participating in any physical activity in the last month (72%) was lower than the CHR Benchmark (79%).

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• In CMMC’s PSA, diabetes ranked as the second highest ACSC for which patients were hospitalized.

4. **Cancer**

Cancer is the second leading cause of death in the U.S. Cancer is a class of diseases characterized by out of control abnormal cell growth. There are over 100 different types of cancers. Cancer cells can spread to other parts of the body through the blood and lymph systems.

Cells can experience abnormal growth if there are damages to DNA, and, therefore, damage to the genes involved in cell division. Cancer can result from a genetic predisposition that is inherited from family members. Thus, it is possible to be born with a gene mutation which can make one more likely to develop cancer.

As people age there is an increase in the number of possible cancer causing mutations that can occur in our DNA. This makes age a primary risk factor for cancer. Several viruses such as HPV, Hepatitis B and C, Epstein-Barr and HIV, and anything that weakens the immune system’s ability to fight infections are also risk factors. Other factors known as carcinogens are substances that are responsible for damaging DNA, promoting and aiding cancer. Tobacco, asbestos, radiation (gamma and x-rays), the sun, and car exhaust fumes are well known carcinogens.

There are a number of things that individuals can do to reduce their risk of getting cancer including eating a healthy diet and keeping to a healthy weight, avoiding tobacco, limiting alcohol consumption, and protecting one’s skin from the sun.

In addition, the number of new cancers can be reduced and cancer deaths prevented by following recommended screening procedures. For example, cervical and colorectal cancers can be avoided by finding precancerous lesions, so they can be treated before they become cancerous. Screening for cervical, breast and colorectal cancers also help detect these cancers at an early and treatable stage.

Cancer statistics and screening rates for Essex County are noted below.

- The age-adjusted mortality rate due to cancer (183.61/100,000) decreased by more than 7.9 points from 2004 to 2008 but remains significantly higher than the Healthy People 2020 target of 160.6/100,000.
- Cancer incidence rates for breast and melanoma were better than the rates statewide.
- The percent of women having a pap test in the last three years (81.3%) was lower than the Healthy People 2020 target of 93.0%.
- The percentage of adults 50+ reporting a sigmoidoscopy or colonoscopy increased between 2004 and 2010.

5. **Asthma**

Asthma is characterized by inflammation of the air passages resulting in a temporary narrowing of the airways that get air from the nose and mouth to the lungs. Asthma symptoms can be caused by exposure to allergens and irritants that are inhaled into the lungs resulting in inflamed or constricted airways. Symptoms include wheezing, coughing, and tightness in the chest. Triggers that can initiate an asthma attack include allergens such as pollen, dust, animal dander, drugs, and food additives, as well as
viral respiratory infections and physical exertion. Obesity, use of acetaminophen and exposure to formaldehyde or other volatile chemicals can also trigger attacks.

While there is no cure for asthma, it can be managed with proper prevention and treatment. Asthma has a genetic component. Nearly 25 million Americans suffer from asthma. The prevalence of the disease has been on the rise since the 1980s across all age, sex and racial groups. Asthma affects children disproportionately.

Ethnic differences in asthma prevalence, morbidity and mortality are highly correlated with poverty, urban air quality, lack of patient education, and inadequate medical care.7

Asthma accounts for one-fourth of all ED visits in the U.S., 10 million outpatient visits and nearly 500,000 hospitalizations. Direct costs of care for the disease account for nearly $10 billion in expenditures. Another $8 billion is a result of indirect cost due to lost earnings due to death and disability.8

The impact of asthma on residents of the county can be seen in the following:

- 8.3% of Essex County residents reported asthma in 2010, up slightly from 2004 (8.2%). Residents of Newark, the county’s largest city, reported an asthma prevalence rate of 16%.
- Asthma had the second highest rate of ED visits for ACSC among children and adults in the county and PSA.
- The ED (ACSC) visit rate among adults for asthma was significantly higher in Essex County (10.3/1,000) than the State (4.9/1,000).
- In terms of admissions for ACSC, asthma ranked third in Essex County, and fourth in the PSA.
- The number of unhealthy air quality days due to both fine particulate matter and ozone were significantly higher than the CHR benchmark.

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8 Ibid.
1. **INTRODUCTION**

Clara Maass Medical Center (CMMC), located in Belleville, New Jersey, is one of seven acute care hospitals operating in Essex County. CMMC’s primary service area comprises largely urban/suburban communities located in southeastern Essex County. Older urban and suburban Essex County towns make up a large part of CMMC’s secondary service area, as well.

CMMC is represented at the Board of the Greater Newark Health Care Coalition (GNHCC), which is made up of key stakeholders in the county (government, civic, community-based organizations, faith-based organizations, and healthcare providers) who are focused on improving the health of community residents. Ongoing relationships with community stakeholders and the GNACC provided valuable input to this Community Health Needs Assessment (CHNA) from a wide range of organizations including representatives from the public health sector.

*Healthy People 2020* is a 10-year agenda to improve the nation’s health that encompasses the entire continuum of prevention and care. For over three decades *Healthy People* has established benchmarks and monitored progress over time to measure the impact of prevention activities. *Healthy People 2020* benchmarks are used throughout the report to assess the health status of residents.

The County Health rankings published by the University of Wisconsin Population Health Institute and the Robert Wood Johnson Foundation rank the health of nearly all counties in the United States. The rankings look at a variety of measures that affect health such as high school graduation rates, air pollution levels, income, rates of obesity and smoking, etc. These rankings are also used throughout the report to measure the overall health of Essex County residents. County rates are also compared to statewide rates. Statistical significance is calculated for values higher, lower or the same as the State or national benchmarks.

In June 2011, the National Prevention Council, created through the Affordable Care Act (ACA) in 2010, and tasked with the development of a National Prevention Strategy to realize the law’s efforts to reduce costs, improve quality of care, and provide coverage options for the uninsured, published its strategy. The Council’s overarching goal is to increase the number of Americans who are healthy at every stage of life. To achieve this goal, the strategy identifies four Strategic Directives and seven targeted Priorities. The Strategic Directions are core recommendations for developing a prevention-oriented society. The Strategic Directions are:

- **Healthy and Safe Community Environments**: Create, sustain, and recognize communities that promote health and wellness through prevention.
- **Clinical and Community Prevention Services**: Ensure that prevention-focused healthcare and community prevention efforts are available, integrated, and mutually reinforcing.
- **Empowered People**: Support people in making healthy choices.
- **Elimination of Health Disparities**: Eliminate disparities, improving the quality of life for all Americans.
With this framework, the Priorities provide directives that are most likely to reduce the burden of the leading causes of preventable death and major illness. The seven Priorities are:

- Tobacco Free Living
- Preventing Drug Abuse and Excessive Alcohol Use
- Healthy Eating
- Active Living
- Injury and Violence Free Living
- Reproductive and Sexual Health
- Mental and Emotional Well-Being

The CMMC needs assessment was undertaken in this context and developed for the purpose of enhancing the health and quality of life throughout the community.
2. **METHODOLOGY**

Data sources for the CHNA included secondary data and qualitative input derived from meetings/discussions with the public health community of Essex County and community providers and service agencies. This allowed the Medical Center to identify and prioritize the top issues facing residents in the service area.

**Secondary Data Source**

Over 30 secondary data sources were used in this Community Health Needs Assessment (CHNA). These included the United States Census Bureau, Centers for Disease Control and Prevention (CDC), New Jersey Department of Health (NJDOH), Behavioral Risk Factor Surveillance System (BRFSS), and the County Health Rankings mentioned above. See Appendix A.

**Meetings with County/Local Health Departments and Public Health Symposium**

Barnabas Health met with a number of local health departments within Essex County at the beginning of the CHNA process and with the Greater Newark Health Care Coalition to advise them of the pending assessment and to request their input.

The Greater Newark Health Care Coalition agreed to convene a Public Health Officer’s Symposium to review the collected data for Essex County and provide comments and assist in the prioritization of health issues and needs. Key community stakeholders, providers and community service organizations were also invited.

**Prioritizing Needs**

Prior to the meeting, health officers were asked to submit a list of major health issues and concerns. This list was supplemented with issues that were developed from the health indicator analysis and discussion. Attendees were asked to rank the health issues on a scale of 1-5 based on significance (with 1 being low significance and 5 being highest significance). Attendees were provided a ballot and asked to rank each issue. Voting on the priorities resulted in the following top 10 issues being identified.

1. Mental Health
2. Diabetes
3. Lack of Primary Care Access
4. Heart Disease
5. Overweight/Obesity
6. Health Care Access/Inadequate Health Insurance
7. Cancer
8. Hypertension
9. Lack of Exercise
10. Substance Abuse (tied with #9)
These priorities were further reviewed with additional qualitative information gathered from an in-depth look at hospital utilization data, a previously completed physician needs assessment, and sociodemographic data specific to the Medical Center’s service area. The assembled information was then presented to Medical Center representatives who entered into a process of establishing priorities for the Implementation Plan. The top 5 priorities selected included access to primary care, heart disease, obesity, cancer and asthma. It should be noted that votes were also tallied by affiliation and that asthma/bronchitis was ranked sixth by the balloting of the Public Health Officers. See Appendix C.

**Service Area Definition**

Clara Maass Medical Center is located in Belleville, New Jersey. It is one of seven hospitals serving residents in Essex County. The Medical Center’s primary service area (PSA) consists of the following zip codes:

<table>
<thead>
<tr>
<th>ZIP Code</th>
<th>ZIP Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>07104</td>
<td>NEWARK</td>
</tr>
<tr>
<td>07109</td>
<td>BELLEVILLE</td>
</tr>
<tr>
<td>07032</td>
<td>KEARNY</td>
</tr>
<tr>
<td>07107</td>
<td>NEWARK</td>
</tr>
<tr>
<td>07003</td>
<td>BLOOMFIELD</td>
</tr>
<tr>
<td>07110</td>
<td>NUTLEY</td>
</tr>
<tr>
<td>07031</td>
<td>NORTH ARLINGTON</td>
</tr>
</tbody>
</table>

The service area is determined by taking into consideration three factors: patient origin, market share, and geographic continuity/proximity. Typically, the combined service area represents 75-80% of the Medical Center’s patients. Zips codes representing approximately 50% of the CMMC patient origin form the initial PSA. Added to this list is any zip code in which the Medical Center has a high market share presence, any zip code with low market share is deleted from the PSA definition and becomes part of the secondary service area (SSA). The next range of zip codes comprise the SSA. Geographic proximity is used to create a contiguous area completes the service area determination.

Most of the secondary data in this report is based on county level data. City or zip code level data is provided wherever possible to enhance the understanding of the specific needs of service area residents. Data obtained from the qualitative analyses provide further insight into health issues facing the communities served by the Medical Center.
Notes on Data Sources

In reviewing the document, the following notes will facilitate understanding.

Color Indicator Tables

Throughout the Health Profile Section, the reader will find tables that have red, yellow and green colored indicators. These tables compare the county level data to the Healthy People 2020 targets, Community Health Rankings benchmarks and New Jersey State data. Data by race/ethnicity is compared to data for all races in the county, unless otherwise indicated.

A red indicator means the value is statistically worse than the comparison statistics. Green indicates a value statistically better than the comparison, and yellow that there is no statistical difference.

Depending upon the data source, various means were used to define statistical significance. Details related to these calculations can be found in Appendix B.
3. **ESSEX COUNTY OVERVIEW**

Essex County is the second most densely populated county in New Jersey, with the third highest number of residents. The county encompasses a land mass of 127 square miles and is made up of 22 urban and suburban municipalities. These include:

- Belleville
- Bloomfield
- Caldwell
- Cedar Grove
- East Orange
- Essex Fells
- Fairfield
- Glen Ridge
- Irvington
- Livingston
- Maplewood
- Millburn
- Montclair
- Newark
- North Caldwell
- Nutley
- Orange
- Roseland
- South Orange
- Verona
- West Caldwell
- West Orange

Between 2000 and 2010, Essex County’s population decreased by 1.2%. The decline occurred predominantly in the urban areas of Irvington (-11.2%), Orange (-8.5%) and East Orange (-8.1%). The highest growth occurred in western suburban areas of Roseland (9.6%) and Livingston (7.7%).

Essex County’s 22 municipalities are widely diverse, encompassing large inner-city communities, such as Newark, Irvington, East Orange and Orange in the southeast, and suburban communities like Livingston, Essex Fells and Roseland to the west. The northeastern section of the county makes up most of CMMC’s primary service area.

Newark, the county’s largest city, is home to a cultural center, a sports and entertainment complex, a number of colleges and universities, and headquarters for a number of corporate giants. Newark also serves as a major national transportation hub. To the north and west lie suburban towns with shopping malls and industrial and professional office parks, luxury condominiums and townhouses, and private homes.

In 1865, Essex County became the first county in the U.S. to create a county-wide park system. That year the Essex County Parks Commission acquired 60 acres of land from the City of Newark as the beginning of Branch Brook Park. Today those 60 acres have grown into 5,745 acres of green space that include reservations, developed parks, golf courses, tennis courts, ice and roller skating complexes, and a zoo.
4. **ESSEX COUNTY/SERVICE AREA HEALTH PROFILE**

The Essex County Health Profile is organized to provide a discussion of health outcomes including mortality, morbidity, health status, etc., followed by a discussion of the role that health factors such as income, employment, access to care, health behaviors, and the environment play in determining how healthy people are and how long they live.

A. **HEALTH OUTCOMES**

1. **Premature Deaths**

Premature deaths, or years of potential life lost (YPLL), is a measure of early death. It represents the number of years not lived by people who die before a given age (usually 75 years). High rates of premature death are found in Essex County compared to New Jersey and to the County Health Rankings (CHR) benchmark.

- Essex County’s premature death rate of 8,410/100,000 is 29% higher than found throughout New Jersey, and 35% higher than the CHR benchmark.
- Essex County’s premature death rate, though declining, is higher than all the comparison counties.

2. **Leading Cause of Death**

Between 2004 and 2008 the age-adjusted mortality rates (AAMR) for most of the 10 leading causes of death declined. The exceptions included septicemia, chronic lower respiratory disease and nephritis.

- The top five leading causes of death include heart disease, cancer, stroke, septicemia, and diabetes mellitus.
- Heart disease and cancer mortality rates have declined but remain by far the primary cause of death for county residents.
Heart Disease

Heart disease is the leading cause of death in the nation, New Jersey, and in Essex County.

- Between 2004 and 2008, the age-adjusted mortality rate (AAMR) for heart disease deaths dropped 9% to 206.4/100,000 but remains significantly higher than the statewide rate of 191.2/100,000 and worse than the Healthy People 2020 target of 108.8 per 100,000.

- Despite a decline in AAMR for heart disease among Blacks from 270.6/100,000 to 225.8/100,000, Blacks had a significantly higher AAMR due to heart disease compared to other racial groups in Essex County.

- The AAMR for heart disease rose among Hispanic as well.

Cancer

Cancer is the second leading cause of death in Essex County, New Jersey, and the nation.

- Between 2004 and 2008, the AAMR for cancer in Essex County decreased from 191.5/100,000 to 183.6/100,000, or 4.1%. The Healthy People 2020 target is 160.6/100,000.
Figure 4.6
Cancer Deaths

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Healthy People 2020 Target</th>
<th>County Health Rankings Benchmark</th>
<th>New Jersey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deaths due to Malignant Neoplasms (Cancer): Age-Adjusted Rate per 100,000 Population</td>
<td>N/A</td>
<td>N/A</td>
<td>Yellow</td>
</tr>
<tr>
<td>*Deaths due to Malignant Neoplasms (Cancer) (Black, Non-Hispanic): Age-Adjusted Rate per 100,000 Population</td>
<td>N/A</td>
<td>N/A</td>
<td>Red</td>
</tr>
</tbody>
</table>

*A among all races/ethnicities in Essex County

- AAMR for cancer among Blacks rose from 218.6 per 100,000 to 235.2 per 100,000, or 7.6%, and is significantly higher than the rate for all county residents.

Figure 4.7
Cancer Deaths by Race – Trends
Per 100,000

Source: N.J. Department of Health and Senior Services, Center for Health Statistics, N.J. State Health Assessment Data
Note: 2007, 2006, and 2004 data for the Hispanic population in Ocean County does not meet standards of reliability based on fewer than 20 cases in the numerator and/or denominator.
Stroke

Stroke is the third leading cause of death in Essex County, New Jersey and the nation.

- Between 2004 and 2008, the AAMR for stroke in Essex County declined 19.1% from 44.5/100,000 to 36.0/100,000. The Healthy People 2020 target is 33.8/100,000.
- AAMR for stroke declined among Blacks and Whites between 2004 and 2008, rates among Hispanics decreased between 2007 and 2008, but Black residents continue to have the highest rate of stroke deaths.

Figures 4.8 and 4.9 illustrate the trend in stroke deaths by county and race/ethnicity in Essex County.

Septicemia

Septicemia is the fourth leading cause of death in Essex County.

- The AAMR for Septicemia in Essex County increased 12.7% between 2004 and 2008, from 27.6/100,000 to 31.1/100,000 and is significantly higher than the State rate of 18.3/100,000.
- Black residents have higher septicemia death rates than other racial/ethnic groups in the county.

Figures 4.10 illustrates the septicemia deaths per 100,000 for each county.

Source: N.J. Department of Health and Senior Services, Center for Health Statistics, N.J. State Health Assessment Data
Note: Data for other racial/ethnic groups not shown because figures do not meet standards of reliability or precision, based on fewer than 20 cases in the numerator and/or denominator.
Diabetes Mellitus

Diabetes is the fifth leading cause of death in Essex County.

- Between 2004 and 2008, the AAMR for diabetes decreased 14.7% from 34.6/100,000 to 29.5/100,000 but remains significantly higher than the statewide rate of 23.1/100,000.
• In 2011, the AAMR in Newark was 37.5/100,000.
• AAMR for diabetes among Blacks in Essex County declined 25.6% but remained significantly higher than for all county residents.
• Black residents showed a decline in the AAMR for diabetes, but at 42.1/100,000 remained highest among all races/ethnicities.
• Hispanic residents saw a slight increase in AAMR for diabetes, but at 42.1/100,000 remained highest among all races/ethnicities.

Figure 4.15
Diabetes Mellitus

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Healthy People 2020 Target</th>
<th>County Health Rankings Benchmark</th>
<th>New Jersey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deaths due to Diabetes Mellitus: Age-Adjusted Rate per 100,000 Population</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>*Deaths due to Diabetes Mellitus (Black, Non-Hispanic): Age-Adjusted Rate per 100,000 Population</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
</tr>
</tbody>
</table>

*Among all races and ethnicities in Essex County.

3. Behavioral Health-Related Deaths

• Age-adjusted drug-related (AADD) deaths declined from 15.3/100,000 in 2006 to 10.2/100,000 in 2007.
• AADD were not statistically different than the Healthy People 2020 target of 11.3/100,000.
• The age-adjusted alcohol-related death rate increased from 4.1/100,000 to 4.4/100,000 between 2006 and 2007.
The Essex County age-adjusted suicide rate decreased 44.1% between 2004 and 2008, and is significantly lower than the Healthy People 2020 target of 10.2/100,000.
4. **Infant Mortality**

Infant mortality has traditionally been used to measure the health and well-being of populations within and across nations. The United States ranks far behind most industrialized nations in terms of infant mortality. This ranking is due in large part to disparities that occur in the percentage of pre-term babies born among racial and ethnic minorities in this country.⁹

Between 2004 and 2008 the infant mortality rate in Essex County rose 11.8% from 7.6/1,000 live births to 8.5/1,000 live births.

- The infant mortality rate for the county is significantly higher than the State rate of 5.3/1,000 and the *Healthy People 2020* target of 6.0/1,000.

![Infant Mortality Comparison by County and State per 1,000 Live Births](image)

**Source:** *N.J. Department of Health and Senior Services, Center for Health Statistics, N.J. State Health Assessment Data*

![Infant Mortality Trends per 1,000](image)

**Figure 4.19**

**Infant Mortality Rate**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Healthy People 2020 Target</th>
<th>County Health Rankings Benchmark</th>
<th>New Jersey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infant Mortality Rate: Rate of Infant (Under 1 year) Deaths per 1,000 Live Births</td>
<td>N/A</td>
<td>N/A</td>
<td>Yellow</td>
</tr>
<tr>
<td><em>Infant Mortality Rate (Black, non-Hispanic): Rate of Infant (Under 1 year) Deaths per 1,000 Live Births</em></td>
<td>N/A</td>
<td>N/A</td>
<td>Red</td>
</tr>
</tbody>
</table>

*Among all races/ethnicities in Essex County

The infant mortality rate for Blacks, 13.4/1,000, is higher than for all other races in the county and has been increasing since 2006.

**Figure 4.22**
Infant Mortality by Race per 1,000

<table>
<thead>
<tr>
<th>Race</th>
<th>New Jersey</th>
<th>Essex County</th>
<th>Union County</th>
<th>Middlesex County</th>
</tr>
</thead>
<tbody>
<tr>
<td>White, non-Hispanic</td>
<td>3.6</td>
<td>3.9</td>
<td>4</td>
<td>3.3</td>
</tr>
<tr>
<td>Black, non-Hispanic</td>
<td>23.1</td>
<td>12.7</td>
<td>3.9</td>
<td>4.4</td>
</tr>
<tr>
<td>Hispanic</td>
<td>7.9</td>
<td>8.1</td>
<td>6.7</td>
<td>5.9</td>
</tr>
<tr>
<td>Total</td>
<td>8.5</td>
<td>13.4</td>
<td>9.1</td>
<td>4.6</td>
</tr>
</tbody>
</table>

**Figure 4.23**
Infant Mortality Trends by Race per 1,000

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>Hispanic</th>
<th>Black, non-Hispanic</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>8.5</td>
<td>9.6</td>
<td>14.5</td>
</tr>
<tr>
<td>2004</td>
<td>8.3</td>
<td>9.5</td>
<td>13.4</td>
</tr>
<tr>
<td>2005</td>
<td>8.2</td>
<td>9.5</td>
<td>13.4</td>
</tr>
<tr>
<td>2006</td>
<td>8.3</td>
<td>9.6</td>
<td>13.4</td>
</tr>
<tr>
<td>2007</td>
<td>8.4</td>
<td>9.6</td>
<td>13.4</td>
</tr>
<tr>
<td>2008</td>
<td>8.4</td>
<td>9.6</td>
<td>13.4</td>
</tr>
</tbody>
</table>

Source: N.J. Department of Health and Senior Services, Center for Health Statistics, N.J. State Health Assessment Data

### 5. Low and Very Low Birth Weight Infants

Between 2004 and 2008 the rate of very low birth weight infants in Essex County decreased by 0.1 percentage point, from 2.1% to 2.0%. Low birth weight infants increased by 0.3 percentage point during this same period from 9.7% to 10.0%.

- The percent of low birth weight and very low birth weight infants are higher than the Healthy People 2020 targets of 7.8% and 1.4%, and significantly higher than the statewide rates of 8.1% and 1.5%.

**Figure 4.24**
Low and Very Low Birth Weight Infants

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Healthy People 2020 Target</th>
<th>County Health Rankings Benchmark</th>
<th>New Jersey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low (&lt;2500 grams) Birth Weight: Percentage of Live Births</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>* Low (&lt;2500 grams) Birth Weight (Black, Non-Hispanic): Percentage of Live Births</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Very Low (&lt;1500 grams) Birth Weight: Percentage of Live Births</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>* Very Low (&lt;1500 grams) Birth Weight (Black, Non-Hispanic): Percentage of Live Births</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

* Statistically higher than all other races/ethnicities in the county.
• The percentage of low and very low birth weight infants among Blacks in Essex County remains significantly higher than for other racial/ethnic groups in Essex County.

Figure 4.25
Low and Very Low Birth Weight by Race
Percentage of Live Births

Source: N.J. Department of Health and Senior Services, Center for Health Statistics, N.J. State Health Assessment Data
Note: Percentages are based on the total number of live births for county and state.

6. **Health and Behavioral Health Status**

Health status is often defined as the level of health status of the individual, group or population as subjectively assessed by the individual, group or population or by more objective measures.\(^\text{10}\) Presented below are both subjective and objective measures of both health and behavioral health status.

**Health Status and Disability**

The percent of Essex County residents reporting their health as fair or poor declined from 19.5% to 18.2%.

• It remains higher than the percentages reported statewide, in the Metropolitan/Micropolitan Statistical Areas (MMSA), and in comparison counties.
• Essex County residents report an average of 3.3 physically unhealthy days per month which is significantly higher than the national benchmark of 2.6.
• The percent of Essex County residents reporting a disability declined by more than 12 percentage points between 2000 and 2010.

---

Figure 4.26
Health is Fair or Poor (%)

Source: CDC, Behavioral Risk Factor Surveillance System

Figure 4.27
Physically Unhealthy Days Reported in Past 30 Days

Source: County Health Rankings, National Center for Health Statistics
Note: The poor physical health measure is based on response to the question: “Thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good?”

Figure 4.28
Total Population with any Disability 2000-2010

Source: U.S. Census Bureau, American Community Survey
Note: Percentages are based on the total civilian non-institutionalized population 5 years and older in each region.
Behavioral Health Status

Essex County residents reported an increase in the number of mentally unhealthy days per month from 3.3 to 3.6.
- The number of mentally unhealthy days is significantly higher than the county health rankings benchmark.

Figure 4.29
Mentally Unhealthy Days
Reported in the Past 30 Days

Source: County Health Rankings, National Center for Health Statistics
Note: The poor physical health measure is based on response to the question: “Thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?”

7. Morbidity

Cardiovascular Disease (CVD) morbidity includes illness related to heart disease and stroke.

Heart Disease

According to data collected from the Behavioral Risk Factor Surveillance System (BRFSS), an estimated 3.4% of Essex County adults report having been diagnosed with angina or coronary heart disease (CHD) in 2010.
- Between 2007 and 2010, the percent of Essex County adults who report being diagnosed with a heart attack increased from 2.7% to 3.1%.
- In 2009, 6% of Newark residents reported a heart attack. Parts of Newark are in the Medical Center’s service area.
Risk Factors

Many of the leading controllable risk factors for heart disease and stroke are also healthy community indicators. Two, high blood pressure and high cholesterol, are discussed here. The others are discussed elsewhere in this document. According to the American Heart Association, the risk factors for developing cardiovascular disease include:

- High blood pressure
- High cholesterol
- Cigarette smoking
- Physical inactivity
- Poor diet, overweight and obesity
- Diabetes

Essex County

- Between 2005 and 2009, high blood pressure among Essex County adult residents rose from 24.5% to 27.5%.
- Adults reporting high cholesterol increased from 30.6% to 36.7%; nearly three times higher than the Healthy People 2020 target.

Over time, these risk factors cause changes in the heart and blood vessels that can lead to heart attacks, heart failure, and strokes.11

Stroke

According to the 2007-2010 BRSFSS survey, an estimate 3.6% of Essex County adults were diagnosed with stroke.

- Between 2007 and 2010, the percentage of Essex County adults reporting stroke doubled.
- Despite this increase there was no statistically significant difference in the prevalence of stroke between the county and the State.

---

Cancer

Between 2005 and 2009, the overall age-adjusted rate (AAR) of cancer incidence in Essex County decreased from 486.9/100,000 to 427.2/100,000.

- Essex County’s overall AAR of cancer incidence is significantly below the statewide rate.

Source: CDC, Behavioral Risk Factor Surveillance System

Source: N.J. Department of Health and Human Services, New Jersey Cancer Registry
Note: The rate for prostate cancer is based on 100,000 males, and the rate for breast cancer is based on 100,000 females.
In 2009, prostate (171.9/100,000) and breast cancers (110.0/100,000) had the highest cancer incidence rates.

Lung was 48.4/100,000.

Colon-rectal was 37.8/100,000; and melanoma was 11.6/100,000.

Between 2005 and 2009 the AAR for prostate cancer incidence declined while the rate of breast cancer increased.

The AARs for breast and melanoma cancer incidence in Essex County were significantly better than the State.

### Figure 4.36
Cancer Incidence – Trends Per 100,000 Population

Essex County Trend 2005-2009

Source: New Jersey Department of Health and Human Services, New Jersey Cancer Registry

Note: The rate for prostate cancer is based on 100,000 males, and the rate for breast cancer is based on 100,000 females

### Figure 4.37
Cancer Incidence

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Healthy People 2020 Target</th>
<th>County Health Rankings Benchmark</th>
<th>New Jersey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cancer Incidence by Site - Prostate:</td>
<td>N/A</td>
<td>N/A</td>
<td>(\bigcirc)</td>
</tr>
<tr>
<td>Age-Adjusted Rate per 100,000 Population</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cancer Incidence by Site - Breast:</td>
<td>N/A</td>
<td>N/A</td>
<td>(\bigcirc)</td>
</tr>
<tr>
<td>Age-Adjusted Rate per 100,000 Population</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cancer Incidence by Site - Lung:</td>
<td>N/A</td>
<td>N/A</td>
<td>(\bigcirc)</td>
</tr>
<tr>
<td>Age-Adjusted Rate per 100,000 Population</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cancer Incidence by Site - Colon/Rectum:</td>
<td>N/A</td>
<td>N/A</td>
<td>(\bigcirc)</td>
</tr>
<tr>
<td>Age-Adjusted Rate per 100,000 Population</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cancer Incidence by Site - Melanoma of the Skin:</td>
<td>N/A</td>
<td>N/A</td>
<td>(\bigcirc)</td>
</tr>
<tr>
<td>Age-Adjusted Rate per 100,000 Population</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Asthma

Asthma—Background

- Currently in the United States more than 23 million people have asthma. Asthma affects people of all ages, but it most often starts during childhood. About 7 million of those in the U.S. with asthma are children. 12
- The exact cause of asthma is not known. Researchers think some genetic and environmental factors interact to cause asthma, most often early in life. These factors include:
  - An inherited tendency to develop allergies.
  - Parents who have asthma.
  - Certain respiratory infections during childhood.
  - Contact with some airborne allergens or exposure to some viral infections in infancy or in early childhood when the immune system is developing.
  - Allergy and asthma “triggers,” include plant pollens, dust, animals and stinging insects, and cockroaches.

Asthma – Incidence

According to the BRFSS survey 2006-2010, the percent of adults reporting asthma has risen in the nation, New Jersey and in Essex County.
- Fortunately, Essex County experienced the smallest increase and is now not statistically different from the statewide percentage.
- Unfortunately, in 2009, 16% of Newark residents reported asthma.

Diabetes

Diabetes – Background

The three common types of diabetes are:
- Type 2—caused by a combination of resistance to the action of insulin and insufficient insulin production.
- Type 1—results when the body loses its ability to produce insulin.
- Gestational—a common complication of pregnancy that can lead to perinatal complications in mother and child. It is a risk factor for development of Type 2 diabetes after pregnancy.

Diabetes is the seventh leading cause of death in the U.S. Complications include:
- Reduced life expectancy by up to 15 years,
- Increased risk of heart disease by two to four times.
• Leading cause of kidney failure, limb amputations, and adult onset blindness,
• Significant financial costs in healthcare, lost productivity and early death. 14

Almost 7 million Americans with diabetes are undiagnosed, and another 79 million Americans have pre-diabetes which greatly increase their risk of developing diabetes in the next several years. 15

Factors contributing to diabetes prevalence overall and in Essex County include:
• Obesity
• Lack of physical activity
• Family history
• Environmental resources including such things as the availability of wholesome food, healthcare access and recreational availability.

Diabetes – Incidence

Diabetes is on the rise in the U.S., in New Jersey, and in Essex County.
• Between 2006 and 2010, the percentage of Essex County residents reporting diabetes increased from 7.8% to 10.2%.
• In 2009, 17% of Newark residents reported they had diabetes.

Arthritis

Arthritis is the inflammation of one or more joints. A joint is where two bones meet. There are over 100 different types of arthritis. The most common form of arthritis is osteoarthritis which is a normal result of aging. It is also caused by “wear and tear” on the joints. Arthritis is the most common cause of disability in the U.S., limiting the activities of an estimated 22 million adults (9%). 16

Arthritis – Incidence

• Between 2005 and 2009, the percent of Essex County residents reporting arthritis declined from 19.5% to 18%.
• The percent of county residents reporting arthritis is significantly lower than the statewide average of 22.7%.

---

**Notifiable Infectious Disease**

The responsibilities of epidemiologists fall into four areas:

1. Outbreak surveillance, detection, and investigation
2. Intensive case investigations for complex cases
3. Maintenance of programmatic disease surveillance
4. Public health emergency-related disease surveillance

*Healthy People 2020* goals for infectious diseases are rooted in evidence-based clinical and community activities and services for their prevention and treatment.

- Objectives focus on ensuring that States, local public health departments, and nongovernmental organizations are strong partners in the Nation's attempt to control the spread of infectious diseases.
- They also reflect a more mobile society with diseases crossing state and country borders. Awareness of disease and completing prevention and treatment courses remain essential components for reducing infectious disease transmission.\(^\text{17}\)

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Communicable Disease – Incidence

When compared to New Jersey, Essex County has the same or lower incidence rates for the three reported communicable diseases: campylobacteriosis, aseptic meningitis, and pertussis.

- Campylobacteriosis is among the most common bacterial infections in humans. The illness is usually spread by consumption of contaminated food or water and, occasionally, by contact with infected people or animals. It typically runs a course of two weeks unless the person is immuno-compromised, in which case it can be life-threatening.
- Aseptic meningitis is an inflammation of the membranes covering the brain or spinal column. Aseptic meningitis is usually caused by viruses. The virus can pass from person-to-person via contact with an infected person.
- Pertussis or whooping cough is a highly contagious bacterial respiratory disease. Pertussis is known to cause uncontrollable, violent coughing making it difficult to breathe.

Data collected by the Bloomfield/Caldwell Public Health Department in 2010, reported 11 cases of campylobacteriosis in Bloomfield and one in Caldwell.

B. HEALTH FACTORS

1. Socioeconomic Status

According to Healthy People 2020, socioeconomic factors contribute to observed disparities in disease incidence and mortality among racial, ethnic and underserved groups. This can be clearly seen in Essex County. The southern areas of the county also align with areas with lower socioeconomic status (SES). Southern areas of the county also have more uninsured residents, fewer healthcare providers, and more conditions treated in an emergency room that would have been more appropriately and cost effectively treated in an outpatient setting. This occurs more frequently among zip codes in CMMC’s PSA. The SSA which includes zip codes in the western portions of the county tends to contain more affluent residents.

Studies have found that income/SES, over race or ethnicity, predicts the likelihood of an individual’s or group’s access to:

- Education
- Health insurance
- Safe and healthy living and working conditions, including places free from exposure to environmental toxins. 18

SES also appears to play a major role in:

- Prevalence of behavioral risk factors like tobacco smoking, physical inactivity, obesity, and excessive alcohol use.
- Rates of preventive screenings, with those with lower SES having fewer screenings. 19

**Essex County**

The percent of Essex County residents receiving Temporary Assistance to the Needy (TANF) benefits is significantly higher than the State rate.

- The same can be said of children receiving TANF benefits.
- Economic status and employment.
  - Essex County’s median household income in 2010 was $52,394, more than $15,000 below the State average. Figure 4.40 presents the range of median household income in Essex County.
  - In 2009, 14.5% of Essex County residents were living below the Federal poverty level. Newark had the highest rate, 23.9%, and Livingston the lowest at 1.8%.
  - In 2011, 11.7% of Essex County families had incomes below the poverty level. Zip codes in CMMC’s service area: Newark (07107) at 22.3%, Newark (07104) at 21.3% had rates above the county level.
  - In 2011, 10.8% of county residents were unemployed. This was higher than the State unemployment level. Unemployment in the urban areas of the county met or exceeded 10.8%.
- Varying education levels.
  - 31% of county residents have Bachelor’s, Professional or Graduate degrees compared to 25.4% in the PSA.
- A relatively young county.
  - According to the 2010 U.S. Census, 24.9% of Essex County residents were under 18, adults 18-64 were 62.7% and seniors age 65+ were 11.6%.
  - In New Jersey 13.5% of residents are over 65, and in the U.S. 13.3% are over 65.
  - In the PSA, 22% are under 18 and adults 18-64 are 66% of the population, seniors are 12%.
- Racial and ethnic diversity.
  - 39.3% of county residents are Black compared to 12.8% in New Jersey, and 13.2% in the PSA. Essex County Hispanic/Latino populations constitute 20.3% of the population compared to 17.7% in New Jersey, and 39% in the PSA. Caucasians are 33.2% of the county’s population compared to 59.3% in the State, and 38.9% in the PSA.

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19 Ibid.
CMMC Service Area

- 61% of CMMC’s PSA and 63% of the SSA are made up of minority populations.
- In 33% of the zip codes that make up CMMC’s service area, the percent of residents with less than 9th grade education is more than double the statewide rate.
- In 2011, the percent of families living below poverty in the PSA (9.8%) is 3.2 percentage points higher than the State.
- In 33% of the zip codes in the PSA, the number of families in poverty exceeds the State rate and in the two Newark zip codes the rates are nearly double the county rate.
- In 2011, the median household income of residents of the PSA is higher than the county median income.
- There is a wide income variance in the combined PSA/SSA, from a low of $30,098 (Newark 07107) per household to a high of $143,163 (Upper Montclair, 07403).

Select PSA Communities

Newark

- Newark is the county’s largest city with 277,237 residents or 35.4% of Essex County’s population. (A portion of Newark is included in CMMC’s service area.)
- Blacks are 52.4% of the population. Latinos are 33.8% and Caucasians are 26.3%.
- The median household income was one of the lowest at $34,816 and unemployment among the highest at over 15% in 2011 and nearly 24% were living in poverty.
- Over 30% of Newark residents failed to graduate from high school and nearly 25% had a low level of English proficiency.
- The percentage of Newark families and children receiving various types of public assistance is twice that of the U.S. average and three times that of New Jersey.
- In 2011, 18.3% of Newark households received SSI, cash public assistance or SNAP in the last 12 months.
- In 2011, 35.6% of Newark children living in households received SSI, cash public assistance or SNAP in the last 12 months.

Belleville

- Between 2000 and 2010, the population of Belleville remained stable.
- Median household income for Belleville residents was $62,238 or $10,000 above the median household income for county residents.
- Unemployment (5.8%) and poverty rate (7.7%) were below the county totals.
- Nearly 14% of Belleville residents did not complete high school and over 17% have limited English proficiency.
- Hispanics were the dominant race (39.3%) followed by Caucasians (38.7), and Asians (11.9%).

Bloomfield

- Between 2000 and 2010, the population of Bloomfield declined by approximately 300 people.
- Median household income in Bloomfield was above the county median at $65,800.
- Unemployment in Bloomfield was 4.6%; and the poverty rate was 6.8%, below both the State and county.
Approximately 90% of residents have completed high school, but nearly 10% have limited English proficiency.

Caucasians were 47.1% of the population followed by Hispanics (24.5%), Blacks (17.1%), and Asians (8.1%).

Nutley
- Between 2000 and 2010, Nutley's population increased 3.6%, or by nearly 1,000.
- Median family income in Nutley was $77,950; unemployment was 5.8%; and the poverty rate was 2.8%.
- Nine percent (9%) of Nutley residents failed to complete high school and 8.1% have limited English proficiency.
- Caucasians were the dominant race (74.8%), followed by Hispanics (11.8%), Asians (9.8%), and Blacks (1.9%).

**Figure 4.43**
Median Household Income

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2005</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Jersey</td>
<td>$55,146</td>
<td>$61,672</td>
<td>$67,681</td>
</tr>
<tr>
<td>Essex County</td>
<td>$44,944</td>
<td>$49,460</td>
<td>$52,394</td>
</tr>
<tr>
<td>Newark</td>
<td>$26,913</td>
<td>$30,665</td>
<td>$34,816</td>
</tr>
<tr>
<td>Belleville</td>
<td>$48,608</td>
<td>-</td>
<td>$62,328</td>
</tr>
<tr>
<td>Bloomfield</td>
<td>$53,225</td>
<td>-</td>
<td>$65,800</td>
</tr>
<tr>
<td>Nutley</td>
<td>$59,634</td>
<td>-</td>
<td>$77,950</td>
</tr>
</tbody>
</table>

*Source: U.S. Census Bureau, American Community Survey*

Note: 2005 City-Wide data is unavailable and the 2010 Median Household Income represents a five year estimate, ranging from 2006 to 2010.
Figure 4.44
Income Below Federal Poverty Level

Percent of Population with Income in the Past Year Below Federal Poverty Level (2009) (%)

Source: U.S. Census Bureau, American Community Survey
Note: People are defined as the entire population in each geographic area, children are defined as the population under 18 years, and seniors are defined as the population over 65 years.

Figure 4.45
Unemployment (%)

Source: N.J. Department of Labor, New Jersey Labor Force Estimates by Area
Note: The Data represents unadjusted annual averages.
Figure 4.46
Educational Attainment (2009) (%)

<table>
<thead>
<tr>
<th></th>
<th>No High School Diploma</th>
<th>High School Graduate</th>
<th>Some College, Associate’s Degree</th>
<th>Bachelors, Professional, or Graduate Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Jersey</td>
<td>12.6%</td>
<td>29.4%</td>
<td>23.6%</td>
<td>34.5%</td>
</tr>
<tr>
<td>Essex County</td>
<td>16.5%</td>
<td>30.4%</td>
<td>22.1%</td>
<td>31.0%</td>
</tr>
<tr>
<td>Newark</td>
<td>31.7%</td>
<td>35.5%</td>
<td>21.1%</td>
<td>11.7%</td>
</tr>
<tr>
<td>Belleville</td>
<td>13.8%</td>
<td>36.2%</td>
<td>22.4%</td>
<td>27.6%</td>
</tr>
<tr>
<td>Bloomfield</td>
<td>10.2%</td>
<td>32.7%</td>
<td>22.4%</td>
<td>34.6%</td>
</tr>
<tr>
<td>Nutley</td>
<td>9.0%</td>
<td>30.0%</td>
<td>19.8%</td>
<td>41.3%</td>
</tr>
</tbody>
</table>

No High School Diploma Trends 2000-2009 (%)

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Essex County</td>
<td>24.4%</td>
<td>16.5%</td>
</tr>
<tr>
<td>New Jersey</td>
<td>17.9%</td>
<td>12.6%</td>
</tr>
<tr>
<td>Newark</td>
<td>42.1%</td>
<td>31.7%</td>
</tr>
<tr>
<td>Belleville</td>
<td>21.8%</td>
<td>13.8%</td>
</tr>
<tr>
<td>Bloomfield</td>
<td>16.5%</td>
<td>10.2%</td>
</tr>
<tr>
<td>Nutley</td>
<td>13.5%</td>
<td>9.0%</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau, American Community Survey.
Figure 4.47
Limited English Proficiency (%)

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2005</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Jersey</td>
<td>11.1%</td>
<td>11.5%</td>
<td>12.1%</td>
</tr>
<tr>
<td>Essex County</td>
<td>13.3%</td>
<td>14.2%</td>
<td>15.1%</td>
</tr>
<tr>
<td>Newark</td>
<td>22.4%</td>
<td>22.0%</td>
<td>24.8%</td>
</tr>
<tr>
<td>Belleville</td>
<td>16.0%</td>
<td>-</td>
<td>17.3%</td>
</tr>
<tr>
<td>Bloomfield</td>
<td>11.3%</td>
<td>-</td>
<td>9.8%</td>
</tr>
<tr>
<td>Nutley</td>
<td>7.2%</td>
<td>-</td>
<td>8.1%</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau, American Community Survey
Note: The U.S. Census Bureau defines LEP population as persons who reported speaking English less than “very well.” 2005 city-wide data is unavailable, and 2009 city-wide data represents a five year estimate ranging from 2005 to 2009.

Figure 4.48
2010 Population by Race/Ethnicity (%)
Community Health Index

New Solutions, Inc.’s Community Health Index (CHI) is a numerical indicator that accounts for the underlying socioeconomic and access barriers that affect a population’s health status. In developing this index, NSI identified prominent barriers related to income, culture/language, education, age, insurance and housing. The index is developed at the zip code level and is ranked from 1 to 552, with 1 having the highest need and 552 the least.

- A comparison of CHI scores to hospital utilization shows a strong correlation between high need and high use – communities with low CHI scores can be expected to have higher hospital utilization.
- There is also a causal relationship between CHI scores and preventable hospitalizations and ED visits for manageable conditions – communities with high CHI scores have more hospitalization and ED visits that could have been avoided with improved healthy community structures and appropriate outpatient/primary care.
- Essex County has an average CHI of 173 compared to 80 for the PSA zip codes and 191 for the SSA zip codes, indicating CMMC serves a higher need for the primary service area community relative to the county and the SSA.

2. Access to Care

Essex County communities with low socioeconomic status experience disparities in health status and access to resources. These disparities are evidenced by uninsured status, limited access to primary care physicians and health services, and inappropriate use of hospital/emergency department services for conditions that could have been treated with preventive and primary care.

Background

Access to comprehensive, quality healthcare services is important for the achievement of health equity and healthy lifestyles for Essex County residents. Access to healthcare impacts:

- Overall physical, social, and mental health status
- Prevention of disease and disability
- Detection and treatment of health conditions
- Quality of life
- Preventable death and life expectancy

Disparities in healthcare access negatively impact each of these outcomes. Access is governed by a range of systemic barriers across the continuum of prevention and care. These include: location of health facilities, resident geographic location, transportation infrastructure, health literacy and awareness, and ability to pay for services. These barriers can lead to:

- Unmet health needs
- Inability to access preventive services
- Emphasis on emergency treatment instead of prevention and primary care
- Hospitalizations that could have been prevented

Healthy People 2020 identifies four components of access to care which will be used to frame the following sections: health insurance coverage, services, timeliness, and adequate and appropriate workforce.
Health Insurance Coverage—Uninsured

Health insurance coverage provides people with the security to access more affordable preventive services and clinical care when needed. It has been documented that people without insurance will not be offered the same range of medical services as those who are insured.  

In addition, ongoing contact with physicians fosters more comprehensive health awareness that informs preventive care and illness management. The uninsured do not think about their health or medical conditions in the same comprehensive way as do the insured. When a medical condition occurs, they may delay treatment and/or use the emergency department instead of a lower cost, more appropriate primary care setting. The uninsured are:

- Less likely to receive needed medical care.
- More likely to have more years of potential life lost.
- More likely to have poor health status.

Essex County

Essex County has a much higher percentage of uninsured residents than New Jersey or the United States.

- Between 2006 and 2010, the rate of uninsured residents has remained stable at 19.1%.
- The Healthy People 2020 goal is 0%.
- Although the State already provides one of the nation’s most generous subsidized health insurance programs, through Family Care, which uses a mix of State and Federal money to cover more than 900,000 children and adults, it is estimated that there are an additional 1.3 million New Jerseyans without insurance which includes nearly 200,000 children.

Insurance Coverage Among Hospitalized Patients

- CMMC’s PSA/SSA included 11.1% uninsured patients compared to 11.3% for the county, and 8.4% in New Jersey
- ED visits among PSA/SSA residents included 29.4% uninsured compared to 29.7% of Essex County, and 22.7% of New Jersey uninsured ED visits.
- 8.8% of CMMC’s inpatients are uninsured, charity care or self-pay patients, compared to 9.6% in the PSA/SSA. However, 11.9% of its inpatients are Medicaid/Family Care patients, compared to 10.9% in the service area.
- The Medical Center’s treat and release ED payer mix is even more heavily weighted towards Medicaid patients. The Medical Center’s Medicaid burden is 19.5%, compared to 12.6% for the PSA/SSA. Its uninsured, charity care and self-pay pay mix is 25.7%, compared to 26.5% for the PSA/SSA.

Figure 4.50
Payer Mix Comparison

Figure 4.51

Figure 4.52

Source: UB-04 2010 Discharges, Census 2010 Population
Affordable Care Act – Expansion of Care

The Affordable Care Act (ACA) is expected to decrease the percentage of uninsured New Jersey residents under the age of 65 from 14.5% to 8.6%. The non-group health insurance market will increase (from 2.8% to 7.6%) to about 362,000 individuals. More than half of those enrolled in the non-group coverage following reform will be eligible for tax credits. The expansion of Medicaid/NJ Family Care is anticipated to result in an increase of 234,000 individuals, increasing from 13.6% of the non-elderly population to 16.7%. More than half of these individuals will be non-parent adults. In addition, about 3% of individuals covered by employer sponsored healthcare insurance are anticipated to switch to exchange based coverage.

The reduction in the non-elderly uninsured rate from 14.5% to 8.6% will likely put the New Jersey rate in line with the national average for uninsured residents under 65. The Congressional Budget Office, in 2010, estimated that the uninsured rate in the U.S. would be 8% after reform, and Buettgrens, Hallohan & Carroll project a national rate of 8.7%.22

As noted in Figure 4.53, if all the towns in Essex County that have in excess of 8.6% of their population uninsured were to reduce the percentage to 8.6%, an additional 80,000 Essex County residents could be insured under ACA.

![Figure 4.53](image-url)

**Source:** United States Census – 2009-2011 American Community Survey 3-Year Estimates – DP03 Selected Economic Characteristics

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22 Health Insurance Status in New Jersey After Implementation of the Affordable Care Act. Joel Cantor, ScD; Dorothy Gaidobu, MSW, Ph.D.; Jose Novams; and Kristen Lloyd, MPN.
Services

Care Coordination—Medical Homes

Improving healthcare access depends, in part, on ensuring that people have a standard and consistent source of preventive care and clinical treatment. One method to accomplish this is through patient-centered medical homes. This model provides personalized, comprehensive medical care using a physician led multidisciplinary team that might also include nurse practitioners, nurses, case managers, community health workers and other medical personnel. Medical homes hold promise to transform the delivery of healthcare by improving quality, safety, efficiency and effectiveness. This will ultimately result in better health outcomes and fewer disparities and costs.  

Conveniently locating medical homes and other primary care in local communities further supports access. Providers who are invested in the community promote meaningful and sustained relationships between themselves, their patients, and patient families. Medical homes may be led by PCPs at clinics, hospitals, and health departments. Medical homes are also enriched by preventive and treatment services from nurse practitioners, parish nurses, community health workers and navigators among others. As a result, medical homes are associated with:

- Greater patient trust in the provider
- Effective patient-provider communication
- Increased likelihood that patients will receive appropriate care
- Decreased duplication and disconnection of health services provided.

Care Coordination—Accountable Care

On July 9, 2012, Barnabas Health North LLC became the fourth Accountable Care Organization (ACO) to be approved in the State to provide coordinated care for Medicare patients and to participate in the shared savings among hospitals and physicians. The ACO will consist of Clara Maass Medical Center in Belleville, Newark Beth Israel Medical Center in Newark, and Saint Barnabas Medical Center in Livingston, as well as aligned physicians throughout the area, who will work with CMS to provide Medicare beneficiaries with high quality service and care, while reducing the growth in Medicare expenditures through enhanced care coordination.

Primary Care Physicians

Primary care physicians represent less than 40% of the physicians practicing in Essex County.

- In 2008, there were 99.7 primary care physicians per 100,000 people compared to the CHR benchmark of 158.5 per 100,000.

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24 Ibid.
Primary Service Area Physician Need

An area-wide Physician Needs Assessment carried out by New Solutions, Inc. on behalf of CMMC identified the following needs within the communities served by the Medical Center.

- Primary care physicians (Family Practice, Internal Medicine and Geriatrics) shows a need for 20 additional physicians.
- OB/GYN shows a need for 4-6.
- Pediatrics shows a need for 8-9.
- Neurology shows a need for 2-4.
- Rheumatology shows a need for 2-4.
- Endocrinology shows a need for one.
- Pulmonary Medicine shows a need for one.
- General Surgery shows a need for two.
- Orthopedic Surgery shows a need for 2-3.
- Otolaryngology shows a need for 2-4.
- Thoracic Surgery shows a need for two.
- Neurosurgery shows a need for 2-3.

Physicians Acceptance of Medicaid

In addition to the fact that Essex County and the service area served by CMMC have fewer primary care physicians than are recommended by CHR, many physicians refuse to accept Medicaid patients because physician payment rates are so low. This substantial impediment to access for New Jersey Medicaid patients is the result of a Medicaid payment rate that is one-third the rate the Federal government now pays for Medicare patients. Healthcare reform measures would equalize payment rates and potentially enhance access for Medicaid patients.

Essex County Clinics

There are seven acute care hospitals in the county, three of which are located in Newark, one in East Orange, one in Belleville, one in Montclair, and one in Livingston, which provide primary access points for patients. Most of these facilities provide outpatient clinic services including family health care services.

There are also a number of community-based organizations (CBOs) that provide medical and health services at local sites, including CBOs serving the Hispanic/Latino population. The Newark public schools have school-based clinics in all elementary, middle and high schools throughout the City.

In addition, there are two Federally Qualified Health Centers (FQHCs) and 10 satellites in Essex County, Newark Community Health Centers and Newark Homeless Health Care, which are the major providers of comprehensive community-based primary health care. Offices are located in Newark (9, including five in schools and one homeless shelter), East Orange (1), Irvington (1), and Orange (1).

In September 2011, Newark City Health and Human Services was awarded a $35,000 grant from the U.S. Department of Health and Human Services to help it become a patient-centered medical home.
In January 2012, the New Jersey Primary Care Association, Inc. (NJPCA) kicked off its statewide patient-centered care initiative. Fourteen New Jersey Community Health Centers agreed to participate. NJPCA is providing technical support around practice transformation and obtaining NCQA and Joint Commission accreditation as a Patient-Centered Medical Home. The Newark Community Health Center, a Federally Qualified Health Center (FQHC), is one of the participating organizations.

Characteristics which distinguish FQHCs from most other healthcare providers include:

- Governance by users of FQHCs and by local professionals.
- Locations in underserved neighborhoods with clinic hours that include nights and weekends.
- Utilization of National Health Service Corps physicians who are devoted on a full-time basis to the Center.
- Multilingual staff.
- Ability to provide multiple sites and even mobile clinics and services for rural populations.
- Commitment to offering a wide array of medical and supportive services.
- Provision of care at costs which are substantially lower than at other settings, sliding fee scales.
- Reduction of overall healthcare costs as an effective alternative to emergency room utilization.
- Physician admitting privileges in local hospitals to provide 24-hour care to patients.
- Networking with community-based human service organizations to provide a continuum of care.
- Programs are based on the life-cycle concept, which gives particular emphasis to maternal and child health and seeks to provide quality care for people from prenatal care to old age.

**Dental Clinics**

Dental clinics in Essex County are provided at HUMC-Mountainside Hospital, Newark Beth Israel Medical Center, University Hospital, and New Jersey Dental School. Community-based providers include the South West Essex Dental Center in West Orange, the Newark Department of Health and Human Services, and Newark Community Health Centers (two in Newark, one in East Orange, and one in Irvington).

**Timeliness of Services**

A key indicator of the timeliness of services is emergency department (ED) utilization for conditions that could have been treated in a primary care setting. These include both unnecessary emergency department visits for minor, treatable conditions and visits for conditions that progressed as a result of not accessing timely treatment in an outpatient setting.

Reasons for accessing the ED instead of a more appropriate, lower acuity level of care include:

- No regular source of primary care
- Lack of health insurance
- Cost including the inability to pay co-pays for office visits
- Transportation issues
- Practices without extended office hours
- Undocumented citizenship status
ED and Inpatient Utilization for Ambulatory Care Sensitive Conditions by County, Age and Case Type

Ambulatory care sensitive conditions (ACSC) are indicators of emergency department (ED) use by patients who would have more appropriately been cared for in an outpatient primary setting. The charts below identify the number and rate of ED visits that might have been treated in another setting for Essex County compared to all New Jersey counties.

**Figure 4.54**

| COUNTY | ACSC - ED RATE/1000
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>COUNTY 2011</td>
</tr>
<tr>
<td>Camden</td>
<td>92.57</td>
</tr>
<tr>
<td>Atlantic</td>
<td>92.28</td>
</tr>
<tr>
<td>Cumberland</td>
<td>88.09</td>
</tr>
<tr>
<td>Essex</td>
<td>82.67</td>
</tr>
<tr>
<td>Salem</td>
<td>80.67</td>
</tr>
<tr>
<td>Cape May</td>
<td>77.19</td>
</tr>
<tr>
<td>Mercer</td>
<td>77.01</td>
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<tr>
<td>Passaic</td>
<td>68.22</td>
</tr>
<tr>
<td>Ocean</td>
<td>67.11</td>
</tr>
<tr>
<td>Union</td>
<td>64.54</td>
</tr>
<tr>
<td>Hudson</td>
<td>61.89</td>
</tr>
</tbody>
</table>

**Figure 4.55**

Source: NJDHSS 2008-2010 UB-04 Data – NJ Residents
Population: United States Census

**Essex County**

Essex County ranks fourth statewide in the rate of ACSC ED visits per 1,000 population.
- In 2011, Essex County had an ACSC ED visit rate of 82.7/1,000 compared to 59.8/1,000 for New Jersey.

**Children**

- Between 2008 and 2010, the rate of ED visits for ACSC among children declined from 119.8/1,000 to 104.0/1,000, but remains significantly higher than the State rate of 81.9/1,000.
- ENT conditions were the number one ACSC for which children experienced an ED visit.
- The top 5 ED visits for ACSC among children in the county were ENT, asthma, GI obstruction, cellulitis and bacterial pneumonia.

**Figure 4.56**

Total ACSC ED Visits For Children by County per 1,000

Source: NJDHSS 2008-2010 UB-04 Data – NJ Residents; U.S. Census Bureau, American Community Survey
Adults

- The rate of ED visits for ACSC among adults decreased from 76.1/1,000 to 75.4/1,000, but remains significantly higher than the State rate of 51.2/1,000.
- The top ED visit rates for an ACSC among Essex County adults was for ENT conditions at 12.6/1,000.
- Although the rate for adult asthma visits is declining, it remains significantly higher than the statewide rate.
Service Area ACSC ED Rates Among Children 0-17

The rate of ED visits for ACSC among children was 89.7/1,000 in the PSA and 93.1/1,000 in the SSA. The Essex County rate was 104.0/1,000 and the State rate was 78.2/1,000.

- In the PSA, Newark (07107) had the highest rate for ED visits for ACSC (148.2/1,000) with the highest visits for ENT conditions (846).
- The top 5 ED visit rates for ACSC among children in the PSA were ENT, GI Obstruction, Asthma, Cellulitis and Kidney/Urinary Tract infections.
- In the PSA, Newark (07104) had the highest number of ED visits for ENT (899).
- In the SSA, Newark (07102) had the highest rate of ED visits for ACSC (175.7/1,000).
- The top 5 ED visits for ACSC among children in the SSA were for ENT, Asthma, GI Obstruction, Cellulitis, and Bacterial Pneumonia.

Service Area ACSC ED Rates Among Adults 18+

The rate of ED visits for ACSC among those 18+ was 56.6/1,000 in the PSA and 65.5/1,000 in the SSA compared to Essex County (75.4/1,000) and State (51.2/1,000) rates.

- In the PSA, Newark (07107) had the highest rate (126.2/1,000).
- The top 5 ED visit types for ACSC among adults in the PSA were ENT, Cellulitis, Kidney/Urinary Tract Infections, Asthma and GI Obstruction.
- East Orange (07018) had the highest rate in the SSA (141.6/1,000).
- In the SSA, the top 5 were ENT, Asthma, Kidney/Urinary Tract Infections, Dental conditions, and Cellulitis.
Inpatient ACSC

Individuals can be admitted to a hospital due to an ACSC. Essex County ranks seventh statewide in the rate of ACSC admissions per 1,000.

- In 2010, Essex County had an ACSC inpatient use rate of 25.2/1,000 compared to 22.7/1,000 statewide.
- In Essex County and in New Jersey, congestive heart failure is the most common inpatient ACSC.

Inpatient ACSC Use Rates in the Service Area

The inpatient use rate for ACSC in the PSA was 23.6/1,000 compared to 25.1/1,000 for the county and 22.7/1,000 for the State.

- Newark (07107) had the highest use rate (35.1/1,000) in the PSA.
The top 5 inpatient ACSC use rates occurred in CHF, Diabetes, Cellulitis, Asthma, and Bacterial Pneumonia.

In the SSA, inpatient use rate for ACSC was 23.4/1,000.
- Newark (07102) had the highest use rate (40.9/1,000).
- The top 5 inpatient ACSC use rates were CHF, Diabetes, Asthma, Bacterial Pneumonia, and Cellulitis.

Service Area ED and Inpatient Utilization by Self-Pay/Charity Care/Uninsured

The PSA (22.3%) has a slightly lower percentage of self-pay, charity care and uninsured patients than the county (24.1%), and the SSA’s percentage is slightly higher (25.2%).
- The rate in the SSA (25.2%) exceeds the statewide rate (17.8%) and the county rate (24.1%).
- Newark (07029) in the PSA has the highest percentage (29.69%) inpatient and ED discharges among the uninsured/underinsured.
- The second highest in the PSA occurs in Harrison (07029) at 28.1%.
Workforce

A key to enhancing access is to increase the availability of high quality community prevention services, clinical prevention services as well as community-based care and treatment. To accomplish this, a well-trained, culturally competent public and private sector workforce is required. The workforce must hold expertise in wellness, preventive care, chronic-illness care and public health.

Nationally, PCPs are in short supply, and according to the Lewin Group, the demand for PCPs will increase between 3% and 6% with the initiation of healthcare reform. As described above, New Jersey is experiencing a shortage of PCPs. This is also the case for CMMC’s primary service area which has a significant need for additional primary care physicians.
3. Clinical Care Measures

Essex County

Hospital Inpatient and ED Utilization

Hospital inpatient and ED utilization tends to be higher in Essex County than statewide but CMMC’s PSA-SSA tends to experience lower inpatient and ED utilization than are experienced by county residents. It is expected that under healthcare reform, use rates will decrease further as care transitions and coordination of care improves, more care is delivered in ambulatory care settings and access to primary and preventive care increases.

Nearly 80% of U.S. adults (18-64) cite the reason for their last ED visit (that did not result in a hospitalization) was a lack of access to other providers. Specifically:

- 48.0% Doctor’s office not open
- 46.3% No other place to go
- 45.8% The ED was their closest provider
- 17.7% Most of their care was at the ED

- In 2010, Essex County had the ninth highest inpatient utilization rate in the State, 180.9/1,000, compared to 171.8 statewide.

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• Essex County’s utilization rate for ED visits is 413.7, making it the third highest in the State.
• The New Jersey rate in 2010 was 316.2.

Service Area Use Rates

Inpatient use rates for CMMC’s PSA and SSA are generally lower than use rates in the county (180.9/1,000).
• The PSA inpatient use rate was 172.9/1,000.
• The SSA inpatient use rate was 166.4/1,000.
• Two zip codes in the service area had inpatient use rates that were much higher than the State and county rate.
  o Newark (07104) was 217.8/1,000.
  o Newark (07107) was 201.1/1,000.

PSA and SSA Emergency Department visit rates per 1,000 are also lower than the county (408.9/1,000) rate. The PSA and SSA ED visit rates were above the State average (315.4/1,000).
• The ED visit rate in the PSA was 354.5/1,000; and in the SSA it was 364.0/1,000.
• The same two zip codes in the PSA have exceptionally high ED visit rates as noted below.
  o Newark (07107) = 637.1/1,000
  o Newark (07104) = 569.2/1,000

Methods to reduce ED use rates include addressing potential primary care access issues and effective management of patients using the ED for ACSC.

Service Area-Specific Utilization by Service Line

CMMC’s highest PSA inpatient volume comes from the following service lines:
  Cardiology
  Pulmonary
  Gastroenterology
  Obstetrics

Over the next five years inpatient utilization in the PSA is expected to decline by 3% with much of the decline related to shifts from inpatient to outpatient settings. Increases are anticipated in General Medicine, Neurosurgery, Orthopedics Rehabilitation and Thoracic Surgery.

Outpatient Growth

Outpatient service utilization is anticipated to increase in nearly all specialty services including Endocrinology, Neurology, joint replacement and glaucoma procedures. Areas of decline are anticipated in Obstetrics/Gynecology and Psychiatry.

Cesarean-Section

Rates for Cesarean-sections in the U.S. continue to rise well above the 15% recommended by the World Health Organization. In 1965, the U.S. rate for cesarean-sections was 4.5%. Since then the rate has
rised steadily, leveling off at 32.8% in 2010 and 2011. As a result, nearly one in three moms gave birth by Cesarean-section.

Cesarean-section is major abdominal surgery and increases the chance of long and short term side effects for both mother and child. As a result, Healthy People 2020 has recommended a 10% improvement of the rate of Cesarean births to 23.9% among low-risk women with no prior Cesarean births, and for low-risk women with a prior Cesarean birth the recommendation is to reduce Cesarean-section rate from 90.8% to 81.7%.

Current research suggests that the following interconnected factors appear to contribute to high Cesarean-section rates.

- Low priority of enhancing woman’s own abilities to give birth.
- Side effects of common labor interventions.
- Refusal to offer informed choice of vaginal birth.
- Casual attitudes about surgery and variation in professional practice style.
- Limited awareness of harms that are more likely with Cesarean-sections.
- Incentive to practice in a manner that is more efficient for providers.

**Essex County**

- In 2010, overall Cesarean-section rates in Essex County were over 40% of all births, well above the U.S. rate and higher than the statewide rate (39.4%).
- Primary Cesarean-section rates at 13.2% were better than the Healthy People 2020 target of 23.9%.
- Repeat Cesarean-section rates were on par with those statewide.

**Service Area**

In order to gain a perspective of the utilization of Cesarean-section at the service area/zip code level, we employed the AHQR inpatient quality indicator #21 which excludes breech births, abnormal presentation, pre-term, fetal deaths, and multiple gestations, and calculates an overall Cesarean-section rate. In addition, because of the data available, Cesarean-section rates are presented as a percent of deliveries rather than as presented above as a percent of births, resulting in small differences.

Accordingly, Essex County’s overall Cesarean-section rate in 2010, as a percent of total deliveries, is 45.7% compared to the New Jersey rate of 43.4%.

- The Cesarean-section rate for CMMC’s PSA is 48.0%.
- The SSA rate is 45.1%.
- Within the service area are several zip codes with rates that are higher:
  - North Arlington = 58.8%
  - Belleville = 52.7%
  - Lyndhurst = 52.0%

---


The figure below provides the Cesarean-section rates by the five Essex County hospitals with maternity units.

- Three (NBIMC, SBMC and HUMC-Mountainside) of the five hospitals with maternity units have rates that exceed the State and county rates.

**Figure 4.66**

<table>
<thead>
<tr>
<th>Hospital</th>
<th>Cesarean Section Rate 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMMC</td>
<td>43.2%</td>
</tr>
<tr>
<td>SBMC</td>
<td>51.0%</td>
</tr>
<tr>
<td>CMMC</td>
<td>43.2%</td>
</tr>
<tr>
<td>NBIMC</td>
<td>46.7%</td>
</tr>
<tr>
<td>Univ. Hosp. UMDNJ</td>
<td>40.4%</td>
</tr>
<tr>
<td>HUMC - Mountainside</td>
<td>49.8%</td>
</tr>
</tbody>
</table>

*Source: 2008-2010 NJ, NY and PA UB-04 Data (NJ Residents Only), Percentages calculated using AHRQ, Inpatient Quality Indicator #21 - Cesarean Delivery Rate (Version 4.4 – March 2012)*

**Readmissions**

Nearly one in five Medicare beneficiaries is readmitted to a hospital within a month. In an effort to reduce costs and improve the transition of care from Medical Center to home or other care setting, readmission rates for three conditions: congestive heart failure, heart attack and pneumonia are being tracked and hospitals with high readmission rates among these patient categories are receiving penalties of up to 1% of their Medicare reimbursement in FY 2013.

Although New Jersey hospitals have reduced admission rates from 21.8% in the second quarter of 2008 to 20.5% in the first quarter of 2012, New Jersey continues to rank among the bottom of states for controlling readmissions. Due to the above, it is not surprising that the Essex County rate of hospital admissions per 1,000 Medicare beneficiaries was not statistically different from that of New Jersey.

- In each of the four case types shown in Figure 4.63, Essex County’s readmission rates were higher than the State.
- The figure below shows the CMS statewide readmission penalty as well as the readmission penalty rates for all hospitals in Essex County. Two New Jersey hospitals in Essex County, SBMC and HUMC-Mountainside, had penalties below 50%.
A key to avoiding penalties is to reduce CMMC’s excess readmission ratios which are shown in Figure 4.65. A ratio less than 1% represents performance that is better than the average hospital that admitted similar patients.

4. **Health Behaviors**

Health behaviors such as eating sensibly and exercising lower the risk of conditions like heart disease and diabetes, while unheathy behaviors like smoking and excessive drinking and high risk sexual activities increase the risk of conditions like lung cancer, heart disease and liver disease. Preventive health behaviors like prenatal care and health screenings can result in early identification and treatment of disease.

**Maternal/Fetal Health Indicators**

**Prenatal Care**

Pregnancy can provide an opportunity to identify existing health risks in women and to prevent future health problems for women and their children.

According to *Healthy People 2020*, factors that affect pregnancy and childbirth, include:
- Preconception health status, including stress
- Age
- Access to appropriate preconception and interconception healthcare
- Poverty

In 2010, 69.3% of Essex County live births initiated prenatal care in the first trimester.
- This was an increase of 6.9 percentage points over the percent in 2006.
• This compared to 81.1% of New Jersey live births receiving care in the first trimester.
• The percentage of live births in Essex County receiving first trimester care was significantly lower than the statewide percentage and the Healthy People 2020 target (79.9%).
• Between 2006 and 2010 the percent of Essex County live births with no prenatal care decreased from 2.7% to 2.1%.
• The percentage of Essex County live births with no prenatal care (2.1%) remains significantly higher than the State rate of 0.9%.

**Figure 4.71**
Maternal Health

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Healthy People 2020 Target</th>
<th>County Health Rankings Benchmark</th>
<th>New Jersey</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Trimester Prenatal Care:</td>
<td></td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Percentage of Live Births</td>
<td></td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>No Prenatal Care:</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Percentage of Live Births</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**High Risk Sexual Behaviors**

**Teen Pregnancy**

One in five unplanned pregnancies each year is among teens; and 82% of pregnancies to mothers aged 15 to 19 are unintended. Teen mothers:

• Are less likely to graduate from high school or attain a GED by the time they reach age 30.
• Earn an average of approximately $3,500 less per year, when compared with those who delay childbearing until their 20s.
• Receive nearly twice as much Federal aid for nearly twice as long.28

Births resulting from unplanned pregnancies can have negative consequences including birth defects and low birth weight. Children from unintended pregnancies are more likely to experience poor mental and physical health during childhood, and have lower educational attainment and more behavioral issues in their teen years. Sons of teen mothers are more likely to be incarcerated, and daughters are more likely to become adolescent mothers.29

The increased costs of healthcare and social service costs, increased costs for incarceration, rates of children born to teen parents, and cost of tax revenue from teen moms who earn less money costs U.S. tax payers an estimated $11 billion a year.30

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29 Ibid.
Essex County Teen Births

Teen births among 15-17 year olds and 15-19 declined in Essex County but remained significantly higher than the rate statewide.

- The birth rate for teens 15-19 in Essex County is nearly twice the CHR benchmark based upon a 6-year average from 2002 to 2008.
- The rate of teen births among those 15-17 (21.0/1,000 females) is lower than the Healthy People 2020 target (36.2/1,000).

Figure 4.72
Teen Births

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Healthy People 2020 Target</th>
<th>County Health Rankings Benchmark</th>
<th>New Jersey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teen Birth Ages 15-19: Rate per 1,000 Female Population</td>
<td>N/A</td>
<td>Red</td>
<td>Red</td>
</tr>
<tr>
<td>Teen Birth Ages 15-17: Rate per 1,000 Female Population</td>
<td>Green</td>
<td>N/A</td>
<td>Red</td>
</tr>
</tbody>
</table>

Service Area Teen Deliveries

More recent data available through the 2010 UB New Jersey data shows the rate for teen deliveries 15-19 dropped to 19.5/1,000 statewide.

- The rate among Essex County teens also dropped (30.0/1,000) but continues to be higher than the statewide rate.
- The PSA teen delivery rate in 2010 was 25.9/1,000. The SSA teen delivery rate was 25.3/1,000.
- Within the PSA three zip codes exceed the State, county and service area rates (Newark 07104 and 07107, and Harrison). The highest (Newark 07104) is nearly three times the State rate.

Figure 4.73
Teen Births (per 1,000)

Source: National Center for Health Statistics, County Health Rankings; N.J. Department of Health and Senior Services, Center for Health Statistics, N.J. State Health Assessment Data
Sexually Transmitted Diseases

Background

Sexually transmitted diseases (STD) refer to more than 25 infectious organisms that are transmitted primarily through (unprotected) sexual activity. STDs remain a significant public health problem in the Essex County and the United States. Factors that affect the spread of STDs include:

- Asymptomatic nature of STDs.
  - The majority of STDs either do not produce any symptoms, or they produce symptoms so mild that they are unnoticed. As a result, many infected persons do not know that they need medical care.

- Gender disparities.
  - Women suffer more frequent and more serious STD complications than men, including pelvic inflammatory disease, ectopic pregnancy, infertility, and chronic pelvic pain.31

- Age disparities.
  - Nationally, sexually active adolescents ages 15 to 19 and young adults ages 20 to 24 are at higher risk for getting STDs than older adults. 32

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32 Ibid.
Incidence

Essex County sexually transmitted disease rates per 100,000:
- The rates for Chlamydia and gonorrhea increased between 2008 and 2010, while the rate of syphilis declined.
- The rate for Chlamydia, gonorrhea and syphilis are all significantly higher than the State rate.
- The rate of Chlamydia in Essex County is eight times higher than the national benchmark.

HIV/AIDS

HIV/AIDS can be transmitted through sexual contact, through intravenous drug use or contact with bodily fluids.
- In 2010, the HIV/AIDS prevalence rate per 100,000 was significantly (three times) higher than the statewide rate.
- Black residents constitute 77.8% of HIV/AIDS cases in Essex County.

The rate of new HIV/AIDS cases declined by 50% in Essex County between 2005 and 2010, but remains significantly higher (more than three times) than the statewide rate.
Tobacco Use

Tobacco use is the single most preventable cause of death and disease in the United States. The hazards of tobacco use are well known.

- Cigarette smokers are at high risk for cancer, heart disease, respiratory diseases, and premature birth.
- Secondhand smoke causes heart disease and lung cancer in adults and asthma, respiratory infections, ear infections and sudden infant death syndrome (SIDS) in children.
- Smokeless tobacco causes serious oral health problems, including mouth and gum cancer, periodontitis, and tooth loss.
- Cigar and pipe use causes cancer of the larynx, mouth, esophagus, and lung.33

Essex County

Smoking is declining in the U.S., Essex County and New Jersey.

- Between 2006 and 2010, smoking in the U.S. declined from 20.1% to 17.3%.
- During the same time, smoking in Essex County declined from 16.1% to 14.8%.

Figure 4.79
HIV/AIDS Cases by County and State (per 100,000)

Source: N.J. Department of Health and Senior Services, Division of HIV, STD, and TB Services, HIV/AIDS Reporting System, 2011; U.S. Census Bureau, American Community Survey
Note: New cases reported indicates new cases per year.

Figure 4.80
Tobacco Use by County and State (%)

Source: CDC, Behavioral Risk Factor Surveillance System, County Health Rankings

The percent of current smokers in Essex County remains significantly higher than the Healthy People 2020 target of 12%.

**Diet and Exercise**

According to the Centers for Disease Control and Prevention (CDC), poor diet and physical inactivity have nearly caught up with tobacco use as the second leading preventable cause of death in the United States.

It has been estimated that the total annual economic cost of overweight and obesity in the United States and Canada combining medical costs, excess mortality and disability was approximately $300 billion in 2009.34

In trying to promote healthy eating as a way to raise the health status of individuals and communities, the high prices for fresh fruits, fresh vegetables, and whole grains have put that common sense, non-medical approach out of reach for those already living in the margins of poverty. The reality is that it is cheaper to eat poorly.

**Diet and Nutrition**

Diet and body weight are related to health status. A healthy diet reduces risks for many health conditions discussed in this report, including:

- Overweight and obesity
- Heart disease
- High blood pressure
- Stroke
- Type 2 diabetes
- Osteoporosis
- Oral disease
- Some cancers
- Complications during pregnancy.35

**Essex County**

Obesity in Essex County rose between 2006 and 2010 from 24.2% to 27.3%.

- Obesity in Essex County was higher than the State, MMSA and comparative counties.
- Only the U.S. reported rate, 27.5%, was higher.

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Despite the increase, Essex County’s obesity rate was statistically similar to the statewide average, *Healthy People 2020* target, and the CHR benchmark.

**Supplemental Food Assistance**

Essex County recipients of the Supplemental Nutritional Assistance Program (SNAP) increased between 2007 and 2011.

- The percent of all SNAP recipients grew from 9.5% to 14.7%.
- Among children the percent grew from 19.9% to 30.4%.
- Essex County has a significantly higher percent of SNAP recipients than the State.

![SNAP by Count and State (%)](image)

![SNAP Trend](image)

Source: NJ Department of Human Services, Division of Family Development, Current Program Statistics, 2011; U.S. Census, ACS, Claritas 2011-2017 Projection / Intervening Year: Straight Line Method. Note: The total percentages are based on the total and the percentages of children are based on the number of children (<18 years). Percentages are for December of each year given.

**Fruit and Vegetable Consumption**

Between 2005 and 2009 the percent of Essex County residents who consumed five servings of fruit and vegetables a day fell from 28.5% to 28.1%.

- This percentage is not statistically different from the percentage statewide but is higher than the U.S. average of 23.4%.
Physical Exercise

Regular physical exercise is declining among Essex County residents.

- Between 2005 and 2009, the percent of Essex County adults engaging in adequate physical activity declined from 46.0% to 43.1%.
- This is statistically lower than the Healthy People 2020 target of 47.9%.
- The percent of county residents reporting any physical activity rose only 0.2 percentage points between 2005 and 2010, from 70.7% to 70.9%, and was statistically lower than the CHR benchmark (79%).
- In 2011, 69% of Newark residents reported participating in any physical activity.
**Figure 4.85**
**Adults with 30+ minutes of moderate physical activity 5 or more days/week, or vigorous physical activity for 20+ minutes 3 or more days/week (%)**

<table>
<thead>
<tr>
<th>Year</th>
<th>New Jersey</th>
<th>Essex County</th>
<th>Newark-Union, NJ-PA MMSA</th>
<th>Union County</th>
<th>Middlesex County</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>45.9%</td>
<td>54.8%</td>
<td>46.0%</td>
<td>40.5%</td>
<td>41.1%</td>
<td>46.0%</td>
</tr>
<tr>
<td>2009</td>
<td>54.2%</td>
<td>49.1%</td>
<td>47.5%</td>
<td>39.2%</td>
<td>49.3%</td>
<td>51.0%</td>
</tr>
</tbody>
</table>

**Figure 4.86**
**Participated in Physical Activity in the Past Month (%)**

<table>
<thead>
<tr>
<th>Year</th>
<th>New Jersey</th>
<th>Essex County</th>
<th>Newark-Union, NJ-PA MMSA</th>
<th>Union County</th>
<th>Middlesex County</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>72.1%</td>
<td>72.1%</td>
<td>74.8%</td>
<td>74.8%</td>
<td>72.1%</td>
<td>76.1%</td>
</tr>
<tr>
<td>2010</td>
<td>72.1%</td>
<td>70.9%</td>
<td>79.9%</td>
<td>70.9%</td>
<td>69.9%</td>
<td>70.9%</td>
</tr>
</tbody>
</table>

**Source:** CDC, Behavioral Risk Factor Surveillance System

Note: Healthy People 2020 baseline and target are defined as, “moderate intensity for at least 150 minutes/week, or 75/minutes/week of vigorous intensity, or an equivalent combination.”

**Figure 4.87**
**Diet and Exercise**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Healthy People 2020 Target</th>
<th>County Health Rankings Benchmark</th>
<th>New Jersey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obesity: Percent with Reported BMI of &gt;= 30</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adults with 30+ Minutes of Moderate Physical Activity 5 or More Days/Week,</td>
<td></td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>or Vigorous Physical Activity for 20+ Minutes 3 or More Days/Week</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>During the Past Month, Did You Participate in Any Physical Activities? %==Yes</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adults Who Have Consumed Fruits and Vegetables Five or More Times/Day</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Percent of Population Receiving SNAP</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Percent of Children Receiving SNAP</td>
<td>N/A</td>
<td>N/A</td>
<td>Red</td>
</tr>
</tbody>
</table>
Health Screenings

Health screenings include preventable actions people can take to ensure early identification or monitoring of disease processes.

Cancer Screenings

Screening is effective in identifying some types of cancer including:

Breast Cancer (mammography)
- In Essex County the percentage of women age 40 and over who did not have a mammogram decreased by 8.2 percentage points from 27.6% to 19.4% and is in line with the Healthy People 2020 target of 18.9%.

Cervical Cancer (pap smear)
- The percentage of women 18 and over who had a pap smear in the last three years declined between 2004 and 2010 from 86.8% to 81.3%.
- It is lower than the Healthy People 2020 target of 93.0%.

Colon-rectal Cancer (sigmoidoscopy or colonoscopy)
- The percentage of Essex County adults 50+ who ever had a sigmoidoscopy or colonoscopy increased 5.5 percentage points between 2004 and 2010, from 62.3% to 67.8%.

Figure 4.88  
Cancer Screenings

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Healthy People 2020 Target</th>
<th>County Health Rankings Benchmark</th>
<th>New Jersey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of Women Age 40+ Who Have NOT Had a Mammogram Within Past Two Years</td>
<td><img src="image" alt="Yellow" /></td>
<td>N/A</td>
<td><img src="image" alt="Yellow" /></td>
</tr>
<tr>
<td>Percent of Women 18 Years and Over Who have Had a Pap Test in the Past 3 years</td>
<td><img src="image" alt="Cherry" /></td>
<td>N/A</td>
<td><img src="image" alt="Yellow" /></td>
</tr>
<tr>
<td>Percent of Adults 50 Years and Over Who Have Ever Had a Sigmoidoscopy or Colonoscopy</td>
<td><img src="image" alt="Yellow" /></td>
<td>N/A</td>
<td><img src="image" alt="Yellow" /></td>
</tr>
</tbody>
</table>

Research shows that a recommendation from a healthcare provider is the most important reason patients cite for having cancer screening tests.36

Diabetes Screening

Diabetes screenings are an effective way of identifying and managing the illness.

- The percentage of diabetes screenings among diabetic Medicare enrollees increased an average of 71% between 2003 and 2006, to 78% in 2009.

**Figure 4.89**
Diabetes Screening

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Healthy People 2020 Target</th>
<th>County Health Rankings Benchmark</th>
<th>New Jersey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of Diabetic Medicare Enrollees that Receive HbA1c Screening</td>
<td>N/A</td>
<td><img src="image" alt="Benchmark" /></td>
<td><img src="image" alt="New Jersey" /></td>
</tr>
</tbody>
</table>

Immunizations

Immunizations are a primary means of providing individuals and children protection from potentially fatal illnesses.

**Adult Flu**

- Between 2006 and 2010 there was a decline in the percent of adults 65+ who failed to get a flu shot from 42.6% to 37.5%.
- The Healthy People 2020 goal is to have no more than 10% go without this vaccine.

**Figure 4.90**
Percent of Adults Age 65+ who have NOT had a Flu Shot in the Past Year

Source: CDC, Behavioral Risk Factor Surveillance System
Adult Pneumonia

- The percent of adults 65+ who have **never had** a pneumonia vaccine between 2006 and 2010 increased from 41.2% to 45.2%.
- The *Healthy People 2020* goal is for no more than 10% to go without this vaccine.

**Figure 4.91**
Percent of Adults Age 65+ who have NEVER had a Pneumonia Vaccine; % = Not Had

![Graph showing percent of adults age 65+ who have never had a pneumonia vaccine between 2006 and 2010](image)

**Childhood Immunizations for Ages 19-35 Months (DPT, polio, MMR and Hib)**

- The childhood immunization rate rose statewide and in Essex County.
- The rate in Essex rose only 0.2 percentage points from 74.8% to 75%.
- Bloomfield/Caldwell Health Department reported immunizing 695 children in 2011.

**Figure 4.92**
Biennial Childhood Immunization for Age 19-35 Months for 4:3:1:3 Vaccination Series

![Graph showing biennial childhood immunization rates for 1999-2008](image)
5. **Physical Environment**

Humans interact with the environment constantly. These interactions affect quality of life, years of healthy life lived, and health disparities. The World Health Organization (WHO) defines environment, as it relates to health, as “all the physical, chemical, and biological factors external to a person, and all the related behaviors.” Environmental health consists of preventing or controlling disease, injury, and disability related to the interactions between people and their environment.

**Air Quality**

According to the CHR, the negative impact of air pollution on people’s health include: decreased lung function, chronic bronchitis, asthma, and other adverse pulmonary consequences. Exposure to excess levels of ozone or fine particulate matter are correlated with increased hospital emergency room visits and admissions among asthmatics or others with compromised respiratory function. Increases in these pollutants are associated with high risks of death due to cardiopulmonary and cardiovascular conditions and ischemic heart disease. All-cause mortality is also associated with higher concentrations of these pollutants.

- The number of unhealthy air quality days due to fine particulate matter declined by one day in Essex County between 2005 and 2007 compared to a one day increase in New Jersey.
- The number of unhealthy air quality days was significantly worse than the CHR benchmark.
- Essex County has also seen improvement in the annual number of unhealthy air due to ozone, a drop from 12 days to 9 days.
- This compares to a CHR benchmark of 0.
Lead Hazards

Lead poisoning is a medical condition caused by increased levels of heavy metal lead in the body. Lead interferes with a variety of body processes and is toxic to many organs and tissue including heart, bones, intestines, kidneys, and reproductive and nervous systems. The main tool for the diagnosis is the measurement of blood lead levels or a urine test. The results of these tests indicate how much lead is circulating within the blood stream. The Centers for Disease Control (CDC) sets the standard for elevated blood lead levels for adults to 25 micrograms per deciliter (ug/dl) of whole blood, and 5 (ug/dl) of whole blood as of 2012 for children; down from the previous 10 ug/dl. Children are especially prone to the ill health effects of lead exposure. Scientists have found that lead in children can disrupt growth and development of a child’s brain and central nervous system. The first 3-6 years of life is when the human brain grows the fastest and when critical connections in the brain that control thought, learning, hearing, movement, behavior and emotions are being formed.
Lead Exposure

The most common source of lead in New Jersey is paint that was used in interior or exterior surfaces of homes built before 1978. The most common form of exposure in adults occurs from occupational exposure. Young children can be exposed by:

- Swallowing leaded dust or soil that gets on their hands, or other objects, that they put into their mouths such as toys.
- Swallowing leaded paint chips.
- Breathing leaded dust or lead contaminated air.
- Eating food or drinking water that is contaminated with lead.

Essex County

- Essex County and its major urban centers continue to have a significantly higher percentage of housing built before 1950 than exists statewide.
- Essex County children have significantly higher blood lead levels than found in children statewide.
- This was true for blood lead levels ranging from 10-19 ug/dl and for levels over 20 ug/dl.
- The Bloomfield/Caldwell Health Department reported five cases of lead poisoning among children in 2011, and 9,624 possible lead hazards in 1-4 family buildings.

Figure 4.97

Blood Lead Levels of Children (less than 17 years) Tested for Lead Poisoning, 2010

Source: NJ Department of Health and Senior Services, Division of Family Health Services, Maternal and Child Health Services, Child and Adolescent Health Program, Centers for Disease Control

Note: The CDC defines a blood lead level of 10 ug/dL as the threshold that should prompt public health actions.
Figure 4.98
Physical Environment

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Healthy People 2020 Target</th>
<th>County Health Rankings Benchmark</th>
<th>New Jersey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual Number of Unhealthy Air Quality Days Due to Fine Particulate Matter</td>
<td>N/A</td>
<td>red</td>
<td>yellow</td>
</tr>
<tr>
<td>Annual Number of Unhealthy Air Days Due to Ozone</td>
<td>N/A</td>
<td>red</td>
<td>yellow</td>
</tr>
<tr>
<td>Blood Lead Levels of Children (less than 17 years) Tested for Lead Poisoning: 10-19 ug/DL</td>
<td>N/A</td>
<td>N/A</td>
<td>red</td>
</tr>
<tr>
<td>Blood Lead Levels of Children (less than 17 years) Tested for Lead Poisoning: 20+ ug/DL</td>
<td>N/A</td>
<td>N/A</td>
<td>red</td>
</tr>
</tbody>
</table>

Access to Healthy Foods
- In 2006, 1% of low income Essex County residents did not live close to a grocery store compared to 4% in New Jersey.
- In 2009, 53% of all restaurants in Essex County were fast food restaurants compared to 50% statewide; more than double the national benchmark.
- In 2006, Essex County had 25 liquor stores per 100,000 residents compared to 20/100,000 statewide.

Figure 4.99
Physical Environment

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Healthy People 2020 Target</th>
<th>County Health Rankings Benchmark</th>
<th>New Jersey</th>
</tr>
</thead>
<tbody>
<tr>
<td>People Who Are Low Income and Do Not Live Close to a Grocery Store:</td>
<td>N/A</td>
<td>N/A</td>
<td>green</td>
</tr>
<tr>
<td>Percent of Total Population</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fast Food Establishments:</td>
<td>N/A</td>
<td>N/A</td>
<td>yellow</td>
</tr>
<tr>
<td>Percent of all Restaurants</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liquor Stores:</td>
<td>N/A</td>
<td>N/A</td>
<td>yellow</td>
</tr>
<tr>
<td>Rate per 100,000 Population</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Crime and Injury Prevention

Healthy People 2020 asserts most events resulting in injury, disability, or death are predictable and preventable. For unintentional injuries, there is a need to better understand the trends, causes, and prevention strategies. Specifically:
- Individual behaviors—choices people make such as alcohol use or risk-taking.
- Physical environment—home and community that affect the rate of injury related to falls, fires and burns, drowning, violence.
- Social environment—individual social relationships, community, societal-level factors.  

**Essex County**

- Both the violent crimes rate and homicide rates have declined in Essex County but remain significantly higher than the statewide rate. The violent crime rate in Essex County is nine times higher than the CHR benchmark, while the homicide rate was nearly three times higher than the statewide rate.
- Burglary rates declined from 6.7/1,000 to 6.0/1,000 between 2006 and 2010.
- Domestic violence remained static statewide at 2.6/1,000 between 2006 and 2010, but increased from 2.0/1,000 to 2.2/1,000 in Essex County.

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• Reports of child abuse in Essex County’s major cities Newark, Irvington and East Orange were well above those seen in the county and statewide.
• The highest percent of substantiated child abuse reports occurred in East Orange (14%) in CMMC’s SSA.

Injuries
• The Essex County motor vehicle crash rate (6.2/100,000) was lower than the Healthy People 2020 target of 12.4/100,000.
• Essex County had an age-adjusted rate of 4.4/100,000 deaths due to falls, which was significantly better than the Healthy People 2020 target of 7.0/100,000.
• Age-adjusted rates for poisoning in Essex County (8.7/1,000) were also significantly better than the Healthy People 2020 target (13.1/1,000).
Figure 4.104
Deaths Due to Falls per 100,000

Source: NJ Department of Health and Senior Services, Center for Health Statistics, NJ State Health Assessment Data
Note: The Healthy People 2020 goal is to, “prevent an increase in fall-related deaths.” 2004 Essex Data not Statistically Significant due to too few cases.

Figure 4.105
Deaths Due to Poisoning per 100,000

Source: NJ Department of Health and Senior Services, Center for Health Statistics, NJ State Health Assessment Data
Note: The Healthy People 2010 goal is to, “prevent an increase in the rate of poisoning deaths.”
6. **Behavioral Health**

Behavioral health (mental health and chemical dependency) is increasingly being linked to physical health indicators. Most Essex County behavioral health indicators are worse than found in New Jersey. It is expected that in the future behavioral health systems will be embedded in new structures such as accountable care organizations, integrated healthcare systems and preferred provider organizations.38

**Mental Health**

Mental health is a state of successful performance of mental function, resulting in productive activities, fulfilling relationships with other people, and the ability to adapt to change and to cope with challenges. Mental disorders are health conditions that are characterized by alterations in thinking, mood, and/or behavior that are associated with distress and/or impaired functioning. There is often a stigma associated with mental health diagnosis and treatment, particularly among African-Americans and Latinos.39

- Mental disorders are among the most common causes of disability.
  - According to the National Institute of Mental Health (NIMH), in any given year, an estimated 1 in 17 Americans have a seriously debilitating mental illness.
- Mental health disorders are the leading cause of disability in the United States and Canada, accounting for 25% of all years of life lost to disability and premature mortality.
  - Mental health plays a major role in people’s ability to maintain good physical health.
  - Problems with physical health, such as chronic diseases, can have a serious impact on mental health and decrease a person’s ability to participate in treatment and recovery.40

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39 Ibid.
40 Ibid.
**Essex County**

- Admission rates for mental/behavioral health conditions exceed the statewide rate and have been on the rise since 2006.
- Rates among all age groups except the elderly have increased.

*Figure 4.107 Mental/Behavioral Health Admissions by Age (per 1,000)*

*Figure 4.108 Mental/Behavioral Health Admissions Trends (per 1,000)*

*Source: UB-04 2010 Discharges, Census 2010 Population*

**Figure 4.109 Mental/Behavioral Health ED Visits by Age (per 1,000)**

*Figure 4.110 Mental/Behavioral Health ED Visits Trends (per 1,000)*

*Source: UB-04 2010 Discharges, Census 2010 Population*

- ED visits due to mental/behavioral health conditions have also risen.
- The highest rate of ED visits occurs among adults.
- From 2006 to 2010, the rate of ED visits for behavioral health rose among all age groups.

*Source: UB-04 2010 Discharges, Census 2010 Population*

**Figure 4.107 Mental/Behavioral Health Admissions by Age (per 1,000)**

**Figure 4.108 Mental/Behavioral Health Admissions Trends (per 1,000)**

**Figure 4.109 Mental/Behavioral Health ED Visits by Age (per 1,000)**

**Figure 4.110 Mental/Behavioral Health ED Visits Trends (per 1,000)**

*Source: UB-04 2010 Discharges, Census 2010 Population*
Mental Health Utilization in the Service Area

- Inpatient use rates for mental health in the PSA are only slightly lower than the county rate and higher than the statewide rate.
- ED use rates for mental health in the PSA are higher than the county and statewide rates.
- Inpatient use rates in the SSA are above the county, PSA and statewide use rates.
- SSA ED use rates for mental health care are lower than the PSA and county use rates.

![Behavioral Health Use Rates- 2010](image)

**Figure 4.111**

**Substance Use/Abuse**

Substance abuse refers to a set of related conditions associated with the consumption of mind- and behavior-altering substances that have negative behavioral and health outcomes. Substance abuse has a major impact on individuals, families, and communities. The effects of substance abuse are cumulative, significantly contributing to costly social, physical, mental, and public health problems.

In 2005, an estimated 22 million Americans struggled with a drug or alcohol problem. Almost 95% of people with substance use problems are considered unaware of their problem.41

**Essex County**

The percent of excessive drinkers combine the percent of people who are heavy drinkers together with binge drinkers.
- Between 2006 and 2010, reported excessive drinking in Essex County declined from 16.8% to 15.4%. This compared to the statewide percentage of excessive drinking of 18.1% and U.S. rate of 20.4%.
- The Essex County rate was nearly double the National Benchmark of 8%.
- Alcohol treatment admissions increased from 16% of all drug treatment admissions to 22% of all drug treatment admissions.

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• Despite the gain, the percent of alcohol treatment admissions were statistically lower than the statewide average (34%).

![Figure 4.112](image1)

**Figure 4.112**
**Excessive Drinking by County and State (%)**

![Figure 4.113](image2)

**Figure 4.113**
**Excessive Drinking Trends (%)**

**Figure 4.114**
**Primary Drug Treatment Admissions (per 100,000)**

**Figure 4.115**
**Primary Drug Treatment Admissions – Trends (%) (per 100,000)**

Source: CDC, Behavioral Risk Factor Surveillance System
Note: Heavy drinkers are defined as adult men who have more than 2 drinks per day and adult women who have more than one drink per day. Binge drinkers are defined as adult men who have 5 or more drinks on one occasion and females who have 4 or more drinks on one occasion.

• In 2010, the most common drug being treated in Essex County was heroin and other opioids.
• Heroin, Cocaine and other drugs admissions in Essex County were significantly higher than statewide admissions.
• The overall rate of substance abuse admissions declined from 1,096/100,000 in 2007 to 892/100,000 in 2010, but remains significantly higher than the statewide rate.

Source: N.J. Department Human Services, Division of Addiction Services, New Jersey Drug and Alcohol Abuse Treatment
Note: The percentages are based on the total number of treatment admissions for all primary drugs.
Alcohol dependence resulted in a higher rate of adult ED visits than for other mental disorders.

Between 2006 and 2010 the rate per 1,000 for ED visits among adults for mental disorders increased from 20.7/1000 to 21.7/1000.
**Figure 4.120**  
Substance Use/Abuse

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Healthy People 2020 Target</th>
<th>County Health Rankings Benchmark</th>
<th>New Jersey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excessive Drinking: Heavy Drinkers Plus Binge Drinkers</td>
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<td><img src="image" alt="Benchmark" /></td>
<td><img src="image" alt="New Jersey" /></td>
</tr>
<tr>
<td>Treatment Admissions for Alcohol: Percentage of Total Treatment Admissions</td>
<td>N/A</td>
<td><img src="image" alt="Baseline" /></td>
<td><img src="image" alt="New Jersey" /></td>
</tr>
<tr>
<td>Treatment Admissions for Heroin/Other Opioids: Percentage of Total Treatment Admissions</td>
<td>N/A</td>
<td><img src="image" alt="Baseline" /></td>
<td><img src="image" alt="New Jersey" /></td>
</tr>
<tr>
<td>Treatment Admissions for Cocaine: Percentage of Total Treatment Admissions</td>
<td>N/A</td>
<td><img src="image" alt="Baseline" /></td>
<td><img src="image" alt="New Jersey" /></td>
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<tr>
<td>Treatment Admissions for Marijuana: Percentage of Total Treatment Admissions</td>
<td>N/A</td>
<td><img src="image" alt="Baseline" /></td>
<td><img src="image" alt="New Jersey" /></td>
</tr>
<tr>
<td>Treatment Admissions for Other Drugs: Percentage of Total Treatment Admissions</td>
<td>N/A</td>
<td><img src="image" alt="Baseline" /></td>
<td><img src="image" alt="New Jersey" /></td>
</tr>
<tr>
<td>Total Substance Abuse Treatment Admissions: Rate per 100,000 Population</td>
<td>N/A</td>
<td><img src="image" alt="Baseline" /></td>
<td><img src="image" alt="New Jersey" /></td>
</tr>
</tbody>
</table>

**Substance Abuse Utilization in the Service Area**

- Inpatient use rates for substance abuse in the PSA are marginally higher than the county rate and higher than the statewide rate.
- ED use rates for substance abuse in the PSA are lower than the county and slightly higher than the State.
- Inpatient use rates for substance abuse in the SSA are similar to those in the PSA and county but higher than statewide.
- ED substance abuse rates in the SSA are higher than the PSA, State and county.

**Figure 4.121**

**Substance Abuse Use Rates - 2010**

![Graph showing Substance Abuse Use Rates - 2010](image)

*Source: UB-04 2010 Discharges, Census 2010 Population
**Metal Health Defined As MDC 19, Substance Abuse Defined As MDC 20*
5. **ASSETS AND GAPS ANALYSIS**

Assets and gaps in Essex County are discussed below in terms of health outcomes and health factors which influence these outcomes. The review of assets and gaps integrates results of this CHNA for each topic and includes information gathered through data analysis, resource inventories, and meetings with key county leaders.

**Premature Deaths, Leading Causes of Death and Behavioral Health-Related Deaths**

**Assets**
- Essex County’s suicide rate, 3.3/100,000, is significantly lower than the *Healthy People 2020* target (10.2/100,000) and significantly better than the statewide rate (6.4/100,000).

**Gaps**
- Age-adjusted Heart Disease mortality rate in Essex County (206.4/100,000) is higher than the *Healthy People 2020* target (108.8/100,000).
- The age-adjusted rates for cancer deaths in Essex County (183.6/100,000) is above the *Healthy People 2020* target (160.6/100,000).
  - Cancer mortality rates among blacks in Essex County were significantly higher than the rate county wide.
- Mortality rates for Septicemia (31.1/100,000) and diabetes (29.5/100,000) were significantly higher in Essex County than statewide (18.3/100,000 and 23.1/100,000, respectively).
  - Blacks had significantly higher mortality rates for septicemia and diabetes than residents county-wide.
- Essex County residents had a higher rate of premature deaths than residents statewide and far worse than the county health ranking (CHR) national benchmark.

**Infant Mortality and Low Birth Weight Babies**

**Gaps**
- Infant mortality rates in Essex County (8.5/1,000 live births) are higher than the State (5.3/1,000 live births).
- The rates of low birth weight (10%) and very low birth weight (2%) infants are higher than the *Healthy People 2020* target (7.8% and 1.4%, respectively) and the State averages (8.1% and 1.5%, respectively).
  - The rates for both indicators are higher among blacks than all County residents.

**General and Mental Health Status**

**Assets**
- The percent of Essex County residents reporting their health as fair or poor declined between 2006 and 2010.
Gaps
• Essex County residents reported an average of 3.3 physically unhealthy days in the last month, which was significantly higher than the National Benchmark of 2.6 days.
• Essex County residents report more mentally unhealthy days in the past 30 days (3.6) than the CHR benchmark (2.3).
• Symposium members expressed concern for the lack of social services in Newark and the need for additional services to address health and mental health needs of seniors.

Morbidity

Assets
• A significantly lower percentage of Essex County residents report being told they have arthritis than residents statewide.
• The overall age-adjusted cancer incidence rate per 100,000 population in Essex County (427.2/100,000) was significantly lower in 2010 than that of residents statewide (487.2/100,000).
  o Cancer incidence rates for both breast and melanoma were significantly lower among Essex County residents compared to those statewide.

Gaps
• In 2010, 3.4% of county residents, compared to 3.9% of statewide residents, reported having angina or coronary heart disease, but 8% of Newark residents reported having angina or coronary heart disease in 2009.
• Between 2005 and 2009, the percentage of Essex County residents who were told their cholesterol levels were high rose from 30.6% to 36.7%.
  o The percentage of people reporting high cholesterol in Essex County is nearly three times higher than the Healthy People 2020 target of 13.5%.
• While Essex County saw an increase in the percent of people reporting heart attacks, from 2.7% to 3.1%, the rate was not statistically different from the rate statewide of 3.8% (2010). The rate among Newark residents in 2009 was nearly double (6%).
• Asthma rates have been rising in both the State and the county. In 2010, 8.3% of adults reported asthma. By 2009, 16% of Newark residents reported having asthma.
• Diabetes is also on the rise in Essex County. In 2006, 7.8% of residents reported diabetes. In 2010, this number increased to 10.2%. By 2009, 17% of Newark residents reported having diabetes.
• Public Health Officers in suburban areas of the county also expressed concerns about increasing incidences of diabetes, especially among children and the elderly.

Socio-demographic and Economic Factors

Assets
• The western part of the county is made up of towns with growing populations and a higher concentration of middle and upper income residents.
Gaps
- Unemployment rates in Essex County and its major cities (10.8%) were significantly higher than the State (9.3%).
- Per capita and median family income for Essex County residents ($29,674 and $52,394, respectively) remain significantly below the incomes of residents statewide ($33,555 and $67,681, respectively).
- Poverty rates for people, families, children and seniors in Essex County are all significantly higher than the statewide rates.
- The percentage of Newark families receiving various types of public assistance is two times the national average and three times that of New Jersey.
- Education and Health Literacy
  - 16.5% of Essex County Residents did not complete high school.
  - The cities of East Orange, Irvington, and Newark report failure to complete high school at levels that are 1.5 to two times the county level.
  - 15% of Essex County and 25% of Newark’s population have limited English Proficiency.
- Public Health Officers noted that employment, education and social service gaps impact the health of their communities.

Access to Care

Assets
- Essex County residents have a significantly higher rate of total physicians (305.2/100,000 population) than the State (252.9/100,000).

Gaps
- A significantly higher percentage of Essex County residents lack any kind of coverage when compared to the State.
- Essex County has significantly fewer primary care physicians (99.7/100,000) than the national benchmark (158.5/100,000).
- Essex County ranks third statewide in ED utilization
- Ambulatory Care Sensitive Conditions (ACSC) visits to the ED among children and adults are significantly higher than statewide.
  - Top 5 ACSC ED visit rates among children occurred for the following: ENT*2, asthma, GI obstruction, cellulites, and bacterial pneumonia.
  - Top 5 ACSC ED visit rates adults occurred for ENT, asthma*, cellulites, kidney/UTI, dental conditions.
- ED visits by adults for primary care conditions in Essex County (178.1/1,000) in 2010 were significantly higher than those for adults statewide (136.9/1,000) and have been since 2006.
- Attendees at the GNHCC Public Health Officers Meeting raised concerns about the county-wide transportation system and its impact on access to medical facilities and providers.
  - Public transportation was as an issue for East Orange residents who need to travel to Newark to access obstetrics and pediatric services.
- Primary care access, especially in urban areas, was of concern to attendees who fear this problem will only be exacerbated once provisions of ACA are enacted, and coverage is expanded.

*Statistically significant.
• Public Health Symposium attendees also mentioned the closure of hospitals in the county and concern that only with improvement in health prevention and outreach efforts would there be a reduced need for inpatient care for patients with chronic diseases.
• The high cost of physician practice in New Jersey, including high malpractice costs, was seen to some as a barrier to recruitment of additional primary and specialty care physicians.
• Symposium attendees also mentioned the need for all stakeholders to communicate regarding the needs of the “frequent flyers” so that these needs could be more effectively coordinated in the community rather than in the hospital.
• Symposium members also spoke of the need for all organizations to address cultural and language barriers as they relate to the development of effective interventions.

Clinical Care Measures

Assets
• Primary C-Section rates in Essex County (13.2%) are significantly better than the Healthy People 2020 target (23.9%).

Gaps
• Thirty day readmission rates are higher than statewide for heart failure, heart attack, pneumonia and COPD. Between 2006 and 2010, only COPD saw a consistent decline.
• Attendees of the GNHCC Symposium raised concerns that hospital reimbursement reductions for hospital readmissions could result in increased access issues for patients. Therefore, providers must continue to address these issues.

Health Behaviors – Screenings and Vaccinations

Assets
• Health Officers believe that there is more demand for, as well as more access to, flu shots for all residents than previously.

Gaps
• The percentage of Essex County women who had a pap test during the last three years (81.3% in 2010) declined between 2004 and 2010, and was significantly lower than the Healthy People 2020 target of 93%.
• The percentage of adults 65+ who did not have a flu shot in the last year (37.5%) was significantly higher than the Healthy People 2020 target of 10%.
• The percentage of seniors who never had a pneumonia shot increased by 4 points between 2006 and 2010, and was significantly worse than the Healthy People 2020 target of 10%.

Maternal/Child Health and High Risk Sexual Behaviors

Assets
• Births to Essex County teens 15-17 (21/1,000) were significantly better than the Healthy People 2020 target of 36.2/1,000.
Gaps
- The percent of Essex County women receiving 1st trimester care is 8.6% points below Healthy People 2020 target of 77.9%.
- The percent of women receiving no prenatal care (2.1%) is significantly higher than the statewide rate (0.9%).
- Essex County teen births 15-19 (39/1,000 female population) are nearly double the CHR benchmark.
  - The Chlamydia rate in Essex County (681.1/100,000) is eight times worse than the National Benchmark.
- Symposium members were concerned with the lack of funding for HPV vaccines at STD clinics, which, were it available, could reduce cancer and STD rates.
- Essex County HIV prevalence in 2010 (1,253.0/100,000) was significantly higher than the statewide rate (409.8/100,000).
- The rate of new HIV/AIDS cases in Essex County (30.4/100,000) is significantly higher than the statewide rate (15.4/100,000).

Health Behaviors – Tobacco, Alcohol and Drug Use

Assets
- The inpatient admission rate for alcohol in Essex County (22%) is statistically lower than the statewide average (34%).
- Essex County has a lower rate of ED visits among adults for alcohol dependence (21.7/1,000) compared to the statewide rate (23.9/1,000).

Gaps
- Tobacco use is 2.8% points higher than Healthy People 2020 target of 12%.
- The reported level of excessive drinking (6.0%) is higher CHR benchmark of 8.0%.
- Admission rates for heroin/other opioids, cocaine, and other drugs are significantly higher than statewide rates.
- The need for a greater emphasis on smoking cessation was another need mentioned at the Symposium.

Health Behaviors – Diet and Exercise

Assets
- Essex County has a significantly higher percentage of total residents (14.7%) and children (30.4%) receiving SNAP benefits than the State (9.1% and 18.5%, respectively).

Gaps
- The percent of Essex County adults engaging in adequate physical exercise (43.1%) declined between 2005 and 2009, and was significantly below the Healthy People 2020 Benchmark of 47.9%.
- Essex County adults reporting any physical activity in the last month (72%) is 7% points below the benchmark.
- Concerns were raised by public health leaders about the sedentary lifestyles of children and the need to enhance “move more” campaigns and provide safe environments for children to enjoy outside activities.
Physical Environment

Assets
- Access to healthy foods – A lower percentage of low income Essex County residents (1%) do not live close to a grocery store compared to 4% of residents statewide.

Gaps
- Air Quality
  - Number of unhealthy air quality days for fine particulate matter and ozone is significantly higher than CHR benchmark.
- Lead Paint Hazard
  - An aging infrastructure poses a lead-based paint hazard.
  - The percentage of Essex County children with high and very high blood lead levels was significantly higher than statewide.
- Ready access to Fast Food and liquor – limited access to Recreation.
  - 53% of all restaurants fast food compared to a benchmark of 25%.
  - High concentration of liquor stores.
  - Fewer recreational facilities than statewide.

Violence and Injury Prevention

Assets
- The 2008 motor vehicle crash death rate among Essex County residents (6.2/100,000) was lower than the Healthy People 2020 target of 12.4/100,000.
- The 2008 rate of deaths due to falls (4.4/100,000) was significantly lower than the Healthy People 2020 target (7.0/100,000).
- The 2008 age-adjusted death rate due to poisoning was lower at 8.7/100,000 than the Healthy People 2020 target of 131.1/100,000.

Gaps
- Safety is a major concern; the violent crime rate is two times the State rate and ten times the National Benchmark.
- The homicide rate is three times the state rate.

Behavioral Health

Gaps
- Essex County hospital admissions for mental health conditions (10.8/1,000) was higher than the State (7.4/1,000), and between 2006 and 2010 the rate has risen among all age groups.
- Essex County ED visit rate for mental disorders was higher than the State; 8.8/1,000 compared to 13.4/1,000.
- Attendees of the Health Symposium spoke of the need to bring behavioral health back into the primary care realm and the corresponding need to bring primary care back into the behavioral health realm.
### APPENDIX A
### SECONDARY DATA SOURCES

<table>
<thead>
<tr>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bureau of Labor Statistics (BLS), Local Area Unemployment Statistics (LAUS)</td>
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<tr>
<td>CDC BRFSS &amp; Youth BRFSS</td>
</tr>
<tr>
<td>CDC’s National Center for Hepatitis, HIV, STD, and TB Prevention</td>
</tr>
<tr>
<td>Claritas</td>
</tr>
<tr>
<td>Corporation for Supportive Housing</td>
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<tr>
<td>County Business Patterns</td>
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<tr>
<td>County Health Rankings</td>
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<tr>
<td>FBI/Interuniversity Consortium for Political and Social Research (ICPSR) National Archive of Criminal Justice Data</td>
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<td>Health Resources and Services Administration’s Area Resource File</td>
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<td>Healthy People 2020</td>
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<td>Medicare/Dartmouth Atlas of Health Care</td>
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<td>National Center for Chronic Disease Prevention and Health Promotion/CDC/BRFSS (CHR)</td>
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<td>National Center for Educational Statistics/ACS (CHR)</td>
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<td>National Center for Health Statistics</td>
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<td>National Vital Statistics System (NVSS), National Center for Health Statistics</td>
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<td>NCHS Ambulatory Care Survey</td>
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<td>New Jersey Cancer Registry</td>
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<tr>
<td>New Jersey Department of Banking and Insurance; New Jersey Hospital Association, Payer Information Resource System</td>
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<td>New Jersey Department of Children and Families, Child Abuse and Neglect Substantiations</td>
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<td>New Jersey Department of Health and Human Services</td>
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<tr>
<td>New Jersey Department Human Services, Division of Addiction Services, New Jersey Drug and Alcohol Abuse Treatment</td>
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<td>New Jersey Department of Health and Senior Services, Center for Health Statistics</td>
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<td>New Jersey Department of Health and Senior Services, County Health Profiles</td>
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<td>New Jersey Department of Health and Senior Services, Division of Family Health Services</td>
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<tr>
<td>New Jersey Department of Labor</td>
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<td>New Jersey Discharge Data Collection System</td>
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<td>PHASE project, a collaborative effort between the CDC and EPA, County Health Rankings</td>
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<td>Small Area Health Insurance Estimates/ACS/CPS ASEC</td>
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<tr>
<td>Small Area Income and Poverty Estimates (SAIPE)</td>
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<td>UB - 04 Hospital and Emergency Room Discharge Data - Multiple Years (NSI)</td>
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<td>U.S. Census Bureau</td>
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<td>USDA Food Environment Atlas</td>
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<td>USDA Food Environment Atlas/County Business Patterns</td>
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<tr>
<td>U.S Department of Health and Human Services</td>
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</table>
APPENDIX B
STATISTICAL SIGNIFICANCE FOR DATA SOURCES

A. In cases where the data source provided error ranges or confidence intervals for both county and state (New Jersey) level data, sets of intervals for counties were compared to those of the state. If the sets of intervals overlapped, the comparison was determined to be not significant. If they did not overlap at all, the comparison was determined to be significant.

B. In cases where the data source provided error ranges or confidence intervals for county level data but not state (New Jersey) level data, the intervals for counties were compared to the state data point. If the state data point fell inside the county confidence interval, it was determined to be not significant. If the state data point fell outside the county confidence interval, it was determined to be significant. This method of determining significance assumes that state data points are true values.

C. In cases where the data source provided error ranges or confidence intervals for county level data, and the county level data was to be compared to a national benchmark or target (Healthy People 2020 target, County Health Rankings National Benchmark), the intervals for the counties were compared to the national benchmark/target data point. If the benchmark/target data point fell inside the county confidence interval, it was determined to be not significant. If the benchmark/target data point fell outside the county confidence interval, it was determined to be significant.

D. In cases where the data source did not provide error ranges or confidence intervals, poisson or binomial tests were done for count data, and Z test for proportion data, using sample sizes.

E. In cases where the data source did not provide error ranges/confidence intervals or sample sizes, all New Jersey counties were ranked. Counties falling in the highest or lowest quarter percentile were determined to be significant.
## APPENDIX C
GREATER NEWARK HEALTHCARE COALITION PUBLIC HEALTH SYMPOSIUM

<table>
<thead>
<tr>
<th>Attendees</th>
<th>Title</th>
<th>Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andrew Crighton, MD</td>
<td>Chief Medical Officer</td>
<td>Prudential/GNHCC Trustee</td>
</tr>
<tr>
<td>Bill Wallace</td>
<td>Health Officer</td>
<td>West Caldwell</td>
</tr>
<tr>
<td>Ceu Cirne Neves</td>
<td>VP, Physician &amp; Patient Services</td>
<td>Saint Barnabas Medical Center</td>
</tr>
<tr>
<td>Colette Lamotho-Galette</td>
<td>Policy &amp; Strategic Planning</td>
<td>New Jersey Department of Health</td>
</tr>
<tr>
<td>Colleen Nelson</td>
<td>Supervisor to Director of Child/Family Health Programs</td>
<td>VNA Health Group</td>
</tr>
<tr>
<td>Daniel Boyd</td>
<td>Director of Ambulatory Services</td>
<td>Saint Michael’s Medical Center</td>
</tr>
<tr>
<td>Diane Coluzzi</td>
<td>VP, Outcomes Management</td>
<td>Clara Maass Medical Center</td>
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<tr>
<td>Fran Monteleone</td>
<td>Director, Physician Services</td>
<td>Clara Maass Medical Center</td>
</tr>
<tr>
<td>India Larier</td>
<td>Board of Health Chair &amp; Township Committeeeperson</td>
<td>Maplewood</td>
</tr>
<tr>
<td>Jeremiah Murillo, MD</td>
<td>Patient Safety Officer</td>
<td>Newark Beth Israel Medical Center/GNHCC Board Trustee</td>
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<tr>
<td>John Brennan, MD, MPH</td>
<td>President &amp; CEO</td>
<td>Newark Beth Israel Medical Center/GNHCC Board Chair</td>
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<tr>
<td>John Jacobi, Esq.</td>
<td>Professor of Law</td>
<td>Seton Hall Law/GNHCC Vice Chair</td>
</tr>
<tr>
<td>Kathy McConnell</td>
<td>VP, Affiliate Operations</td>
<td>VNA Health Group</td>
</tr>
<tr>
<td>L’Tanya Williamson</td>
<td>Director</td>
<td>Dept. Child &amp; Family Well being GHNCC Trustee (ex-officio)</td>
</tr>
<tr>
<td>Lionel Lima</td>
<td>VP, Surgical Services</td>
<td>Saint Michael’s Medical Center</td>
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<tr>
<td>Lou LaSalle</td>
<td>VP, Community Relations</td>
<td>Saint Barnabas Medical Center/Barnabas Health</td>
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<tr>
<td>Maria Vizcarondo</td>
<td>CEO</td>
<td>Health-e-ciTI-NJ/GNHCC Trustee</td>
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<tr>
<td>Marsha McGowan</td>
<td>Health Officer</td>
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<tr>
<td>Michael Annee Kyle</td>
<td>Project Director</td>
<td>Greater Newark Health Care Coalition</td>
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<td>Michael Festa, Ph.D.</td>
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<tr>
<td>Michael Hodges</td>
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<tr>
<td>Michellene Davis</td>
<td>SVP, Governmental Affairs and Policy</td>
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<tr>
<td>Nancy Erickson</td>
<td>Principal</td>
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<td>Neveen Elkholy, DO</td>
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<td>Susan Walsh, MD</td>
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<td>Jersey City Medical Center/GNHCC Trustee</td>
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<td>Suzette Robinson</td>
<td>VP, External Affairs</td>
<td>East Orange General Hospital</td>
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<tr>
<td>Tamara Cunningham</td>
<td>VP, System Development/Planning</td>
<td>Barnabas Health/GNHCC Trustee</td>
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<tr>
<td>Tom Ortiz, MD</td>
<td>Family Physician</td>
<td>Forest Hill Family Health Associates/GNHCC Trustee</td>
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<tr>
<td>Tracy Munford</td>
<td>VP, Public Relations &amp; Community Affairs</td>
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<tr>
<td>Vaidehl Dave</td>
<td>Epidemiologist</td>
<td>Essex Regional Health Commission</td>
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<tr>
<td>Vincent Matthews</td>
<td>Associate Counsel, Policy</td>
<td>Barnabas Health</td>
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<td>Bob Roe</td>
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<td>Rochelle Evans</td>
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<tr>
<td>Karen LaRussa</td>
<td>Community Health Educator, Public Health</td>
<td>East Orange</td>
</tr>
<tr>
<td>George Wallace</td>
<td>MD</td>
<td>University Hospital</td>
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Following a presentation of key health indicators, participants were asked if there were any health issues or factors that were absent from the presentation that should be considered.

Their responses were as follows:

- The county is very diverse and Newark’s statistics dominate.
- More city specific data and statistics would better portray the differences – raw data may be available from local health officers.
- Information on the number of available hospital beds and physicians by specialty/per population would be useful – there is a shortage in areas.
- 4 hospitals have closed since 2008 - need may be increased.
- HPV data was not reported.
- More information/discussion on shortage of beds/physicians by specialty.
- Last Census did include undocumented population (specific campaign in city of Newark to capture this population).
- There is a shortage of OB/Gyns and Pediatricians in East Orange – they are migrating out of the county after graduation due to the economy and practice costs – How do we retain physicians in the area?
- Would be interesting to see how care is shifting to mid-level providers.
- Access Issues: transportation, hours of operation.
- There is a need for improved dialogue between health officers and providers/facilities to respond to need for specialists (OB, etc...).
- FQHC issues re: recruitment – physicians choose to leave the state because it is cheaper to practice elsewhere – Ability to offer loan repayment as an incentive has diminished our ability to retain these physicians.
- **Access/Affordable Care Act**: For Newark Public Health Officers, the goal is to obtain an insurance card for all Newark residents – If this is achieved where will all the residents go for care if there is a provider shortage?
- Maternity Services in East Orange: Patients in health center are referred for care outside the city of East Orange – so transportation for this population is a concern.
- Re-Admissions: We have fewer beds available than 10 years ago – if patients are re-admitted and hospital reimbursement continues to decline, the patient will have more limited access for chronic care on an inpatient basis *(in an effort to address this providers are collaborating to treat chronic care before an inpatient stay would be required).*
- **Access**: If you focus on preventative care you may begin to see a change or reduced need for inpatient care for chronic disease.
- OBs: It is a statewide issue – the legislature has worked to try to address this. At the State and Federal level – is there enough dialogue so legislators truly understand the issue/need? There is a disconnect on this issue and for other issues (such as transportation) where those on the ground could provide additional insight to those forming policy.
- **Prevention**: if we focus on this we will be able to prevent diseases for those conditions where Essex County underperforms state.
- On the Commercial Insurance side: there are wait times and access issues that some carriers experience.
- Data is very similar to what it has been for last 3 decades. To address these issues we must have a paradigm shift in the care model. The ACA act works to address the shortcomings of the
current economic model and focuses on preventative care as a means to address cost and access.

- We need to bring Behavioral health back into the primary care realm – and we need primary care brought back into the behavioral health realm.
- Outreach: Many issues are due to a lack or issue with outreach re: screenings, etc...
- We might want/need to embrace economic enterprise zones to address health care costs.
- Essex County has a large middle and upper class population. If we normalize the health care delivery system across a diverse socio-economic population then healthcare becomes concentrated on need across that population – such that everyone is afforded the same quality of care according to their need.

Public health officers were also asked how the presentation compared or contrasted with their own data or experience given the diverse nature of Essex County’s municipalities.

Their responses were as follows:

- Increase in flu activity – not just seniors want flu shots now. Everyone wants them. There are more people providing shots. Recently – pediatricians were not quick to buy additional vaccine during the recent flu outbreak…may have been an economics driven decision.
- HPV: we have STD clinics – the vaccine may be expensive – if we provide funding for the vaccine we can reduce cancer rates and STDs.
- West Caldwell/ Fairfield/Caldwell: there was a low response to FLU clinics in these areas – the response to these clinics varies by where the clinics are offered. Pharmacies are providing many of these services in these areas.
- Diabetes: largest problem in West Caldwell/ Fairfield/Caldwell. Sees issues with sedentary lifestyles among children. Working to address these with “move more” campaigns.
- Chlamydia: Are increased rates due to more people seeking treatment or is it due to an actual increase in the rates?
- Newark: works to provide the same care to inner-city residents as you would receive in suburban towns. There is an awareness that there is a primary care shortage – Mobile primary care being phased out…it is not how people want to receive care.
- People should have the ability to see their doctor in a safe environment
- Newark Public Health Officer: focus is on prevention and education…working in the community to address smoking, diabetes, hand washing, etc…looking at ACA to determine if additional funds may be available to augment and improve these prevention efforts.
- Smoking reduction needs to have a stronger focus (NJDOH concern).
- Providers are partners…hospital-run outreach efforts are conducted in conjunction with Public Health Officers…providers want feedback on how Public Health programs can be supported.
- Employment, education, social service gaps impact the health of our communities. (Social service gap due to number of people and funds available to provide education, guidance, social supports and coordination.)
- Social Service and care coordination should be an important focus (LAMP Program).
- Bloomfield/Caldwell: Working to fill in gaps in social service support programs that address root cause of chronic health issues (asthma). Filling these gaps improves overall health. Major concern is obesity among children and seniors. Reasons for obesity are different in Newark and Caldwell….safe environment vs. sedentary lifestyle?
- For children – if it is easier and safer to go outside – they will. Increased activity is as important as nutrition education and may help overcome some of the high fat and sugar content of diets.
- PALs? Not active in communities to ensure safety of environment for activity.
- Elderly: Sorely lacking social services (Newark). Increased services address health and mental health issues for elderly.
- Public Health Officers: Focus can tend to be on environmental issues/concerns. Not able to fund behavioral health factors. Funding varies by geography and size of population served by a given health department. Funding is driven by local allocations of funding.
- Funding: Pilots often are great starts – but when funding diminishes the focus on the success of that pilot evaporates. We need to speak about insurance carriers and other payers and how the funding they provide to the healthcare system is allocated. Movement to change how payers look at what market needs as a means to address these issues – A Healthcare Financial Summit.

**Prioritizing Needs**

Prior to the meeting, health officers were asked to submit a list of major health issues and concerns. This list was supplemented with issues that were developed from the health indicator analysis and discussion. Attendees were asked to rank the health issues on a scale of 1-5 based on significance (with 1 being low significance and 5 being highest significance). Attendees were provided a ballot and asked to rank each issue. Voting on the top priorities resulted in the following issues being identified.

1. Mental Health
2. Diabetes
3. Lack of Primary Care Access
4. Heart Disease
5. Overweight/Obesity
6. Health Care Access/Inadequate Health Insurance
7. Cancer
8. Hypertension
9. Lack of Exercise
10. Substance Abuse (tied with #9)

**OVERALL WEIGHTED AVERAGE**

**Health Priority Ranking**

1. Lack of Primary Care Access
2. Heart Disease
3. Mental Health
4. Diabetes
5. Health Care Access/Inadequate Health Insurance
6. Overweight/Obesity
7. Lack of Exercise
8. Hypertension
9. Cancer
10. Violent Crime
Public Health Officers’ Ranking

1. Diabetes
2. Overweight/Obesity (tied with #1)
3. Heart Disease
4. Mental Health
5. Lack of Exercise (tied with #4)
6. Hypertension
7. Asthma/Bronchitis (tied with #6)
8. Substance Abuse
9. Communicable Diseases (tied with #8)
10. Vaccine Preventable Diseases (tied with #8)

Clinical Providers’ Ranking

1. Lack of Primary Care
2. Mental Health
3. Diabetes
4. Health Care Access/Inadequate Health Insurance (tied with #3)
5. Heart Disease
6. Overweight/Obesity
7. Pre-natal Care (tied #6)
8. Hypertension
9. Lack of Exercise
10. Infant Mortality

Community-based Organizations’ Ranking

1. Diabetes
2. Lack of Primary Care Access
3. Heart Disease
4. Mental Health (tied with #3)
5. Overweight/Obesity
6. Health Care Access/Inadequate Insurance (tied #5)
7. Infant Mortality (tied with #5)
8. Violent Crime
9. Lack of Exercise
10. Hypertension (tied with #9)

Other Affiliations’ Ranking

1. Lack of Primary Care Access
2. Health Care Access/Inadequate Insurance
3. Mental Health
4. Overweight/Obesity
5. Heart Disease
6. Diabetes
7. Substance Abuse (tied with #6)
8. HIV/AIDS (tied with #6)
9. Violent Crime
10. Pre-natal Care
11. Poor Nutrition (tied with #10)
12. Communicable Diseases (tied with #10)
13. Vaccine Preventable Diseases (tied with #10)
14. Lack of Preventive Screenings (tied with #10)

Following discussion, the group voted to accept the top 10 priority areas with broad agreement that prevention should be the top focus.

- The problem with primary level prevention efforts is that it is not sexy...the investment is made in the second layer of care because it is very concrete. At the primary level you don’t see the benefit until years later. Does the public grasp the true importance of prevention?
- Payers: focusing on efforts to encourage additional interest in individual prevention efforts.
- We must do a better job of getting people to WANT to do the right thing. In HUDSON County – a program was started that pays people to do the right thing (provides a financial incentive to the patient to do the right thing). This program brings the patients into the process of prevention.

Hospitals and community-based organizations were then asked to comment on the top health priorities? The following comments were noted:

- Work hard to address cultural and language barriers as they relate to developing effective programs.
- It is essential that health agencies collaborate with hospital and other providers about what is needed, where it is needed, and what barriers do exist. ZIP Code matters.
- With asthma in particular – if patients don’t know how to manage a disease you can’t prevent it. Definitely a challenge among children. We need to engage the community and providers to address these challenges.
- Important that all groups/stakeholders communicate re: “frequent flyers” so their care can be more effectively be coordinated in the community rather than in the hospital.
- Community based organizations are important because they help to identify not only differences in care across a state or county but at the micro-community level so that efforts are more targeted.
- East Orange Public Health Officer: We cannot overlook communicable diseases. I had an issue in the last few years with TB incidence. Also - issue among high-risk undocumented mothers. For Public Health Officers, obtaining care for these patients can be a challenge. UMDNJ needs to be at the table.
- One of ACA priorities is the expansion of access for uninsured. How does the group see the challenges of responding to the increased number of patients with access to care?
  - In East Orange there are huge challenges – Public Health Officers look at population health – hospitals address patient health. IT will be an issue. When we look at access to care and primary care the challenge will be immense across the board. Public Health Officers need to be able to communicate with both the State and Providers. East Orange Public Health Officer has been successful in partnering with the hospital to address challenges because they work to support one another. We need to make a cultural change – prevention is not wholly accepted by people that DO have health insurance.
Public Health Officers collaborate in using their limited funds to address community need.

- Look to Massachusetts: One issue there is that with everyone insured, there are not enough providers so the waiting lists to be treated are increasing...expects to see this nationally.
- With everyone covered there needs to a focus on infrastructure. IT may address some access issues by allowing providers to treat increased numbers of patients more efficiently.
- Address access to nutritious foods so that residents are actually able to deal with health related issues.
- Access to primary care will get worse...clinics will get busier. Call centers are busier.
Providers in CMMC's Service Area

Clinical Care Provider Locations

Provider Type
- Green square: Urgent Care (2 in PSA)
- Blue triangle: OP Primary Care & FQHC (2 in PSA)
- Yellow square: After Hours Clinic (1 in PSA)
- Red triangle: Dental (1 in PSA)
- Blue circle: Minute Clinic (0 in PSA)

Source Listing

<table>
<thead>
<tr>
<th>Name</th>
<th>URL</th>
</tr>
</thead>
<tbody>
<tr>
<td>NJ Primary Care Association (NJPCA)</td>
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</tr>
<tr>
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<td><a href="http://www.yellowpages.com/">www.yellowpages.com/</a></td>
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</table>

Websites of each Community Health Center
Providers in CMMC’s Service Area

Behavioral Health Locations

Provider Type

- Residential (1 in PSA)
- Outpatient & Residential (2 in PSA)
- Outpatient (7 in PSA)

Source Listing

<table>
<thead>
<tr>
<th>Provider Type</th>
<th>Contact Information</th>
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<tr>
<td>NJ Dept. of Human Services Directory of Mental Health Services By Program Element</td>
<td><a href="http://www.state.nj.us/humanservices/dmhs/news/publications/mhs/directory_by_program.html">www.state.nj.us/humanservices/dmhs/news/publications/mhs/directory_by_program.html</a></td>
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<tr>
<td>NJ Division of Mental Health and Addiction Services (DMHAS) Addiction Services Treatment Directory</td>
<td><a href="http://njsams.rutgers.edu/dastxdirectory/txdirectory.htm">njsams.rutgers.edu/dastxdirectory/txdirectory.htm</a></td>
</tr>
<tr>
<td>Yellow Pages</td>
<td><a href="http://www.yellowpages.com/">www.yellowpages.com/</a></td>
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</table>
Providers in CMMC’s Service Area

Communicable Disease Services

Provider Type

- IB Center (2 in PSA)
- Immunizations (4 in PSA)

Source Listing

| NJ Department of Health Office of Local Public Health | http://www.state.nj.us/hea lth/hl/directory/lhdselectcou nty.shtml |
Providers in CMMC’s Service Area
Inpatient Rehabilitation & Long Term Care

Provider Type
- LTC / Nursing Home (8 in PSA)
- Hospital Based (2 in PSA)
- Long-Term Residential Health Care (0 in PSA)

Source Listing

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<tr>
<th>Health Care Payers</th>
<th><a href="http://www.hcpc.org/HospCounty.asp">http://www.hcpc.org/HospCounty.asp</a></th>
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<tr>
<td>Coalition of NJ</td>
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Locations are approximate and based on street address.
Providers in CMMC’s Service Area
Maternal & Pediatric
Provider Type
- Clinical Pediatric (2 in PSA)
- Clinical Prenatal (2 in PSA)
- Family Planning/Women’s Health Center (1 in PSA)

Source Listing

<table>
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<tr>
<th>Source</th>
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<tbody>
<tr>
<td>NJ Primary Care Association</td>
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<td>Websites of each Community Health Center</td>
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<td>Planned Parenthood</td>
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</table>
Providers in CMMC’s Service Area

Senior Services

Provider Type

- Social & Health (5 in PSA)
- Medical—Adult Day Care (6 in PSA)

Source Listing

<table>
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<tr>
<td>NJ Department of Health: Division of Aging and Community Services</td>
<td><a href="http://web.doh.state.nj.us/apps2/seniorcenter/scsearch.aspx">http://web.doh.state.nj.us/apps2/seniorcenter/scsearch.aspx</a></td>
</tr>
</tbody>
</table>
Providers in CMMC’s Service Area

Family & Social Support Services

Provider Type

- School Linked Services (2 in PSA)
- Family Planning/Parenting (6 in PSA)
- Nursery & Child Care (10 in PSA)
- Early Childhood Services (1 in PSA)
- Domestic Violence & Child Abuse Support (4 in PSA)
- Other Counseling & Support Services (5 in PSA)

Source Listing

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<tr>
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<td>City of Newark Directory for Youth and Families</td>
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<td>MAP GROUP</td>
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