“WHAT’S GOIN’ ON?”

REPORT ON LOCAL HEALTH DISPARITIES
COMMISSIONED BY THE AFRICAN AMERICAN HEALTH COALITION

2014
I. Introduction

Racial disparities in health are undeniable and persistent features of our region. Previous editions of “What’s Goin’ On?” have clearly shown that local African Americans experience worse health on a variety of measures in comparison to Whites (for a complete history of the Minority Health Reports, refer to Appendix A). While this pattern of disparate health outcomes exists at a national level, it is the belief of the Finger Lakes Health Systems Agency and the African American Health Coalition that responsibility for achieving improvements in this area falls first and foremost on the community in which the outcomes occur. Obtaining a clear picture of the scope of the problem and a better understanding of the potential underlying causes is a key component of improving the health of local African Americans and reducing unwarranted differences. This report attempts to achieve these objectives. It documents racial health disparities in our community using numerous indicators to capture the multifaceted nature of “good health.” Furthermore, it explores potential root causes by evaluating racial and ethnic groups on four categories of health determinants: the physical environment, the social environment, health behaviors, and medical care.

Looking at these four determinants is an acknowledgement of the complex mechanisms which cause good or bad health and differences in outcomes across racial groups. As commented on by Fisher and colleagues (2007),

Racial disparities in health care are well documented, but their mechanisms are incompletely understood. The genetic, cultural, and sociopolitical aspects of race all have the potential to contribute to the production of racial disparities in health and health care. The Institute of Medicine panel on health disparities developed a conceptual model to better categorize these determinants and described three broad factors as potential sources of disparities: social determinants, access issues, and the health care system itself (Smedley, Stith, and Nelson 2003). The cultural aspects of race may influence each of these potential determinants of disparities in health care.

Additionally, this report attempts to place greater emphasis on ascertaining the role of “place” in driving racial health disparities by focusing on smaller geographic regions. While the disparity reports have always attempted to capture the health of local African American populations, discussions within the Coalition revealed the need to move from region and county level analyses to an examination of African Americans living in select ZIP codes. A primary reason for taking a more focused approach can be seen in Figure 1. When looking at a basic measure of premature mortality (Years of Potential Life Lost), there is strong evidence that the health of individuals varies considerably by ZIP code of residence within Monroe County.
Looking only at county-level outcomes would bias our findings toward average values, thereby masking serious health discrepancies between a ZIP code like 14611 (city of Rochester) and 14534 (Pittsford). As a result, considerable effort was put forth to study racial disparities at as fine a partition as possible.

The African American Health Coalition identified a particular bundle of ZIP codes that they believed warranted special attention. Specifically, they defined an Area of Focus consisting of ZIP codes 14605, 14606, 14608, 14609, 14611, 14613, 14619, and 14621 based on several important factors. First, this area contains a sizable African American population and represents about 63% of all African Americans living in the Finger Lakes region. Second, this area is frequently viewed as the major residence of the city’s minority population because of its relatively high concentration of people of color (68% of Focus Area residents are non-White compared with 14% of residents in the balance of Monroe County). Finally, coalition members felt these areas were culturally significant as they contain important neighborhoods, like the 19th Ward and Marketview Heights, and represent Rochester’s “Eastside and Westside.”
While this more focused look affords us the opportunity to gain a clearer picture of the racial disparities in our community, it does come with trade-offs. Previous local reports on minority health have noted the difficulty in securing data, or problems with data quality, on which decisions concerning minority health can be made. Those problems continue today and are often exacerbated when smaller geographies are used as the unit of analysis. One would like to consider not just the count of events, like the number of deaths in a year, but also the factors that lie behind those events, such as health behaviors that influence their occurrence. Much of the data needed for this type of analyses are provided by surveys. Often, the relatively small populations of African Americans or Latinos lead to small numbers of respondents in survey samples and difficulty in production of statistically meaningful estimates of population-specific indicators. Additionally, the data available vary by the geographic area of interest. Not all datasets are available at the ZIP code level; consequently, our goal of looking at the Focus Area and comparing to surrounding ZIP codes was not always possible. In these instances, we attempted to use the smallest geographic partition possible, whether it be state, region, county, or city level information.

It should be noted that the definition of African American (and White) can vary depending on the source of the information. Beginning with the 2000 Census, the U.S. Census Bureau allowed individuals to indicate they are of more than one race. Most other data sources require individuals to choose a single racial category that best describes them. Since this report draws data from a number of sources, “African American” (and White) may have a different definition depending on the context. Appendix B contains further information on the various data sources.
The report proceeds by first examining the health outcomes of African Americans living in the Finger Lakes Region, Monroe County, and the Focus Area in comparison primarily to Whites. A more complete description of the determinants of health are provided in Chapter III, followed by evaluation of racial and geographic disparities across each of the four determinants in Chapters IV-VII.
II. Health Outcomes

A primary goal of this chapter is to document measureable health outcomes among this region’s African American population. The concept of health can be quantified in a variety of ways, including self-perceived health status and quality of life, the prevalence of various disease states or disease risk factors, the use of health care services, or an ultimate outcome such as mortality rates. The current investigation attempts to capture the multi-faceted nature of health by using a variety of measures; however, special attention is given to the notion of premature mortality.¹ Dying early (defined in this report as death before the age of 75) is one of the most tangible expressions of a poor health outcome. Premature mortality captures the loss of potentially productive years of life and the depletion of valuable human capital within a community, making it a primary area of interest for the Coalition. Furthermore, premature mortality focuses on deaths that should largely be avoidable; as such, disparities in this outcome likely represent conditions that are both unjust and actionable from a community standpoint.

This section begins by examining health outcomes at the largest geographic area of interest, the Finger Lakes Region, and proceeds to an examination of Monroe County followed by the Area of Focus. Many of our data sources are not available for all geographic regions, and in some instances we are unable to differentiate between racial and ethnic groups. As such, the information presented varies depending on the geography being assessed.

Finger Lakes Region

Previous editions of “What’s Goin’ On” have clearly demonstrated that racial health disparities have been a persistent feature of this region; these disparities continue to exist. In looking at the mortality rates for the Finger Lakes Region (FLR)² by race and ethnicity, we see that despite some progress in overall mortality rates since 1999, racial disparities have seen only modest improvements (Figure 3).

Leading causes of death for African Americans as well as for Whites and Latinos in the region are chronic diseases (cancer, heart disease, stroke), while kidney disease and diabetes are substantial contributors for African Americans and COPD for Whites (Figure 4). Except for COPD, African Americans have much higher mortality rates from these chronic diseases than do Whites. African Americans are more likely to die from homicide than Whites and Latinos; African Americans experience a mortality rate from homicide that is more than 10 times the rate experienced by Whites and more than 2 ½ times the rate experienced by Latinos.

¹ Years of Potential Life Lost before age 75 (abbreviated as YPLL in this report). See the Appendix B for notes on how this statistic is calculated.
² The Finger Lakes Region includes Chemung, Livingston, Monroe, Ontario, Schuyler, Seneca, Steuben, Wayne, and Yates Counties.
Figure 3

Mortality Rates Due to All Causes by Race/Ethnicity
Finger Lakes Region, 2001 - 2012
(3-Year Average)

- White
- African American
- Latino

Rates are age-sex adjusted to 2010 US Population
Whites and African Americans are non-Latino
Data Source: NYS Vital Statistics

Finger Lakes Health Systems Agency
Similar disparities can be seen in terms of premature mortality. Figure 5 shows that while racial disparities in Years of Potential Life Lost (YPLL) have seen slow but steady declines over the past 10 years, substantial differences persist as African Americans experience almost twice the rate of YPLL of Whites. Racial variation in premature mortality is not simply limited to differences in overall rates of YPLL. Figure 6 demonstrates that while African Americans consistently experience higher rates of potential life lost, regardless of cause, there are important racial divergences in the leading contributors to premature mortality within the FLR. Most notably, homicide is the third leading cause of potential life lost for African Americans (~9% of total YPLL), while it fails to enter the top five for Whites (~1% of total YPLL). Additionally, stroke as a top five contributor is unique to the region’s African Americans.

Figure 5
Given that the preponderance of African Americans in this region lives within Monroe County and the desire of the AAHC to focus on smaller geographic regions, the report now shifts focus to the county level. Monroe County continues to be the primary geographic region of interest throughout most of the remainder of this report.
Monroe County

In Monroe County the gap between mortality rates for African Americans and for Whites is wider than it is in the Finger Lakes Region due to both an improvement in White mortality rates and a worsening of African American rates within the county (Figure 7).

Similar to the region-level data, the leading causes of death for all racial/ethnic groups are chronic diseases. However, in Monroe County, homicide is the eighth leading cause among African Americans (compared to 10th in the region); homicide remains the 14th leading cause of death among Whites (Figure 8).

Figure 7

Mortality Rates Due to All Causes by Race/Ethnicity
Monroe County, 2001-2012
(3-Year Averages)

Rates are age-sex adjusted to 2010 US Population
Whites and African Americans are non-Latino
Data Source: NYS Vital Statistics
Finger Lakes Health Systems Agency
The rates and causes of premature mortality in Monroe County largely mirror the racial/ethnic trends seen at the region level with a few exceptions. For example, African Americans in Monroe County experience more than twice the rate of YPLL than Whites in the same geography. However, it is encouraging to note that, over the past 10 years, the gap between African Americans and Whites appears to have narrowed at a greater rate than at the region level.
In terms of causes, kidney disease supplants stroke as the fifth leading contributor to premature mortality for African Americans while stroke supplants COPD for Whites and suicide for Latinos as the fifth leading contributor to overall YPLL rates (Figures 9 and 10).

Figure 9

Years of Potential Life Lost Due to All Causes
By Race/Ethnicity
Monroe County, 2000-2012
(3 Year Averages)

Years of Potential Life Lost based on deaths before age 75
Rates are age-sex adjusted to 2010 US Population
Whites and African Americans are non-Latino
Data Source: NYS Vital Statistics

Finger Lakes Health Systems Agency
Additional outcomes available at the county level provide us a more complete picture of health disparities within this geography. According to the Adult Health Survey (AHS) conducted by the Monroe County Department of Public Health, African Americans in Monroe County are more likely to report a fair or poor overall health status compared to Whites (Figure 11). Although not fully understood, the association of self-reported health status with mortality is well-established (Jylhä, 2009), suggesting that these differences in perceived health may have implications beyond a divergence in the quality of life experienced by racial groups. Evidence also shows that African Americans are more likely than Whites to live with physical limitations associated with health impairments. For example, Figure 12 illustrates several dimensions of daily activities on which African Americans report worse health outcomes, including climbing stairs, performing work or other activities, and accomplishing self-selected tasks. However, these limitations are not limited to physical health. Some evidence of disparities in mental health also exists. Almost 10% of African Americans respondents reported that they had worked less carefully all or most of the time over the past four weeks due to emotional problems compared to just 3.3% of Whites (Figure 13).
Figure 11

Percent of Respondents Reporting Fair or Poor Health by Race/Ethnicity, Monroe County, 2012

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Percent Reporting Fair or Poor Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>13%</td>
</tr>
<tr>
<td>African American</td>
<td>20%</td>
</tr>
<tr>
<td>Latino</td>
<td>20%</td>
</tr>
</tbody>
</table>

Differences relative to Whites are statistically significant (per MCDH)
Whites and African Americans are non-Latino
Data Source: MCDH AHS, 2012

Finger Lakes Health Systems Agency

Figure 12

Percent of Respondents who Reported Functional Limitations Because of Physical Health by Race/Ethnicity, Monroe County, 2012

<table>
<thead>
<tr>
<th>Limitation</th>
<th>White</th>
<th>African American</th>
<th>Latino</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moderate Activities</td>
<td>13%</td>
<td>14%</td>
<td>15%</td>
</tr>
<tr>
<td>Stairs</td>
<td>7%</td>
<td>7%</td>
<td>8%</td>
</tr>
<tr>
<td>Kind of Work or Other Activities</td>
<td>8%</td>
<td>8%</td>
<td>10%</td>
</tr>
<tr>
<td>Accomplishments</td>
<td>10%</td>
<td>14%</td>
<td>17%</td>
</tr>
<tr>
<td>Pain</td>
<td>17%</td>
<td>14%</td>
<td>14%</td>
</tr>
<tr>
<td>Energy</td>
<td>22%</td>
<td>24%</td>
<td>27%</td>
</tr>
</tbody>
</table>

Differences relative to Whites are statistically significant (per MCDH)
Whites and African Americans are non-Latino
Data Source: MCDH AHS, 2012

Finger Lakes Health Systems Agency
Another key measure of a population’s health is birth outcomes. The infant mortality rate (death of newborns before age one) is often used as a benchmark of a community’s overall health and well-being as many of the factors affecting the health of adults can have profound impacts on the ability of newborn children to develop and thrive ("Infant Mortality," 2012). The federal government has set a national target for 2020 of six infant deaths per 1000 live births. At the county level, the infant mortality rate provides further evidence of racial disparities: African Americans experience 16.5 deaths per 1,000 live births (almost three times the federal target) compared to 3.9 deaths per 1,000 births among Whites and 12.5 deaths per 1,000 births among Latinos (Figure 14).
In combination, these findings suggest that African Americans in Monroe County experience health disparities in a variety of domains, ranging from terminal health outcomes (like mortality) to more intermediary health outcomes pertaining to functional ability and quality of life. Yet, a county-level analysis may not thoroughly describe the health challenges facing minorities in this region nor provide clear health improvement targets that can guide a disparity-reducing action plan.

**Area of Focus**

As previously mentioned, the African American Health Coalition has identified a geographic area of focus, consisting of eight ZIP codes, that they believe warrants special attention due to its concentration of minority populations, high levels of poverty, and cultural significance for the local African American community. Utilizing a finer partition can yield greater information on the drivers of observed county- and region-level health disparities. Indeed, deaths in the Focus Area account for about 78% of the total African American years of potential life lost in Monroe County and about 71% of the African American total for the region. Thus, a closer examination of available health outcomes within the Area of Focus will provide additional information on the preponderance of premature mortality among this region’s African Americans.

Overall, Focus Area residents experience more than twice the rate of premature mortality as compared to those living in the balance of Monroe County (Figures 15).
Additionally, residents of the Focus Area\textsuperscript{3} of all racial and ethnic groups self-report worse health outcomes in a variety of domains as compared to respondents living in the balance of Monroe County. Broadly, 19% of Focus Area residents reported fair to poor health compared to just 12% of non-Focus Area residents (Figure 17). More specific survey questions reveal considerable divergence in physical health and functional limitations (Figure 18), as well as stark differences in mental health outcomes (Figure 19).

\textsuperscript{3} Due to sample size limitations, data from the Monroe County Adult Health Survey are not available by race/ethnicity when looking at the Focus Area and the balance of Monroe County. As a result, we are forced to examine survey responses among Focus Area residents without regard to race/ethnicity.
The differing mortality rates, self-reports of overall health status, frequent mental distress and functional limitations make it clear that residents of the Area of Focus experience a disproportionate burden of poor health in terms of both terminal outcomes and quality of life.

Using data sources that allow for comparisons across racial/ethnic groups within the Area of Focus, there is clear evidence that health outcomes in this geography are worse not only for African Americans but also Latinos and even Whites. While all groups fare worse in the Focus Area compared to their counterparts living in the balance of Monroe County, racial disparities do persist in this more focused geography. For example, Focus Area African Americans experience 1.5 times the rate of YPLL compared to their White counterparts (Figure 20). Furthermore, an examination of the leading causes of YPLL among the racial and ethnic groups in the Focus Area continues to produce telling differences. Aside from illustrating that African Americans in this geography experience the highest rates of YPLL for many of the major causes of death, Figure 21 also highlights that homicide remains the third leading cause of YPLL for African Americans, while this cause of death continues to be absent from the top five contributors for Whites in the same area. Also of note is the presence of HIV as a top five cause of YPLL for African Americans and Latinos, but not for Whites, in this geography. Cancer, heart disease, and accidents continue to be major contributors to premature mortality for all groups in the Focus Area.
Figure 20

Years of Potential Life Lost
By Race/Ethnicity and Geography
5-Year Average (2008-2012)

AAHC Focus Area
Balance of Monroe County

White  African American  Latino

Finger Lakes Health Systems Agency

Figure 21

Leading Causes of Years of Potential Life Lost
By Race/Ethnicity
AAHC Focus Area
5-Year Average (2008-2012)

Data are age-sex adjusted to the US 2000 population.
Years of Potential Life Lost (YPLL) based on deaths before age 75.
Bubble size represents proportion of total YPLL due to a particular cause.
Rankings exclude perinatal death.
Whites and African Americans are non-Latino.
Focus Area = ZIP codes 14400, 14500, 14600, 14610, 14613, 14619, 14621.
Data Source: NYS Vital Statistics

Finger Lakes Health Systems Agency
Birth outcomes also appear worse in the Focus Area, with African Americans experiencing the highest rates of adverse events. For example, rates of low birth weight, which is the number one risk factor for death in the first year of life and for life-long health problems ("Health Pregnancy Fact Sheet," 2006), are highest among children born to African American mothers, with the highest rates occurring among African American mothers living in the Focus Area (Figure 22).

A separate but related birth outcome, premature births, is another important health indicator as infants born preterm are at a greater risk for mortality and a variety of health and developmental problems (Behrman & Butler, 2006). Additionally, many of the risk factors for preterm delivery are directly related to the mother’s health. Smoking, the presence of infection, and high levels of stress in the mother all have links to preterm deliveries. Since premature births account for about one quarter of all infant deaths (Monroe County Perinatal Network) addressing this area is essential to improving the health of the youngest members of our community.

Once again, African American infants in Monroe County are more likely than White and Latino infants to be born prematurely. Infants born to mothers residing in the Focus Area are more likely to be born prematurely than infants born elsewhere in the county. More than 15% of African American infants born in the Focus Area represent pre-term births (Figure 23).
Regardless of the geography, African Americans experience health outcomes that are considerably worse than their White peers. We see clear evidence of higher mortality rates, greater prevalence of self-reported poor health and mental health issues, higher levels of functional and work limitations, and, perhaps most notably, greater levels of premature mortality among African Americans living in the Finger Lakes region, Monroe County, and the Focus Area. Explaining why these disparities exist is a difficult and complicated task. However, gaining greater insight into potential root causes is essential to devising strategies to eliminate long-standing inequalities. Variation in the leading causes of YPLL, as well as the concentration of poor health in the Area of Focus, provide some insight that one’s life experiences may play an important role in elucidating the underlying origins of certain health outcomes. With this in mind, we believe that a thorough examination of the determinants of health (namely one’s environment, social circumstances, health behaviors, and medical care) across racial and ethnic groups in this community is warranted. A more complete description of each of these determinants is given in the following section.
III. Determinants of Health

Medical care, by itself, has a limited effect on a population’s health. This may explain, in part, the large discrepancy between the amount of medical care Americans receive (number 1 in the world based on percent of GNP spent) and the relatively poor life expectancy of the population (about 51st among nations).

In 1980, Alan Dever, then with the Rhode Island Department of Health, estimated the contributions of what he defined as the primary determinants of health:

<table>
<thead>
<tr>
<th>Determinant</th>
<th>Contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lifestyle</td>
<td>43%</td>
</tr>
<tr>
<td>Human Biology</td>
<td>27%</td>
</tr>
<tr>
<td>Environment</td>
<td>19%</td>
</tr>
<tr>
<td>Health Care</td>
<td>11%</td>
</tr>
</tbody>
</table>

Such estimates have been refined in subsequent years. McGinnis and colleagues more recently estimated the contributions to population health of various domains (2002):

Figure 24
McGinnis’ estimates are similar to Dever’s, with Environment being split into physical environment (“environmental exposures”) and social environment (“social circumstance”). However, McGinnis argued:

More important than these propositions is the nature of the influences in play when the domains intersect. Whether a gene is expressed can be determined by environmental exposures or behaviors. The nature and consequences of behavioral choices are affected by our social circumstances. Our genetic predispositions affect the health care we need, and our social circumstances affect the health care we receive (McGinnis et al., 2002).

The members of the African American Health Coalition embrace McGinnis’ framework because it calls attention to the differing socio-economic conditions across various neighborhoods within Monroe County, and it calls for a community approach that moves beyond a sole focus on individual behavior and lifestyle. In FLHSA’s effort to report on health disparities and seek factors that help explain these differences, McGinnis’s work will serve as a powerful organizing framework for the balance of this report.

Biology

Genetic predispositions have a strong influence on health; however, it is likely that genetics play a relatively small role in health disparities between races or ethnic groups.

“Race” is largely a social construct. With a few exceptions it does not genetically distinguish among persons. For instance, after centuries of genetic pressure from malaria in Africa, most African Americans have a 2-times higher genetic disposition to suffering from sickle cell disease than do Whites. Relatively few diseases demonstrate that level of racial disparity.

Even diseases known to have a genetic component to prevalence may have other causes as well. The BRCA1 and BRCA2 genes, known to predispose women to breast cancer, are only present in about 10% of breast cancer cases. As such, differences in genetics are unlikely to explain observed disparities.

Medical Care

Medical care, while playing a minor role in overall population health, remains vital for individuals when they become sick. McGinnis defines optimal medical care as that which is timely and error-free (2002). This means that it is important to examine both if adequate access to the health care system is available for populations of interest and the quality of care that is delivered if access is achieved.

In the United States, access to health care is largely driven by publicly or privately financed health insurance. Numerous studies have shown that having insurance greatly enhances one’s access to and ability to afford medical care (Baicker et al., 2013; Buchmueller, Grumbach, Kronick, & Kahn, 2005). These improvements in access can have very tangible benefits in the form of greater use of preventive services, which can improve one’s current health status and halt the development of future chronic
conditions, and more consistent use of screening tests that facilitate early disease detection and can improve treatment outcomes.

In addition to shortfalls in insurance coverage, supply-side factors may limit a particular population’s access to medical care services. For example, a lack of primary care physicians in the inner-city or in rural regions can place considerable barriers to adequate care that no amount of health insurance coverage can overcome.

Measuring the quality of care delivered is challenging given the datasets available. However, an examination of the types of preventive and screening services received, as well as a review of the adequacy of primary care management of more complex conditions, provides some description of the quality of health care services encountered by various populations.

*Physical Environment*

Environmental exposures play a substantial role in determining the health of individuals and communities. This category includes the features of the physical environment, including toxic waste, air and water pollution, and lead poisoning, especially from leaded paint. In rural areas, issues such as lack of sidewalks, accidents from farm equipment and use of chemicals are often key features with direct links to health outcomes.

But there are other, less obvious factors which promote or inhibit a physical environment conducive to good health. Factors include a lack of grocery outlets that carry health-promoting options such as fresh vegetables and low-fat milk products; easy availability of tobacco, alcohol and illegal substances; and lack of green space or safe places to exercise.

*Social Environment*

McGinnis also categorizes a group of social circumstances that are part of the environment. These circumstances include the stress created by living with low incomes, urban crowding, and crime or fear of crime. They include living with the constant pressure of being subjected to racism or alternatively the supportive influence of spiritualism. They also include children being raised with a single parent or a grandparent, young boys without adult male role models, and/or communities missing substantial numbers of young men due to incarceration. These types of social environmental influences may be measured by persons admitting to frequent mental distress or by the internalized stress that results in higher allostatic loads (the body’s physiologic response to periods of high stress), which contribute to greater “wear and tear” on the body and depletion of one’s physical health (Juster, McEwen, & Lupien, 2010). They also can be exhibited more generally as lower self-assessment of overall health.
Behavior

As noted by researchers Dever and McGinnis, health-related behaviors may be the single largest influence on one’s health, in both positive and negative ways. The California-based Milkin Institute estimated that a “modest” but “optimistic” improvement of specific prevention and health-related behaviors would reduce the incidence of seven major chronic diseases nation-wide by 40 million cases (from 230 million to 190 million) between 2003 and 2023 compared to present trends (DeVol et al., 2007).

Much of health is self-managed, whether it involves deciding if an illness or injury requires professional medical care or deciding to undertake a physical activity rather than watching TV. Many behaviors that put health at risk are also self-managed. However, it would be a mistake to conclude that individuals are solely responsible for their own bad health through risky behaviors. As previously noted, the determinants of health often have their effect where they intersect, such as genetics and behaviors. It is easy to blame the victim, but the direct causal pathway between one’s behavior and health outcomes is unclear.

Behaviors thought to have negative consequences on health include smoking, excess alcohol consumption, poor diet, lack of physical activity, excess weight, and illicit drug use. Reductions or elimination of these factors are considered positive behaviors. Periodic monitoring of health by professional health practitioners is generally thought to be a positive behavior.

Synergy of Effects

Even from the brief discussion above, it is clear that the pathways to health are complex. It will be difficult to discern what is “causative” of positive or negative health status.

For instance, a combination of conditions known as the “metabolic syndrome” are associated with elevated risk of heart disease, stroke, and diabetes. The syndrome is an example of how behaviors, genetics, environment, and medical care can work together to affect health. Risk factors for metabolic syndrome include stress, overweight and obesity, sedentary lifestyle, aging, high cholesterol, insulin resistance, high blood sugar levels, high blood pressure, and systemic cellular inflammation. Some of these factors are closely tied to genetics that inherently make an individual more likely to develop the syndrome. Others can be changed with assistance from health practitioners, for instance through medications to reduce cholesterol, blood sugar and blood pressure levels. Additionally, some risk factors can be changed by individuals, often with support, through behavior changes like weight loss, dietary modifications, and changes in physical activity levels. The environment, both social and physical, likely plays an important role in determining how easy or difficult it is to implement such changes.

There is considerable variation in the measures of determinants across geographies. However, as will be seen in subsequent sections, many of the adverse measures are more “negative” in the Focus Area, and many more adverse conditions occur simultaneously in that geography. This creates an environment that is conducive to the development of chronic conditions with multiple comorbidities, but often times prohibitive to successful management of such a challenging health state.
In the following sections of the report, information will be provided to illustrate differences in physical environment, social circumstances, behavior, and medical care access. Biological differences will not receive close scrutiny in light of the arguments mentioned previously: genetic differences are not believed to account for the substantial racial health disparities, and one’s genetics are by and large un-modifiable. Differences in the remaining four categories will be examined to see if they provide insights about potential solutions to observed disparities in health outcomes among this community’s African American population.
IV. Environment

A growing body of evidence suggests that the neighborhood in which one lives can have substantial impacts on health outcomes in both a positive and negative direction (Diez Roux & Mair, 2010). While issues of self-selection (where healthier and/or more advantaged individuals choose to live in more amenable communities) are an eminent challenge to examining this issue, it appears likely that one’s physical surroundings do exert a degree of influence on his or her well-being. For instance, researchers have found a relationship between the built environments (i.e., community layouts, transportation options, proportion of green space, and population densities) and the amount of physical activity in which a community engages (McGinn, Evenson, Herring, Huston, & Rodriguez, 2007). The retail environment can also affect health by restricting access to healthy foods while keeping unhealthy consumption goods, like junk food, tobacco, and alcohol, readily at hand (Moore, Roux, Nettleton, & Jacobs, 2008; Novak, Reardon, Raudenbush, & Buka, 2006; Scribner, Cohen, & Fisher, 2000). There is also evidence to suggest that the mere condition of an environment can contribute to negative health outcomes. Specifically, a 2003 study found that higher levels of deterioration in the physical structure of a neighborhood (as measured by the number of boarded-up or vacant houses) was a significant predictor of premature mortality after controlling for a variety of other explanatory factors (Cohen et al., 2003). In other words, simply living in a run-down and neglected physical environment may be bad for your health for reasons beyond the obvious exposure to potential toxins such as lead paint or pollution.

As demonstrated in the Health Outcomes chapter, poor health was most pronounced in the Focus Area. Features of the physical environment in this region may contribute to such geographic disparities.

Toxic Waste

The U.S. Environmental Protection Agency defines “brownfields” as abandoned, idled or under-used industrial and commercial facilities where expansion or redevelopment is complicated by real or perceived environmental contamination (2013). Brownfields may pose health hazards to the neighboring populations. A study found that communities in Baltimore near zones with many brownfields experienced statistically higher mortality from cancer and respiratory diseases compared to areas with few brownfields after adjusting for a number of other known risk factors (Litt, Tran, & Burke, 2002).
As seen in the Figure 25, there are environmental cleanup sites throughout Monroe County, but the highest concentrations are often clustered near and in low-income neighborhoods, including the Area of Focus.

Figure 25

Source: New York State Department of Environmental conservation, Division of Environmental Remediation, GIS data base, www.dec.ny.gov/msmaps/facilities/viewer.htm

Lead

The major source of lead exposure is lead-based paint and lead-contaminated dust found in deteriorating pre-1978 buildings. Particularly dangerous to children before the age of two, lead is a neurotoxin that causes serious health risks in both children and adults including permanent brain damage, behavior issues, hearing loss, kidney damage, and high blood pressure. The city of Rochester has by far the highest proportion of housing with lead hazards in the region at 16%; it’s a proportion above what is found in the Bronx or Brooklyn. The majority of the region’s housing units with lead hazards – 56% or 13,890 units – are found in Rochester.
The economic burden of lead poisoning is substantial. Lifetime costs (in terms of lost wages only) for a national cohort of children who experienced lead poisoning during one year is estimated to be $43 billion (Landrigan, Schechter, Lipton, Fahs, & Schwartz, 2002). There has been research to suggest that the psychological damage caused by exposure to lead during childhood can lead to violent criminal behavior in adulthood, creating additional costs for society (Reyes, 2007). Fortunately, the number of children in Monroe County with reported blood lead levels of 10 µg/dl (micrograms per deciliter) or higher—dropped 81% between 2001 and 2011 (Table 1).

Table 1

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<tr>
<td>% Positive</td>
<td>12.5%</td>
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<td>8.9%</td>
<td>9.1%</td>
<td>7.4%</td>
<td>6.5%</td>
<td>4.5%</td>
<td>3.9%</td>
<td>2.9%</td>
<td>2.6%</td>
<td>2.0%</td>
<td>2.3%</td>
<td>1.6%</td>
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*Of the Children tested <= 6 years at time of test with blood lead levels >=10 micrograms (µg) per deciliter of blood
Source: Monroe County Department of Public Health

While significant progress has been made in the reduction of lead poisoning, it is valuable to note that the 2011 result is the equivalent of 10 kindergarten classrooms filled with lead-poisoned children. If the newly CDC issued 5 ug/dL threshold is used, the number of children considered lead poisoned would revert to 2001 levels. Further, if one looks at test results from previous years, there are presently 8,766 children in Monroe County schools struggling with the many negative health effects of being lead poisoned, such as loss of intellect, hyperirritability, poor impulse control, and a seven times greater risk of dropping out of school.

The burden of lead poisoning is not distributed evenly across Monroe County as the rate of lead poisoning is much higher in the Focus Area compared to the balance of the county. The rate of children with blood lead levels above 10 µg/dl, as a rate per 1000 children in the 2009 birth cohort (age 1 in 2010), is 90 in the Area of Focus vs. 8.7 in the rest of the county, a ten-fold difference.

**Retail Environment**

The retail environment for residents of the Focus Area differs drastically from the types and quantities of stores available to non-Focus Area residents of Monroe County. These differences are perhaps best represented by the Focus Area’s lack of full-service grocery stores and their selection of fresh foods and healthy meal options coupled with the wide availability of corner convenience stores whose shelves are often filled with nutrient-poor processed foods, tobacco products, alcohol, and lottery offerings. Estimates vary, but records identify approximately 350 convenience store locations within the city limits.
That number equals ten stores for every square mile of land and a 15% increase in the number of such stores since 2005 (Sharp, 2012). As Figure 26 demonstrates, these types of stores are highly concentrated in much of the Focus Area.

Figure 26

Anecdotally, the corner store has become the location in which drugs dealers loiter outside and illegal or single cigarette sales, food stamp fraud, and other illicit activity have become just part of “doing business” (Sharp, 2012). In 2011, Rochester police responded an average of 21 times to every corner or convenience store. Of those, an average of 62% were drug-related calls. The 25 worst stores averaged 80 police calls, of which more than 36 were drug-related (Sharp, 2012). This demonstrates a high level of illegal activity that has the potential to contribute to a deterioration of the safety and desirability of a neighborhood while increasing the stress of living in such an area.

Beyond the potential for illegal activities at these stores, the products they sell represent significant cause for concern. Given that they primarily sell calorie-dense foods with little or no nutritional value (Farley et al., 2009), it is unrealistic to believe that these retail outlets can serve as the primary source of
groceries for a community filled with residents who have limited access to private transportation. As such, it is not surprising that Focus Area residents have expressed concerns about the high concentration of corner stores in their neighborhoods.

For instance, a 2006 survey by the University of Rochester and the Southwest Area Neighborhood Association (SWAN) in Sector 4 of Rochester\(^4\) found that the closest major grocery store to sector residents was approximately three miles from the center of the sector (Michaud, 2007). The 53 food stores serving the area consisted of a combination of convenience stores, mom & pop grocery stores, fish and meat markets, and stores that offered both food and other retail items (e.g. pharmacies). Over 80% of stores agreed to participate in the study. The survey showed that 85% of stores did not offer fresh fruit, 76% offered only white bread or no bread at all, and 65% offered either whole milk or no milk at all.

The study concluded that “access [to healthy foods] is a critical issue in urban environments where socio-economic factors and transportation issues are barriers to frequent visits to a supermarket. Without healthy food options close at hand, the advice of a physician to adopt a healthier lifestyle becomes difficult if not infeasible.”

In contrast to the difficulty of obtaining fresh healthy food choices, unhealthy products are in abundance.

Figure 27 shows the location of licensed tobacco outlets in the city of Rochester. While not all of these outlets are corner stores, it is clear that the inner city and the Area of Focus contain a high concentration of locations where cigarettes and other tobacco products can be purchased. Specifically, the Focus Area, with less than one-quarter (24%) of the county’s household population, contains almost half (47%) of the establishments with tobacco licenses in the county and more than half (54%) of the county’s convenience stories with tobacco licenses (Monroe County Department of Public Health).

\(^4\) An area consisting of portions of Zip Codes 14608, 14611, and 14619. It is a lower income, predominantly African American part of Rochester with a population of 32,000.
Given the existing literature linking retail tobacco outlet density with the prevalence of smoking in adults (Novak et al., 2006) and the initiation of smoking in children (Henriksen, Schleicher, Feighery, & Fortmann, 2010), one would expect to see higher rates of tobacco use in the Focus Area. This relationship will be explored in the following Health Behaviors chapter.
A similar relationship between the number of alcohol outlets and drinking behaviors has also been documented (Scribner et al., 2000). Here again, we must expand our examination beyond just corner stores in order to fully ascertain the availability of alcohol in our geographies of interest. New York State licenses businesses for sale of alcohol either “on-premises” (e.g., restaurants and bars) or “off-premises” (e.g., grocery or corner stores). Generally, the urban counties, while having the most outlets numerically, have the lowest number of outlets per population, while the less populous/less dense rural counties have the highest rate of outlets per population. These numbers are likely impacted by wineries in the Finger Lakes areas. The exception to this trend, however, appears to be the high rate of outlets in the inner city areas of Rochester, particularly in comparison to suburban Monroe County (Figure 28). Given the previously cited literature, there is ample reason to suspect that city of Rochester and Focus Area residents may be susceptible to the influence of the myriad places to purchase and consume alcohol. Here again, data presented in the Health Behaviors chapter will be used to examine whether higher rates of alcohol consumption do exist in the Area of Focus.

Figure 28

**Active Liquor Licenses per 10,000 Population**  
**Finger Lakes Region 2008, by Zip Code**
By all the measures considered—toxic wastes, lead paint, safety, and the retail environment—it appears that the city of Rochester, and more specifically the Area of Focus, has physical environment characteristics that create strong potential barriers to good health.
V. Social Circumstances

A large body of literature has demonstrated that a distinct social gradient in health status and health outcomes exists both in the U.S. and on a global scale: those of higher socio-economic status (SES) tend to live longer and experience better health (Marmot, 2005). The potential explanations for this relationship are varied. The chronic stress of living in an impoverished environment with limited financial and social resources is thought to have significant deleterious effects on health over time (Baum, Garofalo, & Yali, 2006). The higher levels of education associated with higher SES have also been identified as the key pathway to better health due to improved decision making about health behaviors and the use of medical care (Ross & Wu, 1995). Other explanations focus primarily on poverty as the main explanatory component as greater wealth typically improves access to a variety of health improving resources including better housing, working conditions, medical care, and social support (Feinstein, 1993). While the exact mechanisms through which one’s social circumstances affects health remain open for debate, it appears quite clear that in combination these factors do play a key role in the health outcomes of individuals, families, and populations.

Measuring SES can pose a challenge given its multifaceted and somewhat abstract nature. While certain factors, such as income and education, are highly correlated with an individual’s relative SES, other measures provide a more complete picture of the social environment one encounters on a daily basis. An evaluation of housing tenure, family composition, occupation, or housing expenses as a proportion of income can all provide valuable insight. With this in mind, the FLHSA has created a composite measure of SES within a given ZIP code that aggregates many of the factors mentioned above into a single number\(^5\). The result is an SES score that ranges from 1 (low SES) to 5 (high SES). The SES scores of Monroe County ZIP codes are represented in Figure 29. Figure 29

\(^5\) The measure includes average income, average level of education, occupation composition, average value of the housing stock, age of the housing stock, a measure of population crowding, percentage of renter-occupied housing, percent of persons paying more than 35% of their income on housing, and percent of children living in single-parent households. Each ZIP code in upstate New York (New York State less New York City and the surrounding suburbs) is then ordered on this number, and an SES score is assigned based on the following thresholds: the lowest and highest SES score each contain 15% of the upstate population, the middle score represents 30% of the population, and the remainder is evenly split between SES scores 2 and 4.
One feature of SES that is not captured directly by the SES indicator is the extent of one’s social connections. This intangible construct is challenging to measure, but given the documented importance of having adequate social relationships that can provide support and positive interaction to SES and health (Campbell, Marsden, & Hurlbert, 1986; Holt-Lunstad, Smith, & Layton, 2010), it is worthy of special consideration. The map in Figure 30 details how much of the population living within a given census tract lived in a different house somewhere in Monroe County last year. High levels of housing turnover or “churn” likely impede the development of strong relational resources and community networks, potentially leading to social isolation of the residents living in these areas.
One of the most striking features of these two maps is the large amount of social inequality present in this relatively small community. Many of the suburban ZIPs have SES rankings in the highest 15%, while the majority of the city ranks in the lowest 15%. Also of note is that all of the Focus Area ZIPs have SES rankings of 1, meaning that the residents of this area are among the lowest 15% of all ZIP code populations in Upstate N.Y. in terms of social circumstances. Additionally, the social networks in the Area of Focus may suffer from considerable instability as much of this region includes census tracts in which 19% or more of residents lived in Monroe County but in a different house the year before. These findings imply that our region is socially segregated. On average, Focus Area inhabitants have life experiences that are different from those living in ZIP codes with the SES score of 5: affluence is replaced by poverty, home ownership is supplanted by renting from an older and often dilapidated housing stock, higher education is the exception not the norm, and those with jobs typically work in physically demanding occupations marked by low pay and limited benefits.

Differences in social circumstances, however, are not fully explained by where an individual lives. There is considerable evidence indicating that one’s race also plays a significant role in predicting SES. In Monroe County, African Americans fare worse on almost any measure of SES compared to Whites. When African American race is coupled with living in the Area of Focus, these differences typically
become even worse. For example, in the Focus Area, more than a third of the African American population lives in poverty compared with 17% of Whites (Figure 31). In the balance of the county about 21% of African Americans live below the federal poverty level compared to about 7% of Whites in the same region.

Figure 31

A similar pattern emerges in terms of education. Twenty percent of African American adults living in the balance of Monroe County have less than a high school education while only about 7% of Whites in the same geography report this level of schooling. Twenty-seven percent of African American adults in the Focus Area have not completed high school (Figure 32).
Race, in and of itself, may also play an important role in shaping one’s social circumstances. Prior work has demonstrated a link between poor health and the challenges of facing segregation (Williams & Collins, 2001) and implicit racism (Paradies, 2006). At a local level, work by Dr. Amina Alio and colleagues provides clear evidence that racial discrimination exists in the city of Rochester (Alio et al., 2013). Through the use of surveys, they found that 76% of African Americans respondents reported experiencing any form of racial discrimination in their lifetime. For comparison, a similar study conducted in Mississippi found that 57% of African American men and 70% of African American women reported experiencing any lifetime discrimination (Sims et al., 2012). As a result of this discrimination, 47% of Rochester African American respondents described their lives as moderately or very stressful, while 83% stated that discrimination had made their life at least somewhat harder. Facing these types of biases may contribute to the disparities in health status by perpetuating social oppression, limiting the availability and quality of medical care, and creating a more stressful living environment that can deplete an individual’s health over time.

Consistent with these findings, there is evidence that race is closely associated with worse health, even after controlling for SES. Figure 33 demonstrates that African Americans in Monroe County experience the highest rates of premature mortality at all levels of SES and that these elevated rates persist even among Blacks who live in ZIP codes with the highest SES scores.
Another key component of the social environment that can have a very direct impact on health is the frequency with which one experiences crime and violence. The city of Rochester is marked by high rates of both of these detrimental features. According to County Health Rankings and Roadmaps, Monroe County experienced 387 violent crimes per 100,000 population between 2007 and 2009, a rate which was below the state average of 399 ("Violent Crime Rate- Monroe County," 2011). Within the city of Rochester, however, the violent crime rate has been estimated to be more than two times that rate (917 crimes per 100,000 population per Rochester Police Department calculations). The map in Figure 34 indicates that the highest rates of violent crime in Rochester are concentrated in the inner-city and a significant portion of the Focus Area.
This may explain why a recent survey of residents of the HOPE community found that only one-third of respondents felt very safe outside during the day and less than one-quarter felt very safe outside at night (Project HOPE, 2012). Yet it does not appear that this violence is distributed evenly across racial and ethnic groups. An examination of hospital use due to assault shows that African Americans experience the highest rates of emergency department use (Figure 35) and hospitalization (Figure 36), with those living in the Focus Area experiencing the highest rates of utilization on both of these measures.

6A neighborhood near the intersection of Clifford and Conkey Avenues in northeast Rochester
Figure 35

ED Treat and Release Visits Due to Assault
By Race/Ethnicity and Geography
5 Year Average (2006-2010)

Focus Area - ZIP codes 14605, 14606, 14608, 14610, 14611, 14613, 14619, 14621
Rates are age-sex adjusted to the US 2000 population
Whites and African-Americans are non-Latino
Source: NYS SPAECI

Finger Lakes Health Systems Agency
This disparity in documented violence likely contributes to homicide ranking as the third leading cause of YPLL among African Americans in the Focus Area. The impact of crime and violence appears to be especially strong among African American males in this area. When the causes of premature mortality are examined for males only, homicide becomes the leading cause of YPLL for African Americans, surpassing both cancer and heart disease (Figure 37).
These high levels of premature mortality, coupled with higher rates of incarceration\(^7\) that typically accompany participation in violent and criminal behavior, have contributed to a demographic profile that the Coalition has referred to as the "missing male" phenomenon. As Figure 38 illustrates, young (ages 20-39) adult males are notably absent from the population distribution in the Area of Focus, helping to create a social environment predominated by households headed by single mothers (Figure 39).

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\(^7\)In 2012 almost 60% of male releasees who had served more than 90 days in the Monroe County Correctional Facility were African American, according to the Monroe County Releasee Report provided by the Safer Monroe Reentry Team.
Figure 38

African American Female: Male Ratio
by Age and Geography
Monroe County, 2010

African Americans are non-Latino
Focus Area = ZIP codes 14605, 14606, 14608, 14609, 14611, 14613, 14619, 14621
Data Source: US Census, 2010

Finger Lakes Health Systems Agency
While having only one earner has obvious implications for a family’s financial resources (see Figure 40), there are additional, less tangible consequences of this domestic structure.
Single mothers likely experience higher levels of stress and social isolation as they are forced to assume additional parenting duties, perhaps worsening the effects of lower SES on one’s health. Furthermore, a general lack of positive male role models may contribute to a perpetuation of violent and criminal behavior, which can impede social mobility and result in a multi-generational cycle of poor SES.

After looking across multiple dimensions of the social environment, it is clear that African Americans in this community are experiencing social circumstances that are far from ideal or equitable. Given the vast body of literature linking one’s social status to health, it is difficult to argue that the previously discussed health disparities are not, at least in part, a direct result of the broader economic disparities. Consequently, it will be difficult to achieve true health equity in this community without addressing the social circumstances laid out here.
VI. Health Behaviors

According to the calculations of McGinnis and colleagues, behavior comprises the single largest determinant of one’s health (2002). Given the vast body of literature that illustrates the direct link between unhealthy behaviors (i.e., smoking, a sedentary lifestyle, diets high in sodium and overall calories, heavy drinking, risky sexual behavior, or illicit drug use) and numerous diseases and chronic illnesses, it is easy to see why so much emphasis is placed on this particular factor. The 2008 version of “What’s Goin’ On?” placed substantial emphasis on the role of behavior in shaping one’s health through its focus on the metabolic syndrome: a collection of medical conditions that are largely caused by health behaviors and are strongly predictive of future heart disease, stroke, and diabetes. The area of health behaviors has been gaining increased attention within the public health community as it is seen as a key avenue through which improvements in population wellbeing can be achieved (Schroeder, 2007). Although changing behavior is by no means easy, it may be more directly actionable and responsive, particularly at a community level, than for example, altering the socioeconomic status of a large portion of the populace. The large estimated effect of lifestyle choices on health outcomes suggests that making strides in this area has the potential to offer the greatest return on investment, an important consideration in an era of increasingly scarce resources.

Given the importance of behavior as a determinant of health and a means by which it can be improved, it is essential to understand what role this factor plays in the observed racial disparities in our community. Looking at the results from the 2012 Adult Health Survey conducted by the Monroe County Department of Public Health reveals some startling lifestyle differences between African Americans in Monroe County and their racial/ethnic counterparts, as well as a concentration of “unhealthy” behavior within the Focus Area.

Tobacco use, and smoking in particular, is well established as a deleterious behavior with serious health consequences. This activity has been linked to increased rates of heart disease, stroke, lung and other forms of cancer, chronic obstructive pulmonary disease (COPD), and poor birth outcomes, as well as almost one in every five deaths within the U.S. each year (“Health Effects of Cigarette Smoking,” 2012). In Monroe County, there is evidence that African Americans are more likely to be current smokers as compared to Whites. Furthermore, comparing Focus Area residents to those living in the balance of Monroe County reveals higher levels of current smoking within our ZIP codes of interest (Figure 41). As discussed in the Physical Environment chapter, this geography is marked by high concentrations of tobacco outlets, suggesting that such easy access to tobacco products facilitates the development and perpetuation of a smoking habit.
Consistent with the prevalence of smoking within the Area of Focus, the rates of YPLL due to chronic obstructive pulmonary disease (COPD) and lung cancer appear to be higher for all racial/ethnic groups in this geography compared to those living outside (Figures 42 and 43). Interestingly, the rates of YPLL between African Americans and Whites do not differ greatly, and Whites in the Focus Area experience much higher rates of YPLL due to COPD. However, it is important to note that YPLL captures deaths from COPD and lung cancer that are potentially the result of earlier upstream health behaviors. As such, one might not expect significant correlation between current smoking patterns and current death statistics. Examining the incidence of new COPD and lung cancer cases would likely give a better representation of the health impact of recent tobacco use. Looking at the lung cancer incidence rate among racial and ethnic groups in the Finger Lakes Region (the smallest geography for which these data are available) shows that African American males experience the highest rate of new lung cancer cases (Figure 44).
Figure 42

Years of Potential Life Lost Due to COPD
By Race/Ethnicity and Geography
5-Year Average (2008-2012)

Years of Potential Life Lost per 100,000 Population

AAHC Focus Area
- White
- African American
- Latino

Balance of Monroe County
- White
- African American
- Latino

Focus Area = ZIP codes 14605, 14606, 14609, 14611, 14613, 14619, 14621
Years of Potential Life Lost based on deaths before age 75
Rates are age-sex adjusted to the US 2010 population
Whites and African Americans are non-Latino
Data Source: NYSDOH Vital Statistics

Finger Lakes Health Systems Agency
Figure 43

Years of Potential Life Lost due to Lung Cancer
By Race/Ethnicity and Geography
5-Year Average (2008-2012)

Focus Area = ZIP codes 14605, 14606, 14608, 14609, 14811, 14613, 14619, 14821
Data are age-sex adjusted to US 2000 population
Years of Potential Life Lost (YPLL) based on deaths before age 75
Data Source: NYS Vital Statistics

Finger Lakes Health Systems Agency
The daily dietary choices one makes represent another behavior with strong linkages to health outcomes. A poor diet has been shown to significantly increase the risk of being obese and developing conditions like cerebrovascular disease, type-2 diabetes, and certain types of cancer, including colorectal, pancreatic, and stomach ("Diet and Physical Activity: a Public Health Priority," 2013; Key, Allen, Spencer, & Travis, 2002). Conversely, diets that are energy balanced (calorie consumption is equal to calorie expenditure), high in fruits, vegetables and whole grains, and low in fat, salt and refined sugars have been found to have numerous protective health benefits. At a national level, the 2010 Dietary Guidelines Advisory Committee has identified racial differences in diet as a potential contributor to racial disparities in health. Locally, it appears that similar patterns exist. African Americans in Monroe County report relatively poor diets in relation to Whites on a variety of measures. Specifically, African Americans consume significantly more soda and sugary drinks, they are more likely to report consuming fast food, and they are more likely to have consumed less than one fruit and one vegetable per day over the past week (Figure 45).
Focus Area residents, meanwhile, were also significantly more likely to consume soda, sugary drinks, and fast food, while being less likely to have eaten at least one vegetable per day when compared to the balance of Monroe County (Figure 46). Given the dearth of healthy food outlets and the multitude of corner store outlets documented previously, these reported behaviors reinforce the aforementioned notion that healthy eating habits are difficult to achieve in the Focus Area.
Physical activity has also been shown to reduce the risk of many chronic conditions, including heart disease, diabetes, cancer, and stroke (Warburton, Nicol, & Bredin, 2006). Additionally, this health behavior is frequently examined alongside diet as these two factors concurrently impact an individual’s weight and his or her risk for the myriad health issues associated with obesity. These issues include heart disease, type 2 diabetes, kidney disease, breast and colon cancer, stroke, liver disease, and osteoarthritis. ("Diet and Physical Activity: a Public Health Priority," 2013; "The Health Effects of Overweight and Obesity," 2011).

According to the CDC, adults should engage in moderate-intensity physical activity for 30 minutes or more at least five days per week and/or vigorous intensity activity for 20 minutes or more at least three days per week ("How Much Physical Activity Do Adults Need?," 2011). In Monroe County, African Americans are less likely to meet these guidelines and more likely to report no leisure-time physical activity in the past month in relation to Whites (Figure 47).
A similar pattern emerges when comparing Focus Area residents to Monroe residents outside that Area (Figure 48).
In light of the geographic and racial differences in eating and physical activity habits presented here, one might expect to see disparities in the health outcomes associated with these behaviors. Looking at an intermediate outcome such as the percent of adults who are overweight or obese reveals that 68.7% of Focus Area respondents and 75.2% of African American respondents (compared to 64.8% of Whites) have a BMI greater than or equal to 25. While no difference was found between Focus Area and non-Focus Area respondents, there is clear evidence of poorer weight control for African Americans in Monroe County. Looking at a different intermediate outcome, high blood pressure rates illustrate another point of divergence: 64% of African Americans aged 35 years and older have ever been told that they have high blood pressure compared to 39% of Whites. Similarly, there is a greater prevalence of diabetes among African Americans 35 years and older (24% vs. 12%) and Focus Area residents 18 years and older (13% vs 9%) compared to Whites in Monroe County and non-Focus Area residents respectively (Figures 49 and 50).
Figure 49

Percent of Respondents who Have Ever Been Told They Have High Blood Pressure by Race/Ethnicity, Monroe County 2012

Percent of Respondents Who Have Been Told They Have High BP

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<th>Percentage</th>
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<tr>
<td>African American</td>
<td>63%</td>
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Differences relative to Whites are statistically significant (per NYSDOH)
Whites and African Americans are non-Latino
Data Source: NYSDOH AIDS, 2012

Figure 50

Percent of Respondents Who Have Ever Been Told They Have Diabetes by Race/Ethnicity and Geography, Monroe County, 2012

Percent of Respondents Who Have Been Told They Have Diabetes

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<th>Geography</th>
<th>Percentage</th>
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<td>12%</td>
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<tr>
<td>African American</td>
<td>24%</td>
</tr>
<tr>
<td>AAHC Focus Area</td>
<td>13%</td>
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<tr>
<td>Balance of Monroe County</td>
<td>9%</td>
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Differences (White vs. African American and Focus Area vs. Balance of County) are statistically significant (per NYSDOH)
Whites and African Americans are non-Latino
Focus Area = ZIP codes 14602, 14603, 14608, 14609, 14611, 14613, 14619, 14621
Data Source: NYSDOH AIDS, 2012

Finger Lakes Health Systems Agency
Corresponding disparities also exist in end-point outcomes as African Americans experience higher YPLL rates at the hands of several diseases that are caused, at least in part, by poor diet, physical inactivity, and obesity. Figure 51 illustrates the persistent differences in premature mortality that African Americans in the Area of Focus experience in relation to their racial and ethnic neighbors and the average rates for all of Monroe County. Given the consistency of this finding across multiple diseases, it appears that African Americans in the Focus Area suffer a much greater mortality burden at the hands of conditions for which diet and exercise behaviors constitute important risk factors.

Figure 51

Sexual behavior is another lifestyle feature with important health consequences. Risky sexual practices significantly increase the likelihood of contracting a number of communicable diseases ("Risk Factors," 2013), which result in an estimated $16 billion in U.S. health care costs in addition to the human cost of living with an infectious condition ("Incidence, Prevalence, and Cost of Sexually Transmitted Infections in the United States," 2013). At a national level, the Healthy People 2020 initiative has identified reducing racial and ethnic disparities in the occurrence of sexually transmitted diseases (STDs) as a key component to achieving the objective of reducing the burden of STDs ("Sexually Transmitted Diseases,” 2012). According to the Adult Health Survey, 16% of African Americans between the age of 18 and 64 in Monroe County report engaging in one or more risky sexual behaviors (consisting of having more than one sexual partner, using intravenous drugs, having been treated for an STD or venereal disease, having
given or received money or drugs in exchange for sex, or having sex without a condom over the past year) in contrast to 9% of Whites surveyed. In accordance with this increased risk, it appears that local health systems have appropriately responded as African Americans were much more likely than Whites to have ever been tested for HIV or to have been offered an HIV test in the past 12 months (76% vs. 46% and 51% vs. 22%, respectively). Nevertheless, recent changes in New York state law that require virtually all persons between the ages of 13 and 64 receiving hospital or primary care services be offered an HIV test may suggest that health care providers should be addressing this subject with all of their patients. As such, this may be an area needing improvement among White individuals.

Concurrent with the documented disparity in sexual behaviors, there is clear evidence that racial disparities exist in premature mortality related to HIV. As seen in Figure 52, this disease represents a significant cause of premature death for African Americans, particularly inside the Area of Focus, while Whites living outside the Focus area experience very little premature mortality attributable to HIV.

Figure 52

![Years of Potential Life Lost Due to HIV By Race/Ethnicity and Geography](image)

It is not clear from the data presented here whether the higher rate of premature mortality among African Americans is due to a greater prevalence of disease or some other factors such as inferior medical care. Yet, in light of the documented difference in sexual risk taking, it is likely that higher rates of HIV among African Americans exist locally.

Finally, there are additional risk behaviors that warrant investigation due to their connection with adverse health outcomes. Habits such as unsafe driving practices, heavy alcohol consumption, or the use of illicit drugs all come with the potential for negative health outcomes. For example, impaired and
unsafe driving coupled with a failure to properly use safety restraints help to make motor vehicle accidents one of the leading causes of death in the U.S. ("Ten Significant Public Health Achievements-United States, 2001-2010: Motor Vehicle Safety," 2011). Heavy or binge drinking significantly increases one’s risk for liver, breast, and colorectal cancer, heart disease, and stroke (Goldberg, Burchfiel, Reed, Wergowske, & Chiu, 1994; Grønbæk, 2009), while the use of illegal drugs can result in numerous adverse events, including fatal overdose (Chen & Lin, 2009).

The AHS found that African Americans in Monroe County are significantly less likely to have had at least one drink of alcohol in the past month compared to Whites (42.1% vs. 63.9%), while no significant differences were found in the rates of binge and heavy drinking between African Americans and Whites. As such, there does not appear to be significant racial disparities in alcohol consumption behavior in Monroe County.

In the Health Outcomes chapter, accidents were identified as a leading cause of YPLL for all racial and ethnic groups. This category captures a variety of unintentional causes of death, but as Figure 53 illustrates, deaths from motor vehicle accidents and drug and alcohol poisoning constitute the majority of YPLL due to accidents for all racial and ethnic groups living in the Area of Focus. Looking at rates of YPLL across racial/ethnic groups and geography reveals that African Americans in the Focus Area experience the highest rates of YPLL due to MVAs (Figure 54). Interestingly, Whites and Latinos in the Focus Area appear to have the highest rate of YPLL due to drug and alcohol poisoning, while African Americans in the Focus Area appear to fare slightly better than those living outside that Area (Figure 55). However, given the relatively small number of deaths due to this cause and the small difference in the two rates, this finding may not constitute a true difference in health between the two groups.
Figure 53

Composition of YPLL due to Accidents
By Race/Ethnicity
AAHC Focus Area
5 Year Average (2008-2012)

Focus Area = ZIP codes 14605, 14606, 14608, 14609, 14611, 14613, 14619, 14621
Years of Potential Life Lost based on deaths before age 75
Whites and African-Americans are non-Latino
Data Source: NYS Vital Statistics

Finger Lakes Health Systems Agency
Figure 54

Years of Potential Life Lost Due to MVAs
By Race/Ethnicity and Geography
5-Year Average (2008-2012)

Focus Area: ZIP codes 14005, 14606, 14608, 14509, 14611, 14613, 14019, 14621
Years of Potential Life Lost based on death before age 75
Ratios are age-sex adjusted to the US 2000 population
Whites and African-Americans are non-Latino
Data Source: NYS Vital Statistics

Finger Lakes Health Systems Agency
In total, it is clear that the health behaviors of African Americans in Monroe County and all residents of the Area of Focus are distinctly different from those of Whites and non-Focus Area residents, respectively. Given the strong connections between the behaviors discussed above and negative health outcomes, this determinant must be a key area of concentration for any disparity-reducing action plan.

However, a more startling conclusion from this chapter may be the concordance between the behaviors documented here and the physical and social environments discussed earlier. For example, higher rates of smoking and unhealthy eating habits, along with lower rates of physical activity, were found among residents of an area marked with numerous tobacco outlets, a retail environment with limited healthy food options, and high rates of crime and violence.\(^8\) Attempting to establish causality is beyond the scope of this report, but these results certainly suggest a complex and challenging relationship between where one lives and his or her health.

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\(^8\) It should be noted that this pattern was not found in relation to alcohol consumption as Focus Area residents were found to be less likely to have had a drink in the past 30 days.
VII. Medical Care

Lack of medical care is thought to have less influence on community health than other determinants such as environment or health behaviors. Nonetheless, there are substantial disparities in access to medical care services for minority populations and those living in the Area of Focus, compared to Whites and those living in the balance of Monroe County.

Service Availability

Much of the city of Rochester is a federally-designated Primary Care Health Professional Shortage Area (Figure 5.6) or a Medically Underserved Area (Figure 5.7), suggesting that the supply of health professionals, and specifically primary care physicians, is not adequate to meet the needs of these geographies. This may mean that city and Focus Area residents are forced to either travel to find a physician (a potentially challenging task if one does not have a car), seek care in a community clinic setting, seek care in an emergency department setting, or simply forgo receiving care. Given existing evidence showing that primary care is associated with the prevention of illness and death, as well as a more equitable distribution of health within a population (Starfield, Shi, & Macinko, 2005), it is plausible that this supply side deficit may be having deleterious effects on the health of city and Focus Area residents.

Figure 5.6
Table 2, based on 2008-2009 physician licensure data, shows that there are relatively few physicians practicing in the Area of Focus. Monroe County has approximately 2,400 full time equivalent (FTE) total physicians and 765 FTE primary care physicians (Center for Health Workforce Studies, 2010). Yet the Focus Area, with 25% of the county’s population, has only about 17% of all physicians and 11% of primary care physicians. Furthermore, if one removes the physicians immediately around Rochester General Hospital (14621), the balance of the Focus Area drops to about 4% of physician supply. Table 1 also indicates that again excluding the physicians located near Rochester General Hospital (that are potentially hospital-based and used by many outside the area), the remainder of the Area of Focus has only one FTE physician for each 4,900 population; in contrast, the federal benchmark for primary care physician shortage is one physician per 3,500 population. The area likely has fewer physicians than needed to meet the needs of the population.
Table 2

<table>
<thead>
<tr>
<th>Area of Focus (Area less 14621)</th>
<th>Total FTE</th>
<th>Primary Care FTE</th>
<th>Specialist FTE</th>
<th>Population per Primary Care FTE</th>
<th>Population per Specialist FTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area of Focus</td>
<td>395</td>
<td>88</td>
<td>307</td>
<td>2000</td>
<td>575</td>
</tr>
<tr>
<td>(Area less 14621)</td>
<td>(96)</td>
<td>(29)</td>
<td>(67)</td>
<td>(4900)</td>
<td>(2100)</td>
</tr>
<tr>
<td>Other Monroe</td>
<td>~2000</td>
<td>~675</td>
<td>~1325</td>
<td>850</td>
<td>425</td>
</tr>
</tbody>
</table>

Source: Center for Health Workforce Studies from physician licensure surveys 2008-2009

Availability of Health Insurance

Many in the Focus Area do not have health insurance or have had periods when they have not had insurance. Per the Monroe County Adult Health Survey, the Focus Area has over twice the proportion of the population without health insurance compared to the rest of the county. The rates of insurance county-wide are also significantly higher among African Americans as compared to non-Hispanic Whites (Table 3).

Table 3

<table>
<thead>
<tr>
<th>Measures of Health Insurance Availability, Monroe County, 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAHC Focus Area</td>
</tr>
<tr>
<td>-----------------</td>
</tr>
<tr>
<td>AA</td>
</tr>
<tr>
<td>Do not have health insurance, age 18-64</td>
</tr>
<tr>
<td>Did not have health insurance at some point in past 2 years, age 18-64</td>
</tr>
</tbody>
</table>

* = significantly greater than Balance of County
** = significantly greater than White

Source: Monroe County Department of Public Health, Adult Health Survey 2012

County-wide, over one-third of African American working age adults were without health insurance at some time within the past two years (children and elders are less likely to lack insurance). Evidence has clearly shown that having health insurance increases one’s propensity to use health care services (Manning, Newhouse, Duan, Keeler, & Leibowitz, 1987). The effect of such coverage on actual health outcomes is more controversial, yet, from an equity standpoint, it is an injustice that the sickest racial and ethnic groups are also the most likely to face barriers to potentially needed medical care.
Measures of lack of primary care

Perhaps as a result of the shortage of physicians in the Study Area and relative lack of health insurance, a substantial portion of the community does not have a personal health care provider (e.g., a family doctor). Over 12% of those living in the Focus Area reported not having a personal provider, while only about 7% of those in the rest of the county expressed that situation. Furthermore, it appears the lack of health insurance coverage in the Focus Area is having tangible effects on health care use as over 11% of individuals living in this geography report facing cost barriers compared to just 7% of those living in the balance of the county (Figure 58).

Figure 58

At the county level, it appears that African Americans are more likely to report not having a personal health care provider and facing cost barriers to seeing a doctor in the past year (Figure 59).
These restrictions in access have the potential to create significant barriers to a variety of important primary care services ranging from screenings for various diseases and modifiable risk factors such as high blood pressure to the administration of important vaccines. However, AHS responses suggest that African Americans are able to receive a variety of preventive services at rates comparable to their White counterparts. Specifically, no significant differences between African Americans and Whites were found in the rates of blood pressure checks in the past year, cholesterol tests in the last five years, mammograms in the past two years for women age 40-74, pap smears in the past three years for women age 21-65, colorectal cancer screenings in the past 10 years for adults age 50-75, flu vaccinations in the past year for adults over the age of 18, and pneumonia vaccinations for adults over the age of 65. This may be an indication of the positive influence of community health centers and ongoing efforts at community outreach by groups such as the High Blood Pressure Collaborative and the Rochester Health Engagement Partners aimed at increasing access to and the use of preventive screening services.

Despite these encouraging results, other metrics suggest that African Americans are indeed failing to receive wholly adequate primary care. One such indicator is the number of persons who present at a hospital’s emergency department (ED) and are subsequently treated and released without admission. Looking at these types of events provides a crude estimate of the number of ED visits which likely could have been better addressed (often at lower cost) in a primary care setting. Figure 60 illustrates that...
African Americans, both in and outside the Focus Area, are more likely to have treat-and-release visits compared to their racial/ethnic counterparts. Furthermore, African Americans living in the Focus Area have the highest rate of treat-and-release visits, suggesting a potential overreliance on hospital EDs as a source of primary care.

Figure 60

![ED Treat and Release Visits](image)

**ED Treat and Release Visits**
*By Race/Ethnicity and Geography*
*5 Year Average (2006-2010)*

Another indicator is the number of individuals hospitalized for medical conditions which, if adequate primary care had been received, the risk of hospitalization would have been reduced. For example, if a person were cared for and trained to respond to problems with asthma, most would not require a hospital admission for asthma distress. Developed by the federal Agency for Healthcare Research and Quality, such admissions are called Prevention Quality Indicators (PQIs) and are measured as number of PQI admissions per 100,000 population. The PQI rates are not a reflection on the services of the hospitals – those presenting for care need the hospital care – but rather the lack of access to or use of preventive and primary care that led to the medical crisis.

As Figure 61 illustrates, African Americans living in the Area of Focus experience higher rates of PQI hospitalizations than Whites living in the Focus Area and any racial/ethnic group in the balance of Monroe County, suggesting racial and geographic differences in access to preventive and primary care services not seen in the AHS results.
Figure 62 provides a breakdown of these potentially avoidable admissions by the underlying condition that caused the hospital visit. It appears that racial differences are most pronounced in diabetes and circulatory disease PQI admissions in the Focus Area.
This is interesting for two reasons. First, both conditions are closely linked to many of the behaviors (i.e. smoking, diet, and exercise) discussed in the Health Behaviors chapter that demonstrated clear discrepancies between Whites and African Americans. Second, diabetes and ongoing circulatory disease require a fairly complex level of proper care management to slow disease progression and limit adverse outcomes. This suggests that the previously discussed restrictions in access to primary care experienced by African American and Focus Area residents may not be resulting in a failure to receive simple one-time preventive services such as a blood pressure check or a vaccine, but rather in an inability to successfully manage complicated conditions. Once an individual develops a chronic disease, such as heart disease, diabetes, or cancer, the proper response typically requires ongoing clinical monitoring, a complex regimen of treatments and prescription medications, and behavioral modification to prevent adverse outcomes like permanent disability or death. Without proper access to the health care system or an adequate support system, it is very difficult to adhere to the optimal course of care.

Diabetes can be used as a case-study to illustrate how inadequate management can lead to poor and disparate health outcomes. According to the AHS, African Americans 35 years and older in Monroe County were about twice as likely as Whites to have been told that they have this disease (Figure 63).
Yet, when looking at the rate of PQI hospitalizations related to the diagnosis of diabetes, we see that African Americans were more almost six times as likely to be hospitalized for an issue that potentially could have been prevented (Figure 64). This finding suggests that the care received by diabetics in Monroe County may be uneven across racial groups. Beyond the short term inconvenience and cost of being hospitalized, poor disease management can have more serious detrimental effects. As seen in Figure 64, African Americans with diabetes were more than four times as likely to have been hospitalized for a lower extremity amputation compared to Whites.
This is a stark example of how upstream failures in care management, both on the part of the patient and his or her family and the health care system as a whole, can lead to a life altering progression of what likely should have been a manageable illness.

Complications potentially go beyond lower extremity amputations. Failure to appropriately treat diabetes can also lead to premature death. Figure 65 shows that African Americans in Monroe County experience the highest rate of YPLL (more than five times the rate seen in Whites) due to diabetes and kidney disease (a condition closely linked with diabetes).
While numerous factors determine whether or not an individual dies prematurely from diabetes, this finding is at the very least suggestive of disparate experiences within the health care system.

While the overall effect of medical care on the health status of a population is estimated to be small in proportion to the other determinants, this area remains an important means through which disparities can be reduced. Based on the findings presented here, it appears that this community has been able to mitigate potential barriers to primary care access for several preventive services, but more work, particularly in the area of chronic disease management, is needed to help reduce racial disparities.
VIII. Discussion

Clearly, racial disparities remain evident in this community. African Americans in Monroe County suffer worse self-reported health in comparison to Whites, likely leading to substantial differences in the quality of life experienced by these two groups. The inequalities do not end there. African Americans are also much more likely to die prematurely as evidenced by a YPLL rate that is more than twice the rate for Whites. Put another way, on average the death of an African American resident of Monroe County represents almost 10 and a half years of potential life lost compared to the death of a White resident, which represents seven years of potential life lost.

The picture is even bleaker for African Americans living in the Focus Area. The YPLL rate for African Americans in this geography is almost three times that of Whites living in the balance of Monroe County. This high rate of premature mortality, coupled with the large proportion of this region’s African Americans who live in the Focus Area, makes it clear that place matters. In fact, the negative effects of living in the Focus Area appear so profound that all racial and ethnic groups experience worse health outcomes inside this geography.

After examining how the determinants of health vary by race and residence in this community, one should not be surprised by these disturbing divergences in health. African Americans fare worse on almost every determinant examined in the above chapters, and living in the Focus Area typically exacerbates these differences. African Americans in our community typically earn less, have lower levels of education, and are more likely to live in families headed by a single parent. They are also more likely to be uninsured and face shortages in the availability of primary care providers. In addition, many African Americans live in an area marked by the existence of environmental hazards, high rates of violent crime, high concentrations of liquor and tobacco outlets, and a relative shortage of grocery stores that sell affordable healthy food options. In conjunction with, or perhaps because of, these external factors, African Americans also appear more likely to partake in a variety of unhealthy behaviors such as smoking, physical inactivity, frequent consumption of fast food, and risky sexual behavior.

These determinants undoubtedly conspire to create daunting barriers to a healthy and productive life for African Americans in this region. No one determinant acts in isolation, rather they are interconnected through pathways that are not fully understood. For example, it is plausible that limited education and health literacy coupled with living in an environment dense in tobacco and alcohol outlets and scarce in retailers of fresh fruit and vegetables can predispose an individual to some of the poor health behaviors described above. Similarly, it is easy to imagine how being born into poverty can significantly limit opportunities and social mobility, essentially forcing individuals to live in unhealthy physical environments filled with crime, substandard housing, and limited “walkability” or “playability.” Being “stuck” in a living situation like this makes it much more challenging to consistently achieve a healthy lifestyle.

In contrast, one could also put forth plausible causal pathways that work in the opposite direction. For instance, making poor health choices, like consuming diets high in calories, fat, and sodium while leading a sedentary lifestyle, leads to poor health, which restricts one’s earning potential and makes him or her...
more likely to be in a lower social class. Along those same lines, dropping out of high school or foregoing higher education places significant restrictions on one’s human capital, thereby restricting chances for upward mobility and contributing to a potential cycle of impoverishment and poor health. In instances where an individual is able to move out of an “unhealthy” living environment, disparate health outcomes are still unlikely to simply disappear. While longitudinal data for these situations are sparse, anecdotes tell of African American family members moving from the Focus Area to the suburbs yet still dying at an early age, often from chronic diseases that are potentially preventable or manageable. In fact, some ZIP Codes in the inner-ring suburbs demonstrate higher mortality rates than portions of the Area of Focus, suggesting a pathway that is more complicated than an unhealthy environment being the sole cause of unhealthy individuals.

Much research has been devoted to elucidating how the determinants interact with each other, yet the issue remains unsettled. Explaining exact causal mechanisms are beyond the purview of this report. Instead it is the belief of the Coalition that an “all of the above” action plan must be adopted by this community to truly address our local health disparities.
What has Been Done

The findings of this report may paint a bleak picture, and addressing these health differences may seem like a daunting task. But it is important to remember that significant progress has been made. Case in point, African Americans in the Finger Lakes region had a premature mortality rate of 11,700 years of potential life lost per 100,000 population in 2000. In 2010, that rate had decreased by almost 23% to just over 9,000 YPLL per 100,000 population. Looking at some of the specific medical problems that were highlighted in the 1981 Minority Task Force Interim Report illustrates similar gains. Between 2000 and 2010, YPLL related to diabetes has decreased by roughly 28% for African Americans, while YPLL related to homicides has declined by about 10% over the same time frame. Other conditions, like heart disease and cancer, have seen declines of 48% and 18% respectively in the local African American population. Many factors have contributed to these health improvements, many of which have nothing to do with the African American Health Coalition or other community efforts. Nevertheless, the coalition has made important contributions to enhancing the well-being of this region’s African Americans.

This section will outline just some of the specific achievement of the Coalition. Taking time to reflect on these successes will serve as a reminder of what can be accomplished when the community comes together around a common goal while helping to inform the action plan that will follow in the next chapter.

The previous edition of “What’s Goin’ On” identified five key strategies that the African American Health Coalition members committed to pursuing. These strategies framed health status improvement as an opportunity for collective and community action. They were:

1. Enlisting the broad diversity of leadership within the African American community in establishing health and health behaviors as a community priority. The Coalition envisioned mobilizing African American community leaders to act as healthy lifestyle models, coaches, and mentors.
2. Focusing on primary prevention and connecting prevention to community-based programming and community events. The Coalition set a goal of working with community and faith organizations to increase healthy eating and promote a more active lifestyle within the African American community.
3. Mobilizing community resources and community leaders in advocacy to address the link between environment and behavior. The Coalition’s report specifically called for policy approaches to promote greater access to healthier food and safer places to play.
4. Focusing on broad community health improvement instead of pursuing disease-specific initiatives. The Coalition embraced the concept of “the Metabolic Syndrome,” as a way to confront underlying health determinants and promote community development issues.
5. Continuing to support and participate in the African American Health Coalition as an important way of signaling community support for the FLHSA’s approach to community health planning. By bringing together diverse leaders, institutions, and organizations, FLHSA created a vehicle by which Coalition members have an influence greater than could be achieved by any single organization or individual working alone.
The African American Health Coalition members have pursued these strategies through a number of efforts that include:

**AIDS Care Minority AIDS Initiative’s “Get It Done” Program**

AIDS Care’s barbershop initiative, Get it Done, is a program that provides health information to communities of color. This program now supports the Rochester Business Alliance/FLHSA High Blood Pressure Collaborative by providing customers of inner-city barbershops and beauty salons with high blood pressure information, blood pressure screenings, and blood-glucose testing. This program has mobilized barbers and stylists, who are powerful community leaders and influencers, to act in new ways as health models and coaches. It has also helped provide a platform upon which local nursing and pharmacy schools can provide service learning opportunities for students preparing for careers in the health professions.

**Rochester Health Engagement Partners’ “Prosper and Be in Health” Program/Rochester Faith Health Collaborative**

The Rochester Health Engagement Partners, which includes Coalition members, collaborated with the FLHSA and other members of the African American Health Coalition to launch a program of monthly blood pressure screenings and weekly health education sessions in Rochester churches with primarily African American congregations. A training curriculum was developed and used to train health coaches in each congregation. The program started with 19 churches representing over 5,000 total congregants. As the number of churches has grown, these congregations now meet quarterly as the Rochester Faith Health Collaborative in order to share best practices and liturgical resources.

**The Natural Helpers Learning Collaborative (NHLC)**

Initiated as an academic-community partnership, the Natural Helpers Learning Collaborative has evolved into a group of residents committed to addressing the determinants of health with a focus on promoting mental wellness and reducing violence. The NHLC fosters these goals through cooperative discussion, education, and outreach across neighborhoods and blocks. Its activities are embedded within formal participatory evaluation and research methods and are aimed at strengthening residents’ informal roles in reducing the acceptance of violence and in promoting mental health. Through this Collaborative, the community is documenting the role of these “natural helpers” and how they are recruited and supported.

**Exploring Perceptions of Discrimination among Rochester Residents**

The African American Health Coalition partnered to support the research of Dr. Amina Alio, a social and behavioral scientist at the University of Rochester Medical Center, as she conducted a survey of perceptions of discrimination among Rochester residents. The Coalition members used their well-established network of grassroots organizations and community settings to help identify and recruit
venues for survey distribution. As a result of the participation of Coalition members, the study project was able to design and implement a plan that increased survey participation and that provided a representative city-wide sample that included individuals from all socioeconomic and ethnic backgrounds.

African American Leadership Development Program

The African American Health Coalition has developed a module on health and health planning that has become a stable element in the curriculum of the United Way of Greater Rochester’s African American Leadership Development Program (AALDP). The AALDP is a development program that identifies, trains, and promotes the placement of African Americans in leadership positions. By having Coalition members participate in the AALDP program, which includes a session on health and health disparities data, the Coalition has been able to broaden the number of African Americans in leadership roles with knowledge of the community’s health care needs. Several Coalition members are AALDP alumni.

Advocacy in support of the Rochester City School District Condom Availability Program

The African American Coalition members provided input into the City School District’s deliberations related to its Condom Availability Program. This program was developed in response to the high incidence of HIV/AIDS and sexually transmitted diseases among city youth and the alarming racial/ethnic disparities in the rate of new infections among young people under the age of 25. This advocacy also allowed Coalition members to engage other members of the community in advocacy and provided an opportunity to circulate the 2008 “What’s Goin’ On” report’s findings related to reproductive health.
References


APPENDIX A

HISTORY OF MINORITY HEALTH REPORTS AT FINGER LAKES HEALTH SYSTEMS AGENCY

Finger Lakes Health Systems Agency (FLHSA) and its predecessor agencies have long had the health of underserved and inappropriately served communities, such as the African American and Latino communities, as one of its areas of focus. However, in 1979 the Urban League of Rochester and its Executive Director William Johnson, in a letter to FLHSA, reproached the Agency and the United Community Chest for not doing more regarding disparities in access to health care and health status of the region’s minority populations. Mr. Johnson quoted from the Urban League of Rochester’s report, “The State of Black Rochester 1978”:

It is hard to believe that the Finger Lakes Health Systems Agency can conduct health planning for the entire region and have no comprehensive data on the region’s minorities. It is equally as difficult to accept that this information does not exist at the United Community Chest. These two agencies are uniquely qualified, as evidenced by their joining forces to access and evaluate and plan for selected health services in the area, to accomplish this critically needed service. The Chest and the HSA should immediately institutionalize the monitoring and reporting of minority health status, until such time that it no longer is necessary.

In response, FLHSA assembled a Minority Health Task Force. In 1980, FLHSA staff released a report citing the relative lack of data, and poor data quality, concerning markers of minority health. Nonetheless, in early 1981 the Task Force issued an Interim Report. The Interim Report listed in outline format health problems relevant to non-white and other minority populations. Many of those problems persist to this day, while others have largely been resolved. As a complement to the statistical data, a Task Force member also performed an informal opinion survey of minority health leaders concerning minority health needs and ways to address them. Those leaders suggested a number of changes needed in the health care system to make it more responsive to minority patients and also suggested societal changes that needed to be addressed:

There is need to recognize the social problems of minorities (low socio-economic status and discrimination) as truly community health problems. The social issues of health should be part of the major issues of health today.

There is need to recognize that physical and mental health problems experienced by minorities are not only a result of their generally lower socio-economic status but to the stress of living in a hostile, racist environment. An awareness of the genesis of stress and its effects on health and mental health is needed.

These two themes – the social causes underlying some of the disparities in health of minority populations and the impact of place of residence and social stress on health – have been consistent throughout FLHSA work in minority health and will be an element in this report.
Loss of federal funding under the Reagan administration reduced the Agency’s focus on population health, although substantial reporting of African American and Hispanic health indicators was included in the FLHSA 1985 “Health Systems Plan.”

Still, in 1998, a community activist challenged the Agency on its lack of focus on Hispanic health. Again, staff were concerned about relative lack of data and the quality of what data existed. In response the Hispanic Health Task Force was developed, and in 1999 “Nuestra Salud” (Our Health) was published. The report provided statistics concerning the health of the Hispanic community and discussed the cultural underpinnings of some of the disparities observed. The relatively small number of persons of Hispanic heritage in the region residing outside Monroe County did not allow for separate analysis of the health of that population, but the Task Force concluded that most of the Hispanic health and health care issues observed in Monroe County were also operative in the counties outside Monroe.

In 2002, FLHSA seated the African American Health Status Task Force (AAHTF), comprised of leadership in the African American community and health care providers. This Task Force was charged with studying the health status of African Americans in the region and identifying the disparities between African Americans and the rest of the community. In a 2003 report entitled, “What’s Goin’ On,” the AAHTF developed a series of recommendations about reducing the disparities identified. The report introduced the concept of “place” in conjunction with race and socio-economics as determinants of health and sources of disparity.

In 2004, “Nuestra Salud Hoy!” (Our Health Today) was published, updating the Hispanic health data.

In 2007, the FLHSA established these two task forces as ongoing Health Coalitions. Renamed the Latino Health Coalition and the African American Health Coalition (AAHC), these community leaders joined in the work of evolving community health planning so that it incorporated eliminating health disparities through community engagement. In 2008, the African American Health Coalition issued an update to “What’s Goin’ On.” This report focused on the metabolic syndrome and its contribution to the region’s disease burden. “What’s Goin’ On” 2008 also brought focus on the need to address the social determinants of health as a central strategy to disparities elimination and highlighted the role that Coalition members, themselves, could play as catalysts for health care improvement.

As a result of this report, and the new Community Engagement effort of the FLHSA, AAHC members became active contributors to other community health improvement activities including the FLHSA/RBA High Blood Pressure Collaborative and the Healthi Kids Initiative.
APPENDIX B

METHODS

Years of Potential Life Lost (YPLL) provide a standardized way to capture premature mortality and give greater weight to deaths which occur at young ages. This indicator is calculated in relation to a reference age which is commonly set at 75. In order to allow for comparability with other community and national reports, that convention is followed here. Measurement computation is as follows:

\[
YPLL = \begin{cases} 
75 - \text{Age at Death} & \text{if } \text{Age at Death} < 75 \\
0 & \text{if } \text{Age at Death} \geq 75
\end{cases}
\]

In order to determine the YPLL within a community, the above value is summed for each death within the given time frame. Additional adjustments are then made to account for differences in the age and gender distribution of the population of interested, with the final result being reported as a standardized rate (YPLL per 100,000 Population).

DEFINING RACIAL/ETHNIC GROUPS

U.S. Census: The U.S. Census allows individuals to choose one or more races to identify themselves. Identification as Latino is a separate question; an individual can identify as a Latino in addition to selecting a race(s). For this report, the category “Black or African American alone or in combination with one or more other races, not Hispanic or Latino” was selected for use in the analysis. This selection represented a change from previous reports, which used “Black or African American alone, not Hispanic or Latino.” The change was made in view of the growth in the number of respondents choosing more than one race. In Rochester and Monroe County, the residence of most African Americans in the region, 95% and 93% respectively of African Americans alone or in combination, not Latino identified themselves as African American alone. Data for “White alone, not Hispanic or Latino” are used for Whites. Individuals identifying as Latino are considered Latino, regardless of racial identification.

American Community Survey: The American Community Survey (ACS) allows the same multiple racial identification possibilities as the Census as well as separate identification as Latino. However, because the ACS uses a sample of the total population, fewer racial/ethnic groupings may be available for analysis. In this region the sole African American category available is “African American alone,” which would include individuals also identifying themselves as Latino. Data on “White alone, not Latino” and “Latino” are available. This report includes education and poverty data from the ACS.

New York State SPARCS: SPARCS asks that the code that best describes the patient be utilized; the choices are white, black, Native American, Asian, Pacific Islander, other race, unknown. Latino identification is a separate question. SPARCS is the source of the report’s hospitalization and emergency department data.

Monroe County Adult Health Survey: The Adult Health Survey (AHS) allows respondents to identify as Latino and to choose more than one racial identification; if they choose more than one race, they are asked which race best describes them.
About the Agency and Coalition

Finger Lakes Health Systems Agency (FLHSA) is an independent community health planning organization working collaboratively with multi-stakeholder groups to improve health quality and access and eliminate health care disparities. The agency envisions Rochester and the Finger Lakes region becoming America’s healthiest community with health equity for all people in the region, while serving as a national model for continuous improvement in community health, health care cost and quality. Its mission is to achieve this vision by bringing into focus community health issues via data analysis, community engagement and by implementing solutions through community collaboration and partnership.

FLHSA serves communities in the nine-county Finger Lakes region of Chemung, Livingston, Monroe, Ontario, Schuyler, Seneca, Steuben, Wayne, and Yates counties. As a non-profit organization, FLHSA is governed by a board of directors composed of leaders from hospitals, insurers, health care providers, business, human-service agencies, education, government, and consumers. Agency leadership and staff include health-data experts, physicians, and community advocates who are highly educated and richly experienced in health care, data analysis, and community outreach.

The agency works in partnership with numerous community stakeholders, such as payers, hospitals, clinicians, nursing homes, the business community, government, and educational institutions. Ongoing efforts to drive change in the health care system focus on three key elements:

• System performance – setting realistic performance targets and measuring and reporting results.
• Capacity management – proactively collecting and analyzing data, then working with stakeholders to develop recommendations.
• Community engagement – sharing health-status information with affected populations and working with community leaders to set priorities, develop action plans, and educate and mobilize consumers to improve their health.

The African American Health Coalition is a group of individuals and organizations, convened by the Finger Lakes Health Systems Agency, who work together to build a coordinated community response to eliminate health disparities affecting the African American population. The Coalition’s 35 members work together towards a shared vision of achieving health equity for African Americans in the Finger Lakes Region through community-wide efforts. To achieve its vision, the African American Health Coalition meets monthly to:

• Collect and analyze data (at the system and individual level) to prioritize and better understand health disparities in the African American community
• Interpret data from the perspective of the African American community to inform more effective responses to health issues;
• Recommend effective strategies to address health issues in the African American community, guided by best available evidence of what works;
• Inform research efforts to understand more effective approaches to eliminating health disparities in the African American community; and
• Advocate for needed public policy changes to eliminate health disparities.

The Coalition member’s organizations sustain some of Finger Lakes Region’s most vulnerable citizens: persons with HIV, struggling families, the fragile elderly, people living with co-morbid health conditions, people discharged from prison and detoxification units, and babies and their mothers.