Community Health Needs Assessment

2016 FINAL SUMMARY REPORT

GHVHS
GREATER HUDSON VALLEY HEALTH SYSTEM

SUBMITTED BY

HOLLERAN
COMMUNITY ENGAGEMENT RESEARCH & CONSULTING

2016-2018
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive Summary</td>
<td>1</td>
</tr>
<tr>
<td>Community Health Needs Assessment Overview</td>
<td>3</td>
</tr>
<tr>
<td>Community Health Needs Assessment Findings</td>
<td>5</td>
</tr>
<tr>
<td>Socio-Demographic Statistics Overview</td>
<td>5</td>
</tr>
<tr>
<td>Key Health Issues</td>
<td>7</td>
</tr>
<tr>
<td>Health Risk Behaviors</td>
<td>12</td>
</tr>
<tr>
<td>Access to Care</td>
<td>13</td>
</tr>
<tr>
<td>Identification of Community Health Needs</td>
<td>15</td>
</tr>
<tr>
<td>Community Health Implementation Plan</td>
<td>18</td>
</tr>
<tr>
<td>Appendix A. Secondary Data Sources</td>
<td>22</td>
</tr>
<tr>
<td>Appendix B. Key Informant Participants</td>
<td>23</td>
</tr>
<tr>
<td>Appendix C. Prioritization Session Participants</td>
<td>25</td>
</tr>
<tr>
<td>Appendix D. 2013 Implementation Strategy Outcomes</td>
<td>27</td>
</tr>
</tbody>
</table>
EXECUTIVE SUMMARY

Beginning in July 2015, Greater Hudson Valley Health System undertook a comprehensive community health needs assessment (CHNA) to evaluate the health needs of individuals living in Orange and Sullivan Counties in New York. The aim of the assessment is to reinforce Greater Hudson Valley Health System’s commitment to the health of residents and align its health prevention efforts with the community’s greatest needs. The assessment examined a variety of health indicators including chronic health conditions, access to health care and social determinants of health. Greater Hudson Valley Health System contracted with Holleran Consulting, a research firm based in Lancaster, Pennsylvania, to execute this project.

The completion of the CHNA enabled Greater Hudson Valley Health System to take an in-depth look at its community. The findings from the assessment were utilized by Greater Hudson Valley Health System to prioritize public health issues and develop a community health implementation plan focused on meeting community needs. Greater Hudson Valley Health System is committed to the people it serves and the communities where they reside. Healthy communities lead to lower health care costs, robust community partnerships, and an overall enhanced quality of life. This CHNA Final Summary Report serves as a compilation of the overall findings of each research component.

CHNA Components
- Secondary Data Research
- Online Community Survey
- Key Informant Surveys
- Focus Group Discussions
- Prioritization Session
- Implementation Plan

Key Community Health Issues
Greater Hudson Valley Health System, in conjunction with community partners, examined the findings of the Secondary Data, Online Community Survey, Key Informant Surveys, and Focus Group Discussions to select Key Community Health Issues pertinent to each county. The following issues were identified (presented in alphabetical order):

Orange County
- Chronic Illness
- Community Outreach
- Financial Caseworker
- Health Care Navigator
- Home Care Services
- Mental Health
- Safety
- Substance Abuse
- Teen Pregnancy Collaborations
- Transportation
- Wellness

Sullivan County
- Care Coordination
- Chronic Disease Management
- Early Detection/Cancer
- Health Education/Literacy
- Mental Health/Substance Abuse
- Mobile Care
- Pharmaceutical Access
- Specialty Care for under/uninsured
- Transportation
- Wellness
**Previous CHNA and Prioritized Health Issues (2013)**
Greater Hudson Valley Health System conducted a comprehensive benchmark CHNA in 2013 to evaluate the health needs of individuals living in the hospital service area within Orange and Sullivan counties. The purpose of the assessment was to gather information about local health needs and health behaviors. The assessment helped Greater Hudson Valley Health System to identify health issues and develop a community health implementation plan to improve the health of the surrounding community. The prioritized health issues include:

**Orange County**
- Prevent Chronic Diseases
- Promote Healthy Women, Infants and Children

**Sullivan County**
- Prevent Chronic Diseases
- Promote Healthy Women, Infants and Children

**2016 Prioritized Community Health Issues**
Based on feedback from community partners, including health care providers, public health experts, health and human service agencies, and other community representatives, Greater Hudson Valley Health System plans to focus community health improvement efforts on the following health priorities over the next three-year cycle:

- Prevent Chronic Diseases/Reduce Obesity
- Promote Healthy Women, Infants and Children/Reduce Teen Pregnancy

**COMMUNITY HEALTH NEEDS ASSESSMENT OVERVIEW**

**Organization Overview**
The Greater Hudson Valley Health System (GHVHS) is a New York State, not-for-profit hospital system headquartered in Middletown, New York. It is currently the active parent company for two member hospitals – Catskill Regional Medical Center and Orange Regional Medical Center. The GHVHS is dedicated to developing specialty services, medical programs and needed healthcare services that allow residents to remain close to home to receive quality care.

Providing healthcare to nearly 450,000 residents in Orange, Sullivan and Ulster Counties, the GHVHS was designed to improve the quality, stability and efficiency of healthcare services in the mid-Hudson and Catskill region. Services provided by more than 3,300 employed professionals and over 850 medical staff members, makes the GHVHS one of the largest healthcare providers in the tri-county area. The System’s three hospital campuses (Catskill Regional Medical Center - Harris, Catskill Regional Medical Center - Callicoon and Orange Regional Medical Center) plus several outpatient facilities, offer a broad spectrum of care.
Methodology
The CHNA was comprised of both quantitative and qualitative research components. A brief synopsis of the research components is included below with further details provided throughout the document:

- **A Statistical Secondary Data Profile**: existing data from local and national sources depicting population and household statistics, education and economic measures, morbidity and mortality rates, incidence rates, and other health statistics for Orange and Sullivan Counties were compiled and compared to state and national level data, where applicable.

- **An Online Community Survey**: was conducted with individuals residing in Orange and Sullivan counties between September 25, 2015 and January 6, 2016. The survey was designed to assess their health status, health risk behaviors, preventive health practices and needs, health care access primarily related to chronic diseases, and community assets and opportunities. The survey took approximately 10 to 15 minutes to complete. In total, 350 residents completed the survey, 229 from Orange County and 121 from Sullivan County.

- **Key Informant Surveys**: were conducted with a total of 20 key informants representing Orange County and 23 from Sullivan County between September and November 2015. Key informants were defined as community stakeholders with expert knowledge, including public health and health care professionals, social service providers, non-profit leaders, business leaders, faith-based organizations, and other community leaders.

- **Focus Group Discussions**: two focus groups were conducted in Sullivan County on November 12, 2015 and another two groups were conducted in Orange County on November 13, 2015. In Sullivan County, feedback was provided from 17 representatives from the community, while a total of 28 representatives from the community attended the focus group in Orange County. The purpose of the focus groups was to gather qualitative feedback from community residents regarding health care access issues among low income population groups in both counties.

Research Partner
Greater Hudson Valley Health System contracted with Holleran, an independent research and consulting firm located in Lancaster, Pennsylvania, to conduct research in support of the CHNA. Holleran has 23 years of experience in conducting public health research and community health assessments. The firm provided the following assistance:

- Collected and interpreted data from secondary data sources
- Collected, analyzed and interpreted data from the online community survey
- Collected, analyzed and interpreted data from key informant interviews and focus groups; and
- Prepared all reports

Community Representation
Community engagement and feedback were an integral part of the CHNA process. Greater Hudson Valley Health System sought community input through key informant interviews with community leaders and partners, focus group discussions with community residents, an online community member survey available to all residents, and inclusion of community leaders in the prioritization and
implementation planning process. Public health and health care professionals shared knowledge and expertise about health issues, and leaders and representatives of non-profit and community-based organizations provided insight on the community, including the medically underserved, low income, and minority populations.

Research Limitations
As with all research efforts, there are some limitations related to this study’s research methods that should be acknowledged. Data based on self-reports should be interpreted with particular caution. In some instances, community member survey participants may over- or underreport behaviors and illnesses based on fear of social stigma depending on the health outcome of interest or misunderstanding the question being asked. In addition, respondents may be prone to recall bias where they may attempt to answer accurately, but remember incorrectly.

In addition, timeline and other restrictions may have impacted the ability to survey all community stakeholders. Greater Hudson Valley Health System sought to mitigate limitations by including representatives of diverse and underserved populations throughout the research components.

Prioritization of Needs
Following the completion of the CHNA research, Greater Hudson Valley Health System prioritized community health issues in collaboration with its research partner, Holleran Consulting, and developed an implementation plan to address prioritized community needs.

COMMUNITY HEALTH NEEDS ASSESSMENT FINDINGS

The following sections present the results of the analysis of secondary data, online community survey, key informant survey, and focus group discussions.

I. Socio-Demographic Statistics Overview

The population of Orange County has experienced a notably higher growth (9.8%) between 2000 and 2013, when compared to Sullivan County (3.9%), New York (3.2%), but lower than the nation (11.5%).

Sullivan County has a notably larger older adult population when compared to Orange County, New York, and the nation as evidenced by the median age (42.2 years), and the percent of resident’s age 65 years and older (15.7%).

The population in both Orange County and Sullivan County is primarily White. However, Orange County has a larger proportion of Hispanic population (18.8%) and residents who identify their race as “some other race” (9.1%), when compared to Sullivan County and the nation. The racial makeup of Orange County fairly compares to that of the state. The racial breakdown provides a foundation for primary language statistics. The percentage of people who speak a language other than English at home is notably higher in Orange County (23.7%) when compared to Sullivan County (15.3%), and the nation (20.9%), but is lower when compared to the state (30.2%). Residents in Orange County who speak a
language other than English at home are more likely to speak Spanish and other Indo-European languages.

Figure 1. Percentage of population speaking a language other than English at home

![Percentage of population speaking a language other than English at home](chart.png)

A review of U.S. Census data shows specific community needs related to housing, education and poverty in both counties. Housing is an important social determinant of physical and mental health. It is well documented that affordable housing alleviates the financial burden and makes more household resources available to pay for health care and healthy food, which leads to better health outcomes. When looking at housing costs in the two counties of interest, the percentage of home owners and renters spending 30% or more of their income on mortgage (43.9%) or rent (58.7%), is higher in Orange County when compared to Sullivan County, the state, and the nation.

Education is an important social determinant of health. Anecdotal evidences indicate that individuals who are less educated tend to have poorer health outcomes. Sullivan County has the lowest percentage of residents with a bachelor’s degree or higher (22%) when compared to Orange County (28.8%), the state (33.5%), and the nation (29.1%).

Another indirect measure of health outcome is household income as it provides a foundation for determining poverty status. The median income for households and families is lowest in Sullivan County ($49,147 and $60,745 respectively), and highest in Orange County ($68,517 and $81,487 respectively). The two counties also had a stark difference in regard to poverty status. Fewer households in Orange County live below poverty level (11.9%) compared to households in Sullivan County (16.7%), the state (15%), and the nation (14.6%). The incidence of poverty is also highest for female-headed households in Sullivan County (34.8%) when compared to Orange County (20.5%), New York (28.6%), and the nation (31.3%). A higher share of residents in Sullivan County live below poverty level and receive food stamp/SNAP benefits (59.8%) than in comparison areas.
Figure 2. Households below poverty level and receiving food stamps

- Households living below poverty level
- Households receiving food stamps/SNAP benefits
- Households living below poverty level and receiving food stamp/SNAP benefits
II. Key Health Issues

This section illustrates the health concerns of the community in both counties as identified by the secondary data as well as the online community survey, key informant survey, and focus groups.

Top Five Leading Causes of Death

The top five causes of death in both of the counties are heart disease, cancer, chronic lower respiratory disease, stroke, and accidents. These conditions are consistent with the state and the nation; however, the age-adjusted death rate due to heart disease and accidents is notably higher in Sullivan County than in Orange County, the state and the nation. In contrast, the death rate due to cancer (161.9) is higher in Orange County when compared to Sullivan County and New York. However, overall death rate per 100,000 is notably higher in Sullivan County (739.2) when compared to Orange County (670.3), the state (621.3), and the nation (731.9).

| Table 1. Deaths by Selected Causes, All Ages per Age-Adjusted 100,000 (2013) |
|-----------------|-------|-------|-------|-------|
| Diseases of heart | N/A   | 169.8 | 176.4 | 167.3 | 196.6 |
| Malignant neoplasms (Cancer) | 161.4 | 163.2 | 149.7 | 161.9 | 157.6 |
| Chronic lower respiratory disease | N/A   | 42.1  | 29.4  | 36.7  | 41.2  |
| Cerebrovascular diseases (Stroke) | 34.8  | 36.2  | 24.9  | 32.3  | 34.8  |
| Accidents (Not including motor vehicle accidents) | N/A   | 39.4  | 25.8  | 33.7  | 45.5  |
| Diabetes mellitus | N/A   | 21.2  | 17.2  | 17.4  | 21.8  |
| Influenza and Pneumonia | N/A   | 15.9  | 19.0* | 20.2* | 15.4* |
| Cirrhosis of the liver | N/A   | 10.2  | 6.6   | 7.9   | 7.6   |
| Suicide | 10.2  | 12.6  | 7.8   | 7.4   | 12.9  |
| Homicide/Legal Intervention | N/A   | 5.2   | 3.4   | 4.2   | 1.2   |

Sources: Centers for Disease Control and Prevention, New York State Department of Health, Healthy People

*Rates only include Pneumonia cases

Online community survey participants were asked to disclose the chronic conditions they have been diagnosed with. The top five health conditions that survey participants in both counties have been diagnosed with include high cholesterol, high blood pressure, arthritis, anxiety disorder, and asthma.

Survey participants were also asked to identify the top five most pressing health issues in their community. Respondents could choose from a list of 24 health issues as well as suggest their own that were not on the list. Overweight/obesity was the top health issue identified by nearly two-thirds of respondents in both counties. Following overweight/obesity, cancer, drug abuse/alcohol abuse, access to care/uninsured, and mental health/suicide were ranked as the next four most pressing health issues in Orange County. On the other hand, access to care/uninsured, drug/alcohol abuse, cancer and mental health/suicide were ranked 2nd, 3rd, 4th, and 5th respectively in Sullivan County. The following table shows the breakdown of the percent of respondents who selected the top 10 health issues from a list of 24 health issues.
Table 2. Ranking of the Top Five Most Pressing Health Issues by Community Residents

<table>
<thead>
<tr>
<th>Rank</th>
<th>Health Issue</th>
<th>Percent of respondents who selected the issue*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Orange County</td>
<td>Sullivan County</td>
</tr>
<tr>
<td>1</td>
<td>Overweight/Obesity</td>
<td>62.4%</td>
</tr>
<tr>
<td>2</td>
<td>Cancer</td>
<td>52.1%</td>
</tr>
<tr>
<td>3</td>
<td>Drug Abuse/Alcohol Abuse</td>
<td>51.6%</td>
</tr>
<tr>
<td>4</td>
<td>Access to Care/Uninsured</td>
<td>39.0%</td>
</tr>
<tr>
<td>5</td>
<td>Mental Health/Suicide</td>
<td>38.0%</td>
</tr>
<tr>
<td>6</td>
<td>Diabetes</td>
<td>36.6%</td>
</tr>
<tr>
<td>7</td>
<td>Heart Disease</td>
<td>28.6%</td>
</tr>
<tr>
<td>8</td>
<td>Tobacco Use/Smoking</td>
<td>24.4%</td>
</tr>
<tr>
<td>9</td>
<td>Alzheimer’s Disease/Aging Issues</td>
<td>23.5%</td>
</tr>
<tr>
<td>10</td>
<td>High Blood Pressure</td>
<td>22.1%</td>
</tr>
</tbody>
</table>

* Respondents could select more than one option, therefore the percentages may sum to more than 100.0%.

The finding gathered through the key informant survey closely resembles that of the community survey in regard to the top five health issues identified in both counties. The following table illustrates the top five health issues facing both counties as viewed by key informants.

Table 3. Ranking of the Top Five Most Pressing Health Issues by Key Informants

<table>
<thead>
<tr>
<th>Rank</th>
<th>Orange County Key Health Issue</th>
<th>Selected as an Issue</th>
<th>Selected As Most Significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Mental Health/Suicide</td>
<td>80.0%</td>
<td>30.0%</td>
</tr>
<tr>
<td>2</td>
<td>Substance Abuse/Alcohol Abuse</td>
<td>70.0%</td>
<td>15.0%</td>
</tr>
<tr>
<td>3</td>
<td>Overweight/Obesity</td>
<td>65.0%</td>
<td>15.0%</td>
</tr>
<tr>
<td>4</td>
<td>Cancer</td>
<td>60.0%</td>
<td>15.0%</td>
</tr>
<tr>
<td>5</td>
<td>Heart Disease</td>
<td>55.0%</td>
<td>10.0%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Rank</th>
<th>Sullivan County Key Health Issue</th>
<th>Selected as an Issue</th>
<th>Selected As Most Significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Substance Abuse/Alcohol Abuse</td>
<td>95.7%</td>
<td>34.8%</td>
</tr>
<tr>
<td>2</td>
<td>Overweight/Obesity</td>
<td>87.0%</td>
<td>21.7%</td>
</tr>
<tr>
<td>3</td>
<td>Mental Health/Suicide</td>
<td>47.8%</td>
<td>8.7%</td>
</tr>
<tr>
<td>4</td>
<td>Tobacco</td>
<td>43.5%</td>
<td>4.3%</td>
</tr>
<tr>
<td>5</td>
<td>Access to Care/Uninsured</td>
<td>39.1%</td>
<td>17.4%</td>
</tr>
</tbody>
</table>

The following section provides a more detailed discussion of health issues that were determined to be significant in either or both of the counties.

**Cancer**

Cancer was identified as one of the top health concerns through the quantitative and qualitative data. According to the CDC, cancer is the number two leading cause of death in both counties, the state, and the nation. Females in Orange County are more likely to die from breast cancer (24.7 per age-adjusted
100,000) than females across Sullivan County (23.5), New York (21.5), and the nation (21.9). Overall, residents of Orange County who are diagnosed with cancer are more likely to die from it when compared to residents in Sullivan County and across the state.

With these statistics in mind, Orange County focus group participants were asked to identify what they felt might be influencing those rates. Several participants mentioned environmental factors were influencers of the high cancer rate. A fast growing community with a large volume of truck traffic, along with the county’s location in a valley, led some to note poor air quality from high emissions and blow off from more industrial areas (e.g., Ohio) specifically. Residential and retail development on top of old landfills was also offered in the discussion.

A lack of healthy food options, including fresh and organic options was mentioned with particular need for low income residents. Overwhelmingly though, the discussion centered on a cumbersome and costly healthcare system along with poor quality of care. Several anecdotes were shared about misdiagnosis leading to missed issues, doctors being too busy to truly know and hear their patients, and taking up precious visit time to decipher new and changing codes.

**Heart Disease**

The secondary data revealed that Sullivan County has a notably higher rate of death from Heart Disease (196.6) than Orange County (167.3), the state (176.4), and the nation (169.8). Focus group participants in Sullivan County focused on health behavior factors as they discussed the potential influencers on this statistic. Eating habits and food choice was a top theme with participants noting a lack of healthy food options, particularly in the grab-and-go and fast food arena (e.g., no salad bars at grocery stores). Exercise, sleep, alcoholism, and stress were other health behaviors mentioned.

**Mental Health**

Mental health issues emerged as an important health concern from the primary and secondary data analysis. This finding is important because it is a significant confounding factor for broader health issues such as overweight/obesity, substance abuse, and overall unhealthy lifestyle behaviors. The secondary data indicates the suicide rate per 100,000 is higher in Sullivan County (12.9) when compared to Orange County (7.4), the state (7.8), the nation (12.6) and the Healthy People 2020 goal of 10.2. Mental health/suicide was also rated as one of the top five health issues in both the community survey and the key informant survey. One key informant stated: “Through our work, the number of children and families with mental health related diagnosis has risen tremendously.”

Mental health and the issue of substance abuse were also at the forefront in both counties’ focus group discussions. Interestingly, isolation was discussed as a reason for people turning to drugs and alcohol, exacerbated by lack of good transportation infrastructure. Young adults (20-30’s) were also identified as being vulnerable to drug and alcohol abuse, because many are not happy with their jobs, out of school and unmarried, and don’t have other more appropriate social outlets. Depression was also identified as an issue in both counties in the youth and adult populations. Both counties came upon the topic of emotional disconnect in teens caused by their overuse of technology; some even calling it a computer addiction, leading to a detachment from reality and a lack of social skills and social connections.
**Overall Physical and Mental Health Status**

Online community survey participants were asked to rate their overall health, including both physical and mental health. In general, self-reported measures of health are favorable among residents in both counties. Just under half of the respondents (48.7% in Orange County and 47.9% in Sullivan County) reported having very good or excellent overall health, while 22.8% of respondents in Orange County and 17.4% in Sullivan County reported having fair or poor health. However, when asked to rate their feelings of stress and depression they may have had in the past 30 days, nearly 50% of respondents in Orange County and about 43% in Sullivan County felt stressed or depressed during the past month. The following charts depict participants’ self-reported poor physical and mental health days.

**Figure 3. Poor Physical Health in the past 30 days**

<table>
<thead>
<tr>
<th></th>
<th>Orange County</th>
<th>Sullivan County</th>
</tr>
</thead>
<tbody>
<tr>
<td>No days</td>
<td>43.0%</td>
<td></td>
</tr>
<tr>
<td>1 - 2 days</td>
<td>20.2%</td>
<td>25.0%</td>
</tr>
<tr>
<td>3 - 4 days</td>
<td>11.8%</td>
<td>11.7%</td>
</tr>
<tr>
<td>5 - 6 days</td>
<td>6.1%</td>
<td>4.2%</td>
</tr>
<tr>
<td>7 - 10 days</td>
<td>6.1%</td>
<td>5.8%</td>
</tr>
<tr>
<td>11 days or more</td>
<td>5.0%</td>
<td>12.7%</td>
</tr>
</tbody>
</table>

**Figure 4. Poor Mental Health in the past 30 days**

<table>
<thead>
<tr>
<th></th>
<th>Orange County</th>
<th>Sullivan County</th>
</tr>
</thead>
<tbody>
<tr>
<td>No days</td>
<td>51.5%</td>
<td>57.1%</td>
</tr>
<tr>
<td>1 - 2 days</td>
<td>22.3%</td>
<td>22.7%</td>
</tr>
<tr>
<td>3 - 4 days</td>
<td>10.0%</td>
<td>10.9%</td>
</tr>
<tr>
<td>5 - 6 days</td>
<td>3.1%</td>
<td>1.7%</td>
</tr>
<tr>
<td>7 - 10 days</td>
<td>5.2%</td>
<td>5.9%</td>
</tr>
<tr>
<td>11 days or more</td>
<td>1.7%</td>
<td>7.9%</td>
</tr>
</tbody>
</table>
Maternal and Child Health

Maternal and child health issues emerged as important health concerns from both the primary and secondary data analysis. Sullivan County did worse in most of the secondary data statistics when compared to the other comparison areas. Specifically, the following findings are noteworthy:

- The teenage birth rate per 1,000 is notably higher in Sullivan County (27.7) when compared to Orange County (15.9), New York (17.7), and the nation (26.5).
- Sullivan County had a substantially larger proportion of births to single mothers (53.6%) when compared to Orange County (31.4%), the state (39.4%), and the nation (39.5%). In addition, nearly 59% of mothers in Sullivan County were Medicaid beneficiaries, which is notably higher when compared to their peers in Orange County and New York.
- The percentage of mothers who experienced low birth weight (8.8%) and preterm births (12.2%) is notably higher in Sullivan County when compared to Orange County, New York and the nation. These figures also fall short of the Healthy People 2020 goal of 7.8% and 11.4%, respectively.
- The percentage of Sullivan County mothers who started prenatal care in the first trimester (66.4%) is notably lower when compared to Orange County (74.0%) and the state (72.1%). It also falls short of the Healthy People 2020 goal of 77.9%.
- The neonatal death rate is higher in Orange County (4.4) when compared to Sullivan County (2.4), as well as the state (3.5%), and the nation (4.0).

To augment this finding, focus group participants were asked to discuss issues related to teen pregnancy and prenatal care. The discussants from both counties were passionate about this topic and placed a strong emphasis on the breakdown and the solution starting within the family. “Parents have to parent” as one Sullivan County participant stated. This sentiment was repeated in both counties with calls for greater parental supervision and involvement in their kids’ life priorities and providing a support structure for making these hard decisions, whether it be abstinence and saying “no,” or effective contraceptive use.

In Sullivan County it was discussed that, if the parents are uncomfortable with broaching the topic of sex, the teen has no support or education to base decisions on. Easier access to contraceptives and education on pregnancy prevention was a top topic in both counties with mention of Planned Parenthood as a good resource of both, although there were some in Orange County who spoke against providing contraception to kids, particularly in schools.

Challenges in getting pregnant teens to seek prenatal care were also discussed by the two groups. Some were concerned that teen mothers would not be able to afford prenatal care. For the general population, accessing prenatal care is limited by transportation, availability of providers, and cost. Participants in both counties referenced that the first thing the doctor’s office asks when you call for an appointment is, “Do you have insurance?” and they don’t want to see you if you don’t. The cost of getting care without insurance causes most not to seek it.
III. Health Risk Behaviors

This section illustrates the health risk behaviors that contribute to poor health as identified by the secondary data analysis as well as the primary data from the online community survey, key informant survey, and focus group discussions.

Tobacco Use

Sullivan County received a health behaviors rank of 56 out of the 62 counties in New York. One of the factors that contributed to this ranking is adults smoking status. Twenty-six percent of adults smoke in Sullivan County compared to 21% in Orange County, 17% in New York, and the National Benchmark of 14%. Risky behaviors related to tobacco use were also measured as part of the community survey. The finding coincides with the county health ranking data in that approximately 43% of respondents in Sullivan County and 33% in Orange County reported smoking at least 100 cigarettes in their lifetime. Among this group, 27.5% in Sullivan County and 18.4% in Orange County reported they smoke every day, whereas 5.9% in Sullivan County and 9.2% in Orange County smoke some days.

Flu Shot/Vaccinations

Online community survey participants were asked if they received immunizations for influenza in the past year. Only 48.3% of Sullivan County respondents and 44.1% in Orange County received a flu shot or a flu vaccine in the previous year.

Dietary and Exercise Behaviors

It is widely supported that physical activity coupled with healthy eating can prevent health concerns such as obesity, diabetes, heart disease and many others. While the majority of the online community survey participants reported exercising regularly, their fruit and dark green vegetables consumption was of a concern. About 37% of all respondents in both counties consume fruits and a third of respondents in Sullivan County and 29.3% in Orange County consume dark green vegetables one to two times per day. However, a notable proportion of respondents in both counties are only consuming fruits and vegetables two to four times per week.

Key informants were asked what challenges people in the community face in trying to maintain healthy lifestyles like exercising and eating healthy. Key informants in both counties identified lack of needed resources including time, money, and education to prepare healthy foods and exercise regularly. One informant in Sullivan County commented: "Money is the biggest challenge. It is not cheap to eat healthy. Need to make healthy foods accessible and affordable to everyone." Another key informant in Orange County offered: "There are some food deserts in Orange County and a lack of knowledge of what and how to eat well. There is also a lack of walkability."

Cancer Screening

Online community survey participants were asked if they have routine screenings for skin cancer, breast cancer, prostate cancer, oral/throat cancer and colorectal cancer. Over 60% of female respondents in both counties had routine screenings for breast cancer, followed by 47.7% of Sullivan County respondents and 38.3% of Orange County respondents who reported having routine screenings for colorectal cancer.
IV. Access to Care

This section illustrates the health coverage status of residents in both counties and highlights the barriers related to access to health care that contribute to poor health as identified by the secondary data as well as primary research methods.

Health Insurance Coverage

Health insurance coverage can have a significant influence on health outcomes. According to the U.S. Census Bureau (2011-13) estimates, the health insurance coverage rate in Sullivan County (87.7%) is slightly lower than Orange County (90.6%) and the state rate (89%), but slightly higher when compared to the nation (85.2%).

Health Care Provider

According to the county health ranking, the ratio of primary care physicians, dentists, and mental health providers to residents is worse in Sullivan County than in Orange County, all of New York, and the National Benchmark. The following table summarizes this finding.

<table>
<thead>
<tr>
<th>Clinical Care Rank</th>
<th>National Benchmark</th>
<th>New York</th>
<th>Orange County</th>
<th>Sullivan County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uninsured (Population &lt;65 years)</td>
<td>11.0%</td>
<td>13.0%</td>
<td>11.0%</td>
<td>14.0%</td>
</tr>
<tr>
<td>Primary care physician density</td>
<td>1,045:1</td>
<td>1,210:1</td>
<td>1,408:1</td>
<td>2,133:1</td>
</tr>
<tr>
<td>Dentist density</td>
<td>1,377:1</td>
<td>1,305:1</td>
<td>1,539:1</td>
<td>2,396:1</td>
</tr>
<tr>
<td>Mental health provider density</td>
<td>386:1</td>
<td>443:1</td>
<td>556:1</td>
<td>759:1</td>
</tr>
</tbody>
</table>

Source: County Health Rankings

Approximately 89% of online community survey participants in Orange County and 92% in Sullivan County have at least one person who they think of as their personal doctor. In other words, at least 10% and 6% of respondents in Orange and Sullivan counties respectively are without a medical home.

While key informants indicated that residents in the area are able to access a primary care provider when needed, they mentioned that residents have difficulty accessing vital health care services, including mental/behavioral health providers, transportation for medical appointments and inadequate number of bilingual providers.

Underserved Populations

Key informants were asked whether they thought there are specific populations who are not being adequately served by local health services and the majority of respondents (63.6%) indicated that there are underserved populations in the community. Key informants felt that uninsured/underinsured individuals, low-income/poor, and immigrants/refugees were the top three groups of the population that were underserved. In addition, nearly two-thirds of key informants indicated the Hospital Emergency Department as a primary place where uninsured or underinsured individuals go when they are in need of medical care.
Barriers to Accessing Health Services
Understanding the perceived barriers to accessing health services can be very eye-opening as it often gets to the less obvious reasons people avoid or delay seeking health care. By far, the most commonly encountered barrier among survey participants was the inability to pay insurance co-pays and deductibles (81% in Orange County; 72% in Sullivan County) followed by lack of health insurance coverage.

Key informants also ranked the barriers similar to community survey participants. Orange County key informants indicated inability to pay out of pocket expenses, lack of transportation and lack of health insurance coverage as the top three barriers. On the other hand key informants representing Sullivan County ranked lack of transportation, inability to navigate the health care system, and inability to pay out of pocket expenses as the 1st, 2nd, and 3rd most significant barriers facing county residents when accessing care.

Resources Needed to Improve Access
Both online community survey participants and key informants were asked to identify key resources or services that were needed to improve access to health care for residents in the community. Community members and key informants once again identified very similar resources they felt were needed in the community. Free low cost care (such as dental, medical, and vision), and transportation were some of the resources that topped the list.

Challenges and Solutions
Key informants were asked to identify challenges people in the community face in trying to maintain healthy lifestyles. The most salient themes that emerged in participants’ responses include: Lack of time to buy and prepare healthy foods and exercise routinely, lack of health education and knowledge of available resources, accessibility and price of healthy food choices, and lack of walkable areas. The vast majority of participants felt that most people in their community are struggling to make ends meet and do not have the time to devote to healthy living. Comments such as the following were very common:

"Basic needs unmet prevent people from having the accessibility or desire to maintain a healthier lifestyle."

"A commitment to maintain a healthy lifestyle is a time and financial commitment. It also involves changing family behaviors and habits. Making the cost of healthier food choices a priority in a family budget verses the habit of purchasing less expensive (less healthy processed/boxed foods) is difficult for not only low, but middle class families as well."

To round out the feedback from key informants and community members, respondents were asked to provide suggestions/recommendations that they felt would be helpful in addressing the health needs of the community. Most survey participants expressed the need for health education and community outreach particularly in regard to nutrition, physical exercise, and chronic disease management. Improving access to transportation for medical visits was also commonly voiced by both key informants and community members.
IDENTIFICATION OF COMMUNITY HEALTH NEEDS

Prioritization Session
Greater Hudson Valley Health System held two sessions, one in Orange County and the other in Sullivan County with members of the health system to review the results of the 2016 Community Health Needs Assessment (CHNA). The goal of each meeting was to discuss and prioritize the needs of their local community as identified through the CHNA and to set the stage for community health improvement initiatives and the development of the hospital’s Implementation Strategy. Nineteen individuals attended the session in Orange County on February 15, 2016; whereas, a total of 18 individuals attended the session in Sullivan County on February 24, 2016. A list of attendees for both sessions can be found in Appendix C.

Process
The prioritization meetings were facilitated by Holleran Consulting. Each meeting began with an abbreviated research overview. This overview presented the results of the secondary data research as well as key findings from the online community survey, key informant survey, and focus group discussions.

Following the research overview, participants were provided with information regarding the prioritization process and criteria to consider when evaluating key areas of focus. In a large-group format, attendees were then asked to share openly what they perceived to be the needs and areas of opportunity in the two counties. The open group discussion encouraged attendees to share if their perceived needs of the community aligned with the needs as found through the CHNA. Participants confirmed their experience matched the identified needs and areas of opportunity found in the region.

Through facilitated discussion, the group identified multiple areas of defined health needs that would later be consolidated to potential focus areas. The “master list” of community priorities (presented in alphabetical order) includes:

**Orange County**
- Chronic Illness
- Community Outreach
- Financial Caseworker
- Health Care Navigator
- Home Care Services
- Mental Health
- Safety
- Substance Abuse
- Teen Pregnancy Collaborations
- Transportation
- Wellness

**Sullivan County**
- Care Coordination
- Chronic Disease Management
- Early Detection/Cancer
- Health Education/Literacy
- Mental Health/Substance Abuse
- Mobile Care
- Pharmaceutical Access
- Specialty Care for under/uninsured
- Transportation
- Wellness
**Key Community Health Issues**

Once the master list was compiled, participants were asked to rate each need based on two criteria. The two criteria included seriousness of the issue and the ability to impact the issue. Respondents were asked to rate each issue on a 1 (not at all serious; no ability to impact) through 5 (very serious; great ability to impact) scale. The ratings were gathered instantly and anonymously through a wireless audience response system. Each attendee received a keypad to register their vote. The following tables reveal the voting results of the top 5 community health issues in each county.

### Orange County

<table>
<thead>
<tr>
<th>Master List</th>
<th>Seriousness Rating (average)</th>
<th>Impact Rating (average)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community Outreach Strategy</td>
<td>4.63</td>
<td>4.25</td>
</tr>
<tr>
<td>Mental Health</td>
<td>5.00</td>
<td>3.41</td>
</tr>
<tr>
<td>Chronic Illnesses</td>
<td>4.81</td>
<td>3.50</td>
</tr>
<tr>
<td>Wellness</td>
<td>4.41</td>
<td>3.12</td>
</tr>
<tr>
<td>Health Care Navigator</td>
<td>4.05</td>
<td>4.05</td>
</tr>
</tbody>
</table>

### Sullivan County

<table>
<thead>
<tr>
<th>Master List</th>
<th>Seriousness Rating (average)</th>
<th>Impact Rating (average)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early Detection/Cancer</td>
<td>4.69</td>
<td>3.50</td>
</tr>
<tr>
<td>Chronic Disease Management</td>
<td>4.63</td>
<td>3.44</td>
</tr>
<tr>
<td>Transportation</td>
<td>2.94</td>
<td>4.56</td>
</tr>
<tr>
<td>Wellness</td>
<td>4.13</td>
<td>3.31</td>
</tr>
<tr>
<td>Mobile Care</td>
<td>4.43</td>
<td>2.93</td>
</tr>
</tbody>
</table>

The matrix below outlines the intersection of the seriousness and impact ratings for each county. Those items in the upper right quadrant are rated the most serious and with the greatest ability to impact.
Orange County

Prioritization of Community Issues

Impact

Seriousness

Community Outreach Strategy
Financial Caseworker
Home Care Services
Substance Abuse
Teen Pregnancy Collaborations
Transportation

Sullivan County

Prioritization of Community Issues

Impact

Seriousness

Care Coordination
Early Detection/Cancer
Mental Health Substance Abuse
Pharmaceutical Access
Transportation

Mobile Care
Speciality Care of the under/uninsured
Wellness