Atlantic
Health System

Community Health
Needs Assessment
2013

Newton Medical Center

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Executive Summary

Atlantic Health System is a multi-hospital, comprehensive health system serving approximately 1.7 million people in Northern New Jersey. In compliance with the requirements of the Patient Protection and Affordable Care Act (Pub. L. No. 111-148, Stat. 199), Atlantic Health System completed a Community Health Needs Assessment (CHNA) for each of its three hospitals in 2013. This report summarizes the process by which data were collected, priorities assessed, and community representatives engaged to identify and address the health needs of the community.

The Process

Atlantic Health System's approach was based on the guidelines established by the IRS and builds on best practices in Community Health Needs Assessment (CHNA) (e.g. Barnett, 2012). CHNAs are important tools for assessing current needs of populations, with an eye to health disparities, and the goal of matching community benefit resources to addressing priorities for the health of the community.

To conduct the most comprehensive assessment possible, the Community Health Alliance of Northwestern Central New Jersey (CHANC-NJ) was formed. CHANC-NJ was comprised of ten total hospitals. These included Atlantic Health System (Morristown Medical Center, Overlook Medical Center, Newton Medical Center), Saint Clare's Health System (Denville, Dover, Boonton, & Sussex), Robert Wood Johnson Rahway, Chilton Hospital, & Trinitas Regional Medical Center. The hospitals agreed to share costs in conducting the assessment and to work together to identify Community Health Needs across the region. Holleran, a national research and consulting firm, was hired to collect the primary data and some secondary data for the project.

Data were collected in three phases. First, a phone survey of residents across the region was conducted. Built from questions included in the Center for Disease Control and Prevention's Behavioral Risk Factor Surveillance Survey, these primary data we designed to provide greater understanding into the health needs of the community from a representative sample of the population. These data were matched with secondary data from multiple sources including the New Jersey Hospital Association, New Jersey Department of Health Statistics, and the Centers for Disease Control and Prevention.

After collecting the primary and secondary quantitative data, a variety of methods were used to solicit feedback from community representatives. These methods included web-based surveys, interviews, and prioritization meetings in which leaders expressed their opinions about the most pressing needs of the community. Special attention was paid to minority voices and those suffering from chronic illness. Specific lists of participating organizations and a detailed synopsis of the process are listed in the individual reports for each hospital.

The Results

While the community health needs were identified, prioritized and will be implemented at the local hospital level, three common system-wide priorities emerged:

Behavioral Health: Approximately one in ten people reported a diagnosed mental illness, and many battled substance use behaviors that put them at risk.

Healthy Behaviors: Despite lower rates than some places, many people are at risk of developing diabetes and an unhealthy weight status due to physical inactivity and poor nutrition habits resulting in obesity, diabetes and other chronic illnesses.

Access to Care and Preventive Services: While many across the region have great medical care, disparities are prevalent between lower income individuals and Hispanic/Latinos on many indicators of access to care and utilization of preventive services. Incidentally, these groups report fewer healthy behaviors and poorer mental health status than their comparison populations.

Implementation Planning

After completing the Community Health Needs Assessment in early 2013, Atlantic Health System continued to meet with diverse workgroups of community representatives at each site to develop detailed implementation plans for each site. This process and the resulting plans are outlined in the chapter for each hospital site.

IRS Requirements

On March 23, 2010, the U.S. Congress approved the Patient Protection and Affordable Care Act. Included in section 9007(a) of this act (Pub. L. No. 111-148, 124 Stat. 119), are requirements for all tax-exempt U.S. hospitals to complete a Community Health Needs Assessment (CHNA) every three years. The requirements of this mandate state that hospitals must 1) define the community served by the facility, 2) consider input of a diverse array of persons served by the facility, 3) prioritize those needs, and 4) identify existing community resources that are available to meet the prioritized needs. An implementation strategy must be developed within the same fiscal year as the CHNA is completed and must be approved by the Board of the organization. The report herein for each AHS hospital satisfies these requirements for the fiscal year beginning January 1, 2013.

Process & Methodology

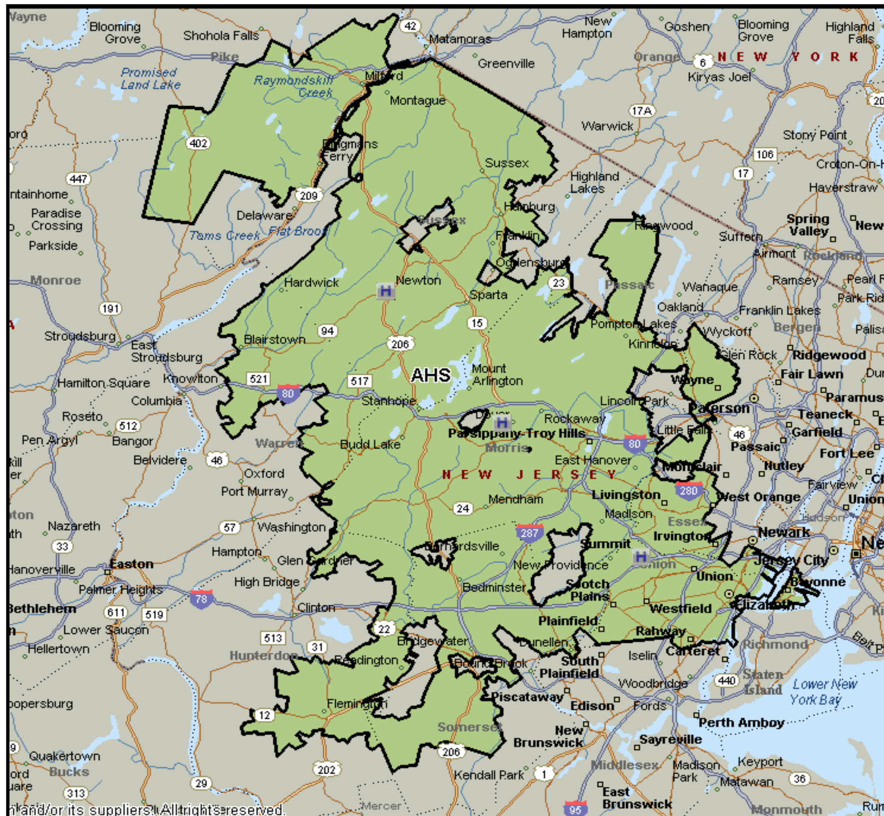
Atlantic Health System (AHS) is a comprehensive health care system serving a population of approximately 1.7 million residents. As shown in Map 1, the area served by the three AHS hospitals (Morristown Medical Center, Overlook Medical Center, Newton Medical Center) spans from urban centers near New York City to the rural counties in Northwestern New Jersey and eastern Pennsylvania. For the CHNA, the primary and secondary service areas of each hospitals were included (i.e. zip codes from which 75% of inpatient market share is drawn). While the service areas extend to parts of many counties, the three AHS hospitals chose to more narrowly define their Community Benefit Service Areas (CBSAs) as follows:

Morristown Medical Center: Morris County, NJ

Newton Medical Center: Sussex County, NJ

Overlook Medical Center: Western Union County, NJ (including the municipalities of Summit, Westfield, and Union)

Details on the communities served for each site are described in the section for each individual hospital.



Map 1. **The Combined Service Areas of the Three AHS Hospitals**

The AHS Community Health Needs Assessment (CHNA) was a team effort. Many individuals across the organization were involved in the development and initiation of the CHNA. The roles are responsibilities for each are outlined in Table 1.

Table 1

Roles and Responsibilities of Key AHS Personnel for CHNA

Department/Group	Role/Responsibility
AHS Corporate Department of Mission Development	• Process framework • Data Analysis • Technical assistance
Community Health Management (each site)	• Project oversight • Community Representative Engagement
AHS Staff and Physicians	• Data review and Implementation strategy • Expertise in medical care, public relations, and community engagement
Community Health Committees (each site)	• Endorsement of process and prioritized goals
Hospital Advisory Boards (each site)	• Endorsement of implementation strategy
AHS Board of Trustees	• Approval of implementation strategy

The Community Health Needs Assessment was conducted in three phases. This process was iterative with each conversation and meeting raising additional questions, leading to deeper data inquiries. The three phases were:

1. Primary Data Collection and Analysis (CHNA Phone Survey)
2. Secondary Data Analysis
3. Community Representative Engagement (meetings, interviews, and focus groups)

1. Primary Data (CHNA Phone Survey)

Primary data were collected by Holleran, a national research and consulting firm headquartered in Lancaster, Pennsylvania. Founded in 1992, Holleran is a recognized leader in health and human services and senior living, serving clients in 43 states and Canada. Working with the Alliance, Holleran provided a customized Community Health Needs Assessment based upon the service areas of the participating hospitals.

Interviews were conducted by Holleran's teleresearch center between the dates of April 18, 2012 and August 3, 2012. Interviewers contacted respondents via land-line telephone numbers generated from a random call list. Each interview lasted approximately 12 - 15 minutes depending on the criteria met and was completely

confidential. Only respondents who were at least 18 years of age and lived in a private residence were included.

The survey tool was adapted from the Center for Disease Control and Prevention's Behavioral Risk Factor Surveillance System (BRFSS). BRFSS is the largest telephone health survey in the world. It is used nationally to identify new health problems, monitor current problems and goals, and establish and evaluate health programs and policies.

The survey tool used for this need assessment consisted of approximately 100 factors selected from the 2006, 2009, 2010 and 2011 BRFSS tools. The factors were chosen by the CHANC-NJ, a collaboration of ten hospitals in Central and Northwest New Jersey. Questions addressed 31 health-related topics ranging from general health status to childhood immunization.

All data sets utilized in the report are statistically weighted to counter for demographic imbalances (e.g. over-representation of females compared to males). All presented statistics are weighted with the exception of the demographic information.

2. Secondary Data Analysis

Secondary data were collected by Holleran and hospital staff. Several sources were identified including the New Jersey Hospital Association Countywide Profiles, existing County Health Improvement Plans, vital statistics data from the New Jersey Department of Health Statistics, County Health Rankings, the United State Census Bureau, and the Behavioral Risk Factor Surveillance Survey from the Center for Disease Control and Prevention. Secondary data were used to fill gaps not covered by the primary data and confirm or clarify data from the primary data set.

3. Community Representative Engagement

Multiple opportunities were provided for local community representatives to collaborate with the Alliance. Community members from a diverse array of organizations were invited to participate. As shown in Figure 1, the Community Wheel was used as a tool to identify partners across the spectrum including health care, government, business, education, social services, public health, law enforcement, and grassroots organizations. Invitations were made via personal conversation, email, and written letters.

On September 13, 2012, the data from the CHNA were unveiled in a meeting at Atlantic Health System Corporate in Morristown, New Jersey. This meeting was comprised of hospital representatives and community leaders including public health officers, elected officials, and non-profit organizations (i.e. the United Way). Following these meetings, a

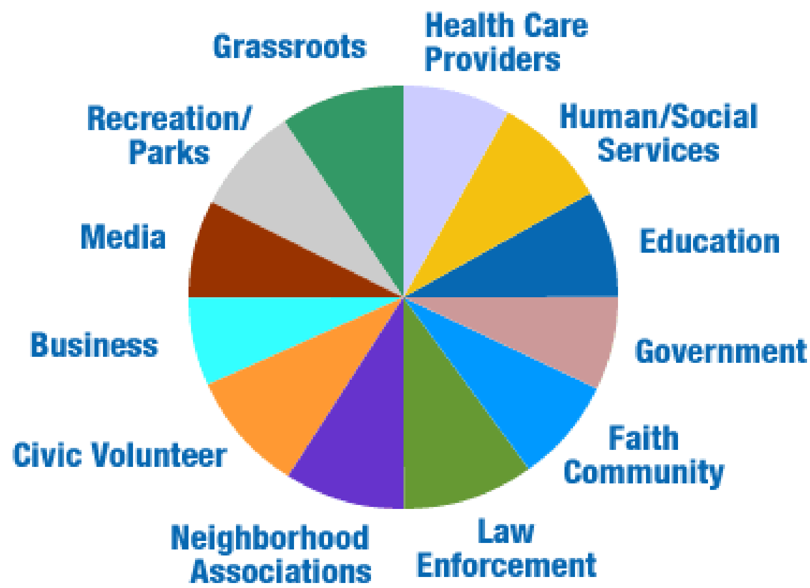


Figure 1. **The Community Wheel**

broader list of community representatives was generated by these partners and hospital staff. This extensive list of community representatives within each area (Morris County, Sussex County, Union County[1]) was invited to participate in the prioritization process. Representatives from organizations serving low-income, medically underserved, and minority populations were explicitly selected for participation. This included senior care organizations, Hispanic/Latino groups, African American faith communities, Federally-Qualified health centers, and local school districts. In addition, in-depth key informant interviews were conducted with key populations representing racial/ethnic minorities and populations with higher rates of chronic illness (e.g. Black and Hispanic/Latino leaders to further understand issues facing the minority populations in the area). In depth descriptions of the community representatives for each site are located within the individual site reports.

As described, a diverse collection of community representatives were invited to participate in the CHNA prioritization process at each site. First, they were asked to complete a brief online survey reflecting their perception of the most pressing needs of

[1] Two prioritization meetings were held in Union County. Please see additional details in Overlook's full report.

the community. Then, they were invited to Community Health Needs Prioritization Meetings at each site. Each CHNA prioritization meeting was held in October and November, 2012.

Prioritization was conducted in line with the health priorities and strategic directions outlined in the National Prevention Strategy (National Prevention Council, 2011). During this session, the primary and secondary data were presented, existing community resources were discussed, and votes were made to identify priorities. Participants voted on three criteria:

1) the prevalence of the issue and disparities between groups
2) the health and economic consequences of doing nothing
3) the ability to impact the problem given existing community resources and interest

After the initial prioritization meeting, workgroups were formed at each site to further define the needs and identify existing community resources available to address these needs. These groups met from November 2012 through the first quarter of 2013.

As data were presented and discussed with external community leaders, internal groups were consulted as well. Each AHS hospital has a Community Health Committee which serves under the local advisory board. Comprised of individuals representing local non-profit and civic organizations, these Committees were responsible for reviewing the data and providing suggestions. Additional presentations were made to groups of AHS staff, physicians, foundation boards, and other internal committees.

Summary of System-Wide Findings

Although the CHNAs were specific to each hospital, common themes were found across the sites. As shown in Figure 2, these system-wide priorities included 1) behavioral health (i.e. mental health and substance use/abuse), 2) healthy behaviors (i.e. physical activity and nutrition), and 3) disparities in access to care and preventive services. These similarities are important to acknowledge as they present opportunities to share resources and create greater impact in address these needs.

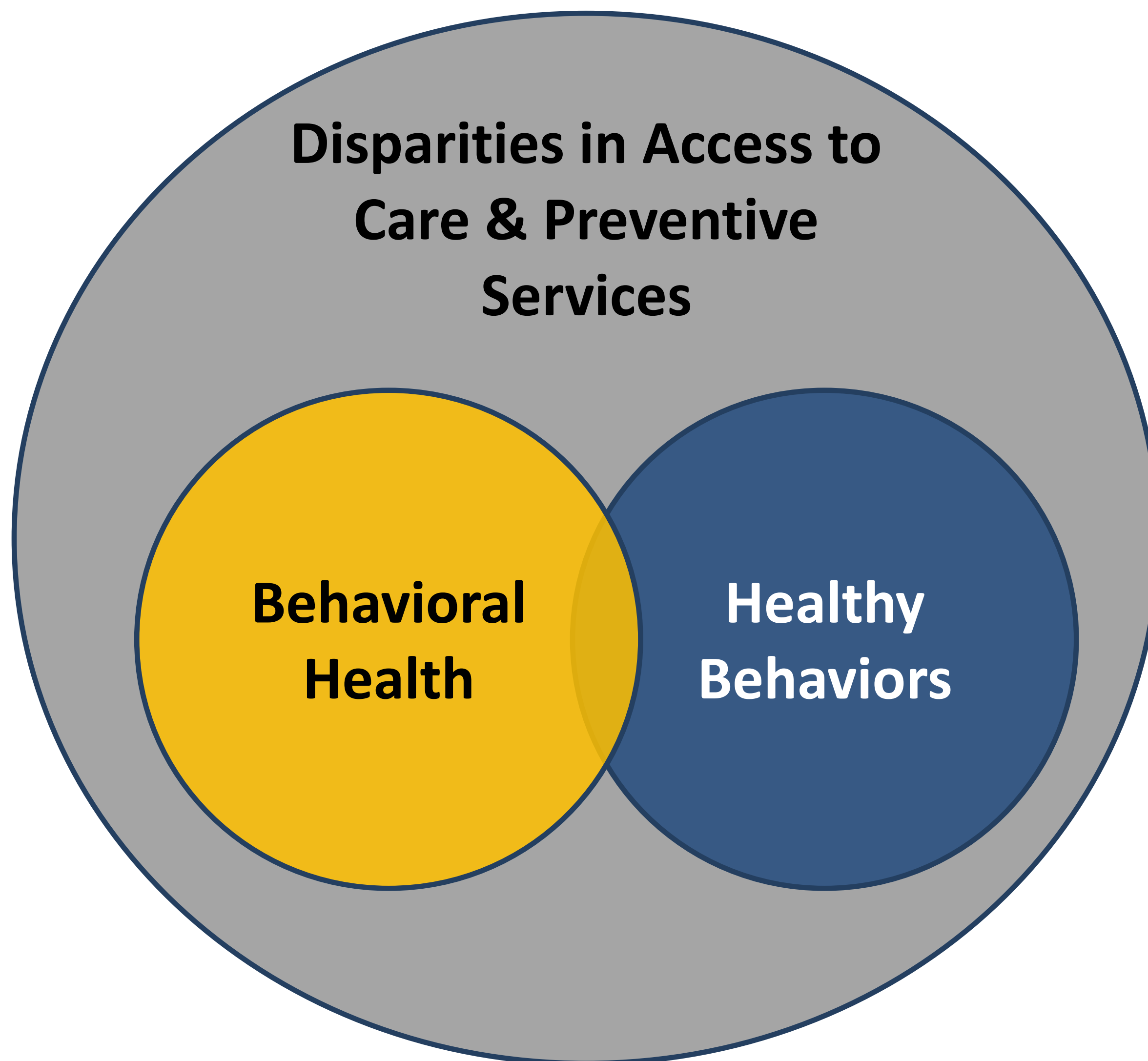


Figure 2. **System-wide Priority Health Needs**

Behavioral Health

Mental Health. While many in the area reported above average mental health status, one in ten reported poor mental health status (i.e. self-rating of poor mental health for 15 or more days in the past month). More than one in ten (10.8%) reported being diagnosed with an anxiety disorder and 11.5% with a depressive disorder. Seven percent of the population reported both illnesses. Many concerns arose around aging seniors and their caregivers. Adults between ages 45 and 64 and those who were unpaid caregivers reported higher rates of mental illness and poorer mental health status than other groups.

Substance Use/Abuse. The majority of respondents reported consuming alcohol in the past month (56.2%). This was higher than New Jersey and U.S. averages. However, rates of binge drinking[1] (15.4%) and heavy drinking[2] (1.3%) were comparable or lower than State and National norms. Similarly, while current smoking rates were lower than other places (11.3%), a large number of people in AHS' region continue to use tobacco on a regular basis. Secondary data identified a growing concern for heroin and prescription drug use across the region with particular focus on Sussex and Pike Counties (New Jersey Substance Abuse Monitoring System, 2011).

Healthy Behaviors

Despite having rates that are better than U.S. averages, the CHNA revealed that 22.7% of the population was obese, another 37.8% were overweight, and many had been diagnosed with diabetes (9.1%) or pre-diabetes (10.5%). In line with the National Prevention Strategy (National Prevention Council, 2011), the AHS hospitals chose to focus on the modifiable risk factors of physical activity and nutrition to address these trends before they lead to greater rates of chronic illness.

Primary data revealed that, while many people reported some physical activity, 16.7% were completely sedentary (i.e. no physical activity of any kind in the previous month). Further, many reported average daily consumption of less than one serving of fruits (28.1%) and vegetables (20.9%).

Interaction Between Priorities

As shown in Figure 1, behavioral health and healthy behaviors are separate, but inter-related issues. Data revealed that individuals with poor mental health status were much more likely to be physically inactive (32.4%), be obese (31.8%), and lack daily intake of

[1] Binge drinking = 5 or more drinks in a row for men/ 4 or more drinks in a row for women within the past month
[2] Heavy drinking = Average past month drinking of more than 2 daily drinks for mail or More than 1 daily drink for females

fruits (34.6%) and vegetables (27.8%). These numbers suggest the need for multi-faceted, integrated implementation strategies that affect the whole person.

Disparities in Access to Care and Preventive Services

Access to care was the third issue that emerged. While Northern New Jersey is home to some of the best healthcare in the nation and the number of insured individuals who had doctors was high, disparities were prevalent in Hispanic/Latinos and lower income populations. As shown in Figure 2, the larger context of access to care and preventive services affects both the behavioral health and healthy behaviors of individuals. Hispanics and lower income individuals (i.e. less than $75,000 in annual household income) in this sample were more likely to be uninsured, less likely to report having a doctor, and much more likely to report that they had been prohibited from visiting a doctor in the past year due to cost. This extended to preventive services with lower income individuals less likely to receive a flu shot and keep up to data with recommended mammograms, pap tests, colonoscopies/sigmoidoscopies, and other services. A sampling of the disparities between racial/ethnic and income level groups are displayed in Table 2.

Table 2

Disparities in Access to Care, Behavioral Health and Healthy Behaviors

	Hispanic	NH Black	NH White	Lower Income	Higher Income
Poor Mental Health Status	17.3%	10.5%	8.8%	12.3%	5.4%
Anxiety	14.1%	4.7%	11.8%	13.0%	9.0%
Depression	12.8%	9.5%	12.3%	15.0%	9.6%
Binge Drinking	17.7%	10.2%	10.0%	11.4%	20.5%
Cigarette Smoking	7.2%	11.1%	11.8%	14.2%	9.2%
Physical Inactivity	31.1%	20.4%	14.0%	23.6%	9.6%
No Daily Fruit	34.1%	36.5%	25.6%	29.6%	28.2%
No Daily Veggie	32.9%	30.6%	18.1%	22.6%	20.2%
Uninsured	27.4%	18.4%	6.1%	17.9%	2.0%
No Doctor	17.1%	18.5%	9.3%	7.1%	13.9%
Cost Prohibited Care	32.0%	19.3%	6.9%	19.0%	3.0%

Note: NH = Non-Hispanic; Lower income = < $75,000 annual household income; Higher income = $75,000 or more in annual household income.

Implementation Strategy

AHS is committed to "empowering our communities to be the healthiest in the nation". Following best practices, AHS developed a community-based process in which the hospitals serve as a catalyst for mobilizing change alongside a diverse array of partners and other healthcare systems. As shown in Figure 3, after completion of the data collection and prioritization process (March 2013), these community workgroups (with leadership support from AHS), developed implementation plans for each community health goal. These plans are highlighted in the reports for each site.

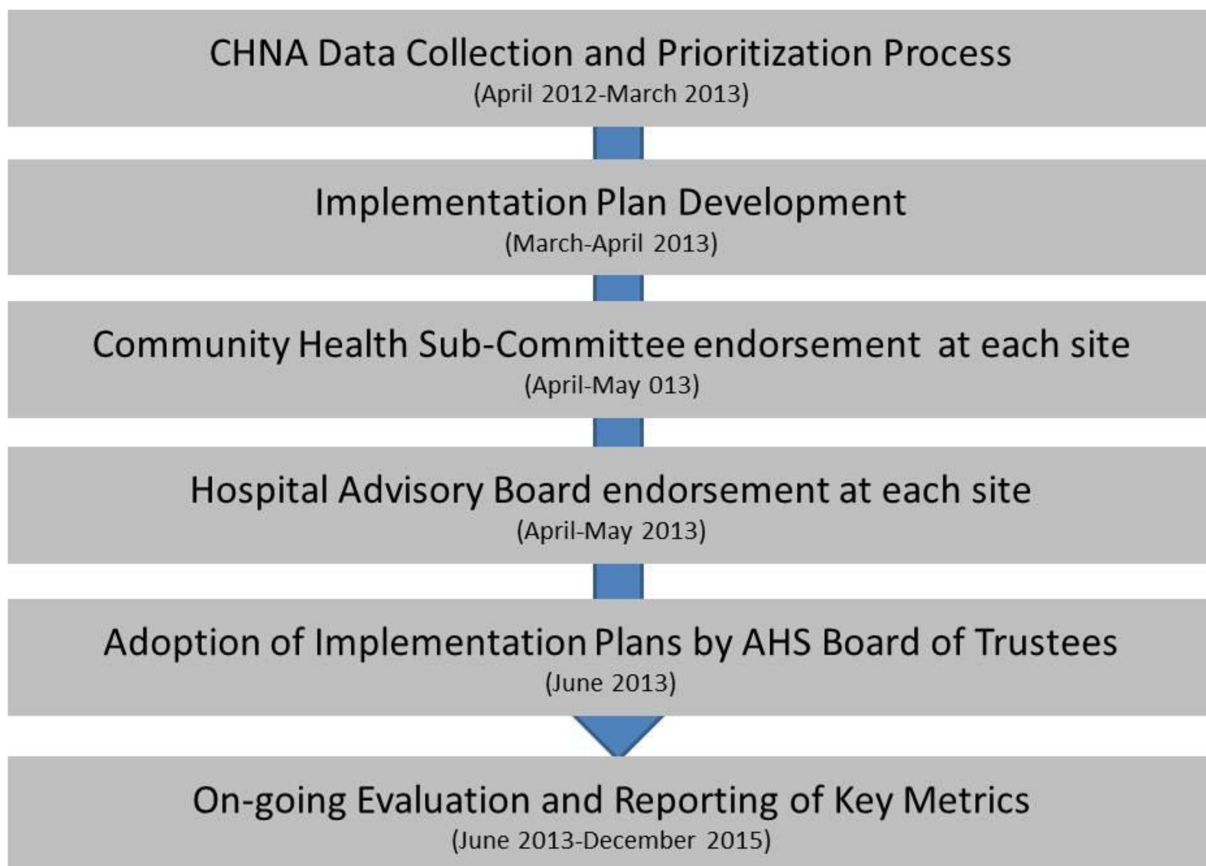


Figure 3. Implementation Plan Process

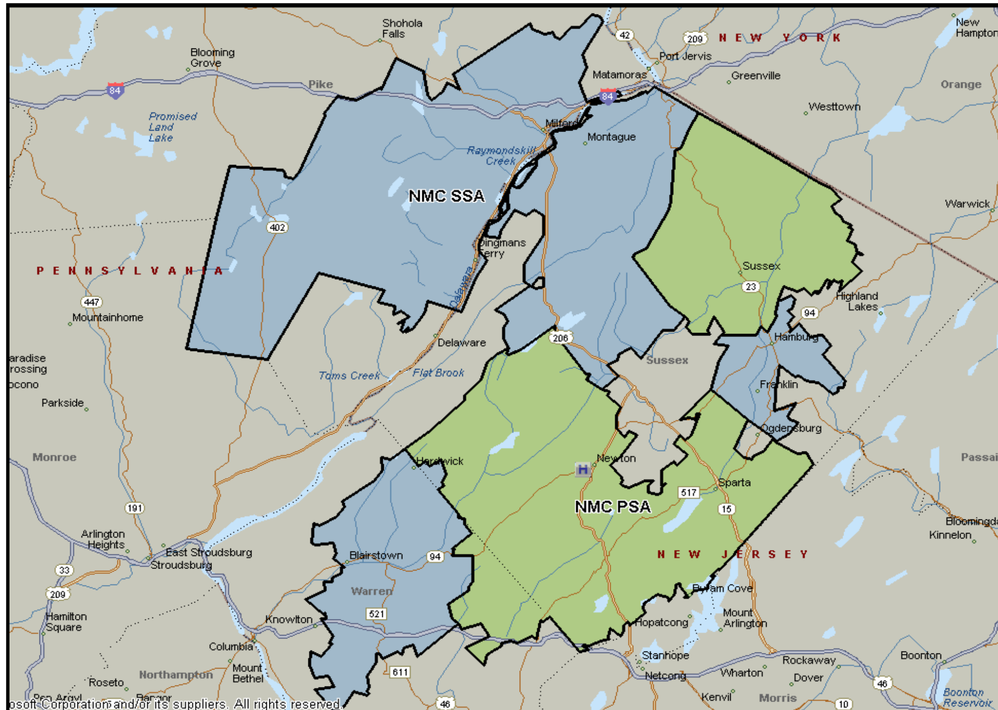
Newton
Medical Center

ATLANTIC HEALTH SYSTEM

2013 Community Health Needs Assessment

Community Served by Newton Medical Center

Newton Medical Center (NMC) serves a population of 149,265 in 11 zip codes in its primary and secondary service areas (zip codes from which 75% of inpatients come). As shown in Map 2, NMC's service area encompasses most of Sussex County, Pike and Monroe County in Pennsylvania and surrounding areas, including the municipalities of Newton, Sussex, and Sparta.



Map 2. **Service Area of Newton Medical Center**

The residents of NMC's service area were slightly more female (50.5%) than male (49.5%). Almost one in four residents were under 18 years of age (23.9%), and 12.2% were aged 65 and older. Almost nine out of ten residents in Newton's service area were

White, 6.1% were Hispanic/Latino, and smaller percentages are Asian (1.8%) or Black (1.7%). One half of households in the county earned over $75,000 in annual household income with 6.5% earning $250,000 per year or more. Conversely, almost one in three residents (29.3%) earns less than $50,000 year. For the purposes of the Community Health Needs Assessment, NMC defined its Community Benefit Service Area (CBSA) as Sussex County, New Jersey.

Procedure & Methodology

NMC conducted the CHNA in collaboration with nine other hospitals from the Community Health Alliance of Northern and Central New Jersey (CHANC-NJ). CHANC-NJ hired Holleran, a national research and consulting firm to conduct a phone survey (primary data) and gather secondary data.

A sample of 739 individuals who reside within Newton Medical Center's service area was interviewed by telephone to assess disease prevalence, health behaviors, preventive practices, and access to health care. Individuals were randomly selected for participation based on a statistically valid sampling frame developed by Holleran. The sampling frame represented 23 zip codes within the New Jersey counties of Warren and Sussex and the Pennsylvania county of Pike.

Secondary data were collected by Holleran and hospital staff from several sources including: the New Jersey Hospital Association Countywide Profiles, existing County Health Improvement Plans, vital statistics data from the New Jersey Department of Health Statistics, County Health Rankings, the United State Census Bureau, and the Behavioral Risk Factor Surveillance Survey from the Centers for Disease Control and Prevention

Community Representative Engagement

NMC engaged a variety of community representatives to share the data from the CHNA, to prioritize community health needs, and to identify collaborative approaches to improving community health.

Community Health Committee. NMC's community health committee was instrumental throughout the process. This group was involved in informing the data collection process, learning from the data, and setting goals for addressing health needs. The Community Health Committee was comprised of various leaders from within NMC and other community organizations. A comprehensive roster of members is listed in Table 9.

Table 3

NMC Community Health Committee Members

Name	Organization
Barbara Adolphe	Center for Prevention and Counseling
Becky Carlson	Center for Prevention and Counseling
Alma Dhuyvetter	Sussex County YMCA
Mary Emilius	United Way of Northern New Jersey
Paulette Hussey	Neighborhood Health Center
Dr. Jean Paul Bonnet	Practicing Physician
Dr. Christian Robertozzi	Chief of Staff at NMC, Practicing Podiatrist
Roger Cherney	NMC Behavioral Health
Maureen Cianci	NMC Community Health
Debra Berry-Toon	Project Self-Sufficiency
Carol DeGraw	United Way of Northern New Jersey
Tania Dikun	NMC Volunteer Office
Kathleen Fitzpatrick	NMC Community Health/Diabetes Education
Judy Beardsley	NMC Community Health/Diabetes Education
Anne Foster	NJ State First Aid Council 12th district
Susan Frost	NMC Marketing
Jennifer Gardner	Sussex County YMCA
Richard Gorab	Sussex County YMCA
Stephen Gruchacz	Sussex County Department of Human Services
Helen Homeijer	Sussex County Dept. of Environmental & Public Health Services
Matt Lifschultz	Fairview Lake YMCA
Lori Reich	Sussex County Superior Court
Analyn Nieuzytek	NMC Case Management
Randy Parks	NMC Chaplin
Emick Seabold	Sussex Cty. Dept. of Environmental and Public Health Services
Tracy Storms-Mazzucco	Sussex Cty. Dept. of Environmental & Public Health Services
Diane Tulig	NMC Community Health
Yvonne Quinones Syto	Hopatcong Health Advisory Counsel
Loretta Ritter	NMC Rehab Services
Leigh Kramer	NMC Diabetes/Nutrition/Community Health
Carrie Parmelee	Saint Clare’s Family Intensive Services
Nancy Hess	Skylands RSVP, Norwescap
Melissa Latronica	Sussex County Division of Community and Youth Services
Ellen Phelps	Sussex Cty. Dept. of Environmental & Public Health Services
Ralph D’Aries	Sussex Cty. Dept. of Environmental & Public Health Services
Darla Williams	WIC Program
Pamela Madzy	Blessed Kateria, Migrant Ministry

Convocation. On September 13, 2012, the data from the CHNA was unveiled in a meeting at Atlantic Health System Corporate in Morristown, New Jersey. This meeting contained hospital representatives and community leaders including public health

officers, elected officials, and non-profit organizations (i.e. the United Way). Representatives from NMC included:

- Tom Senker, President, NMC
- Chris Orr, Manager, Community Health, NMC
- Dr. Paul Owens, Medical Director NMC
- Ardelle Bigos, Chief Nursing Officer, NMC
- Loretta Ritter, Manager, Rehabilitative Services, NMC
- Deborah McCarren, Coordinator, Behavioral Health, NMC
- Maureen Cianci, Coordinator, Community Health, NMC
- Randy Parks, Manager, Chaplain Services, NMC

Community Prioritization Meeting. Representatives from across the community were invited to participate in a prioritization meeting on October 25, 2012 at Newton Medical Center. The gathering was conducted in collaboration with the Sussex campus of Saint Clare's Health System. Eighteen total community partners were present representing:

- Sussex County YMCA
- Center for Prevention and Counseling
- United Way of Northern New Jersey
- Neighborhood Health Center
- Project Self-Sufficiency
- NJ State First Aid Council 12th district
- Sussex County Department of Human and Health Services
- Sussex County Department of Environmental and Public Health Services
- Sussex County Superior Court
- Hopatcong Health Advisory Counsel
- Norewescap

At this meeting, data from the CHNA were presented, participants discussed needs and resources, and voting was conducted to determine top priorities. Data were presented in accordance with the priorities and strategic directions identified in the National Prevention Strategy (National Prevention Council, 2011). As shown in Table 10, the voting process identified three combined areas of need: 1) behavioral health (mental health & substance use/abuse), 2) healthy behaviors (including active living and nutrition), and 3) access to care.

These community representatives and others were invited back to subsequent meetings in December 2012 through May 2013. During these meeting, specific challenges within each priority area were discussed and comprehensive lists of existing community resources were identified. Each of these needs is discussed in depth below.

Table 4

Prioritized Needs List (Sussex County Meeting)

Need	Scope	Severity	Ability to Impact	Overall Average
Mental Health & Well-Being	6.10	6.17	5.13	5.80
Drugs & Alcohol	6.00	5.83	5.41	5.75
Active Living	5.39	5.17	5.46	5.34
Healthy Eating	5.38	5.07	5.36	5.27
Access to Care	5.46	5.41	3.90	4.92
Tobacco Use	4.21	4.43	4.41	4.35
Injury & Violence	3.60	3.52	4.03	3.72
Reproductive & Sexual Health	3.46	3.21	4.00	3.56

* All needs rates on a 1 to 8 scale

Prioritized Health Needs

Behavioral Health

Data. The results of the CHNA confirm that mental illness and substance use/abuse are widespread throughout the Sussex County area. Almost one in ten people reported poor mental health status (i.e. 15 or more days of "poor mental health" in the past month). For diagnosed mental illness, 8.8% of the respondents reported that they had been diagnosed with either an anxiety or depressive disorder, with 7.1% reporting diagnosis with both illnesses.

At the same time, 14.6% of respondents reported recent binge drinking (5 or more drinks in a row for men/ 4 or more drinks in a row for women) and 14.1% were current smokers. While illicit drugs were not included in the primary data, secondary data along with the reports of many community representatives suggested that Sussex County was subject to growing rates of prescription drug and heroin use (New Jersey Substance Abuse Monitoring System, 2011).

The data also identified alarming disparities in behavioral health. Women were more likely than men to report poor mental health status (12.4%) and anxiety disorder diagnosis (15.2%), while men were more likely to be current smokers (16.2%). Hispanic/Latinos were more likely to report binge drinking (22.2%). The largest disparities, however, were found on socioeconomic indicators. Lower income residents reported poorer mental health status (12.5%) and higher rates of anxiety disorder (16.4%), depressive disorder (14.3%), disability (33.2%), and experiences of intimate partner violence (19.1%). Similarly, individuals without a Bachelor's degree reported greater rates of poor mental health (11.0%), anxiety disorder (14.7%) and lifetime cigarette use (53.9%). Among individuals reporting poor mental health status, 14.9%

were uninsured, 12.0% did not have a doctor, and 20.5% reported that they had needed to visit the doctor in the past year, but could not do so because of cost.

Community Representative Engagement. From December 2012 to May 2013, a diverse group of community representatives (including those representing lower-income, racial/ethnic minority, and chronic disease populations) met regularly at NMC. They worked together to discuss the data from the CHNA and identified challenges in reducing narcotic consumption and decreasing mental health stigma. As shown in Table 11, the community representatives developed a list of existing community resources for addressing behavioral health concerns.

Healthy Behaviors

Data. The second priority area that was identified by the group of community leaders was healthy behaviors. These include physical activity and nutrition, and their relationship to health outcomes including obesity and diabetes. In the Sussex area, the needs assessment found that one in four respondents were obese, another four in ten were overweight, and many suffered from chronic illnesses including diabetes (8.5%), heart disease (4.7%), stroke (1.9%), and COPD (6.1%).

As research has consistently shown, many of these illnesses can be traced back to the physical activity and nutrition habits of individuals. While many respondents in the needs assessment reported exercising regularly and eating adequate fruits and vegetables, 15.6% reported no exercise of any kind in the previous month, with a significant number of lower-income individuals reporting no daily consumption of fruits (29.9%) or vegetables (14.2%).

Similar to behavioral health, disparities were prevalent in health behaviors and associated outcomes. While males were less likely to report physical inactivity (i.e. no exercise of any kind in the past 30 days), they reported significantly higher rates of poor nutrition (no daily fruit (32.4%) and vegetable (17.5%) intake), were more likely to be obese (29.3%) and reported almost twice the rate of diabetes diagnosis (10.9%). Disparities were also found based on socioeconomic indicators. Lower-income and non-college educated individuals were more likely to report poor physical health, to be physically inactive, and to suffer from obesity and/or diabetes. While no differences were found on fruit consumption, lower income individuals were less likely to consume vegetables on a daily basis.

Community Representative Engagement. From December 2012 to May 2013, a diverse group of community representatives (including those representing lower-income, racial/ethnic minority, and chronic disease populations) met regularly at NMC to discuss healthy behaviors. Key projects were identified to promote physical activity

collaboratively across the county and by using resources at NMC. This group developed a list of existing resources for addressing healthy behaviors as shown in Table 11.

Access to Care

Data. The final priority area identified by the community representatives was access to care and preventive services. The CHNA revealed that, while many people had insurance and access to physicians, disparities were found among Hispanic/Latinos and individuals of lower socioeconomic status. Individuals earning less than $75,000 per year (annual household income) and those without a college education were much more likely to be uninsured, to not have a doctor, and to have been inhibited from visiting a doctor in the past year due to cost. Similar disparities were found between Hispanic and non-Hispanic residents. Lack of access to care also translated into lack of preventive services. Residents with less household income were less likely to get their annual flu shot and to meet the recommendations for preventive screenings, including mammograms and colonoscopies.

Community Representative Engagement. Community representatives met through May 2013 to develop a list of existing community resources as shown in Table 11. This group built on this list and identified additional opportunities for addressing access to care issues in Sussex County. Four major barriers were identified: 1) transportation 2) cost of care, 3) awareness of available services, and 4) health literacy.

Existing Community Resources

As shown in Table 11, the community representatives at the multiple gatherings held between October 2012 and May 2013 helped to identify key resources within the community that could address the priority needs within the priority populations. The broad coalition of community partners identified the possibility of collaboration within the local community as a key asset.

Table 5

List of Existing Sussex County Resources by Area of Need

Behavioral Health	NMC Behavioral Health, Behavioral Health Care LLC, Bridgeway Rehabilitation Services, Inc., Capitol Care, Inc., Center for Prevention and Counseling, Advance Housing, Community Hope, Project Self-Sufficiency, Sussex County Mental Health Board and Professional Advisory Committee, Self Help/A Way to Freedom, DBSA, NAMI
Healthy Behaviors	NMC Health Education Events, Local YMCAs, Hopactong Health Advisory Council, Norwescap, Sussex County Dept. of Human Services, Sussex Cty. Dept. of Environmental & Public Health Services, United Way of Northern New Jersey, WIC
Access to Care	NMC Community Health, NMC Adult Clinic, Sussex Transportation Services, the “Monday clinic”, Neighborhood Health Center, Saint Clare’s, faith–based communities, schools, sheriff’s office, senior services, WIC, Norwescap, CIRCLES

Implementation Plan

In partnership with the community representatives described previously, NMC developed an implementation plan to respond to each community need: Behavioral Health, Healthy Behaviors, and Access to Care and Preventive Services. The complete logic model for each plan is displayed in Tables 12 through 14.

Behavioral Health

In response to the mental health and substance abuse needs of the community, NMC identified four strategies for implementation as outlined in Table 12.

1. Decrease the number of narcotics being prescribed

Secondary needs assessment data revealed that treatment admissions for heroin use have risen in Sussex County. This has been attributed, in part, to an increase in the number of class 2 narcotics being prescribed by physicians. To address this issue, ***NMC and our partners will provide educational programs about the dangers of over-prescribing and best practices in narcotic management to 100 pharmacists and prescribers (doctors, nurses, etc.) over three years.***

2. Increase usage of New Jersey Prescription Monitoring Program.

The New Jersey Prescription Monitoring Program is a statewide database that was created to "halt the abuse and diversion of prescription drugs." Unfortunately, many practitioners are not fully utilizing the program. To address this issue, ***NMC and our partners will provide education and training on the program to 100 pharmacists and prescribers in MMC's service area over three years.***

3. Decrease mental health stigma

The CHNA revealed that mental illness is widespread in our communities. Much of this illness goes untreated due to many factors including mental health stigma. We will work to decrease stigma in our community by training professionals and increasing public awareness. ***NMC and our partners will train 10 professionals to be trainers in Mental Health First Aid***, an evidence-based program designed to equip people with knowledge about mental illness. These 10 individuals ***will provide the Mental Health First Aid program to at least 300 participants over three years***. In conjunction, we will reach at least 10,000 people with a public awareness campaign to promote anti-stigma messages.

4. **Promote usage of prescription drop boxes in the community**

   Many of the prescription drugs involved in addiction are not prescribed to the person taking them. Unused prescriptions drugs are dangerous and can be accessed by children and youth. To reduce the number of unused prescriptions in the community, ***NMC and our partners will reach 10,000 people with a public awareness campaign to promote usage of the available drop boxes.***

5. **Reduce Tobacco Use in Public Places**

   To reduce the number of smokers in the community and limit exposure to secondhand smoke, ***NMC will work with our partners and local communities to establish 15 smoke-free parks in the NMC service area within three years.***

Healthy Behaviors

As shown in Table 13, NMC and our partners identified four strategies for improving the healthy behaviors in our communities.

1. **Launch the We Can! Program in Sussex County**

   We Can! is a nationally-recognized program for promoting physically activity and nutrition in communities. In partnership with a wide range of community organizations, Sussex County will become New Jersey's first We Can! County. Using the evidenced-based resources, ***NMC and our partners will hold 15 programs and reach at least 500 people over three years.***

2. **Create easy-to-understand information for healthy behaviors.**

   Statistics on health literacy suggest that many people lack the basic information they need to successfully manage their health. To address this concern, ***NMC and our partners will create a "Roadmap to Healthy Living in Sussex County" and distribute to at least 5,000 people over three years.***

3. **Conduct Healthy Cooking classes**

   Many people lack the basic knowledge of how to prepare healthy foods. In partnership with the YMCA and local schools, ***NMC and our partners will provide healthy cooking classes for 150 people over three years.***

4. **Host the "Dinner and a Lecture" series**

   The "Dinner and Lecture" series provides health education and healthy foods to community members at NMC's campus. To address the need for healthy behaviors, ***NMC will host 30 "Dinner and a Lecture" programs over three years.***

Access to Care & Preventive Services

As shown in Table 14, NMC and our partners identified three strategies for improving access to care.

1. **Partner with community organizations to increase screenings and health education events.**

   Health screenings and health education events are essential for lower-income populations to get access to the care and preventive services they need. To increase the number of people completing recommended screenings, ***NMC will hold 30 community-based screenings, reaching 420 people over the next three years.***

2. **Build New Jersey 2-1-1 into a viable resource for the region**

   New Jersey 2-1-1 is a resource that provides phone and internet access to resources. The community representatives in Sussex County revealed that few professionals are aware of the service and that the service is not up to date with all existing resources in the county. To better utilize this resource, ***NMC will work with our partners to increase the percentage of Sussex County resources listed in the 2-1-1 database by 15%.***

3. **Create tools for community/patient to better understand their health**

   Thousands of studies have shown that healthcare communication is too complex for the average person, and that many aversive health outcomes result from limited health literacy. To build awareness among providers, ***NMC will a) develop a patient checklist for guiding patient-provider interaction (5,000 people reached), and b) develop easy-to-use health education tools for the population with limited health literacy (5,000 people reached).***

4. **Create a "Using Clinics in Sussex County Guide"**

   For populations with limited income and no health insurance, finding access to care is challenging, resulting in significant disparities in these populations. To address this need, ***NMC and our partners will create a "Using Clinics in Sussex County" guide and distribute it to at least 5,000 people***

Identified Community Needs that are not addressed

As shown previously, the health needs identified by the data and prioritized by the diverse array of community representatives are all addressed by the preceding implementation plan. By choosing to priorities related to prevention (and in line with the National Prevention Strategy (National Prevention Council, 2011), we have the opportunity to affect a broad range of health factors and outcomes affecting the Sussex County population even in areas where the residents compared favorably to national and state norms.

One key challenge was cited that was not addressed. In discussing access to care and utilization of preventive services, transportation was identified as a key barrier to receiving treatment. Despite mutual agreement as to this need and discussions with all partners, it was agreed that providing direct transportation or increasing routes was outside of the current capabilities for the hospital and the participating community partners. However, the creation of resource cards with transportation information will help many residents know where and how to find medical care.

Table 6

Implementation Plan for Behavioral Health

Community Need	Strategies	Activities	Partners	Timeframe	Outputs	Outcomes	
	How?	How, specifically?	Who?	When?	What?	3 Years	10 Years
17% of Sussex County residents report poor mental health status and approximately one in ten report diagnosis with a mental illness. 14.6% of Sussex County residents report binge drinking, one of the highest counties in the state Rates of heroin and prescription drug use are rising in the county. Sussex County is the #2 county in New Jersey for Heroin use (New Jersey Substance Abuse Monitoring System, 2011)	Rates of heroin substance abuse prescriptions have grown in Sussex County. This has been linked to opiate and prescription drug use	Decrease number of narcotics being prescribed by providing educational programs to providers	NMC Community Health, Skylands Medical Group, Saint Clare's, Center for Prevention and Counseling (CPAC)	2013 Q3	100 pharmacists and prescribers trained	Decrease the number of prescriptions written for class 2 narcotics by 10% Decrease number of pills in each written prescription by 10%	Decrease substance abuse treatment admissions for heroin by 10%
		Increase usage of Prescription Monitoring Program by Provide training for prescribers and pharmacists on how and why to maximize the use of the PMP system.	NMC Community Health, Skylands Medical Group, Saint Clare's, CPAC, Community Pharmacies	2014 Q2	100 pharmacists and prescribers trained	Increase the number of physicians and pharmacists participating by 50%	
	Decrease Mental Health Stigma	Launch Mental Health First Aid Training	NMC Community Health, Saint Clare's, SC Mental Health Board, YMCA, Hopatcong Health Alliance, SC Dept. of Health, SC Dept. of Human Services, Local mental health providers, CPAC	2013 Q4	Train 10 trainers Reach 300 participants	Decrease stigma around mental illness in Sussex County	Decrease untreated mental illness
		Public Awareness Campaign		2014 Q1	10,000 people reached		
	Reduce Unused Prescriptions in the Community by using drop boxes	Promote usage of prescription drop boxes in the community	NMC Community Health and Marketing/PR, Police Departments, CPAC	2014 Q1	10,000 of people reached	Increase pounds of medication in drop boxes by 20%	Decrease substance abuse admissions for prescription drugs by 30%

	Reduce Tobacco Use in Public	Promote "Smoke Free Parks"	NMC Community Health, SC Dept. of Health, CPAC	2014 Q3	15 smoke-free parks	Decrease the percentage of current smokers by 5%	Decrease the percentage of current smokers by 10%?

Table 7

Implementation Plan for Healthy Eating, Active Living

Community Need	Strategies	Activities	Partners	Timeframe	Outputs	Outcomes	
	How?	How, specifically?	Who?	When?	What?	3 Years	10 Years
15.6% of Sussex County residents reported being physically inactive (i.e. no exercise of any kind) in the previous month 30% of Sussex County residents reported no daily consumption of fruits and 14.2%% reported no daily consumption of vegetables 64.8% of county residents were overweight or obese	*We Can!* Program	Train Key Personnel Launch Curriculum	NMC Community Health, Saint Clare's, YMCA, Hopatcong Health Alliance, SC Dept. of Health, SC Dept. of Human Services, Norwescap, WIC, Project Self-Sufficiency	2013 Q3	15 programs held 500 people participants	Increase consumption of daily fruits and vegetables by 10% Increase daily physical activity by 10%	Decrease rate of obesity by 1%
	Create Easy-to-Understand Information for Healthy Behaviors	Create Roadmap to Healthy Living in Sussex County brochure		2013 Q4	5,000 of Brochures distributed		
	Health Education and Screenings	Conduct Healthy Cooking Classes	NMC Community Health, YMCA Hardyston Middle School	2014 Q1	150 people trained		
		Host the "Dinner and a Lecture" series	NMC Community Health, Staff Physicians	2013 Q3	30 programs completed	Conduct pre and post evals to identify 20% change in specific habit related to talk	
		Health Screenings in Community (see goal under					

		Access to Care)					

Table 8

Implementation Plan for Access to Care

Community Need	Strategies	Activities	Partners	Timeframe	Outputs	Outcomes	
	How?	How, specifically?	Who?	When?	What?	3 Years	10 Years
Financial Access							
Lower-income Sussex County residents cannot afford care and are less likely to complete recommended preventive screenings	Conduct recommended screenings in community settings	Partner with community organizations to increase screenings and health education events	NMC Community Health, Blessed Kateria Migrant Ministry Hopatcong Health Alliance, SC Dept. of Health, SC Dept. of Human Services, Norwescap, WIC, Project Self-Sufficiency	2013 Q3	30 screenings to 420 people	5% increase in the number of who have completed recommended preventive screenings	Decrease health disparities in lower income population
Educational Access (Health Literacy)							
Many in Sussex County report being unaware of existing resources.	Establish unified resource portal for community	Build 2-1-1 into a viable resource for the region	NMC Community Health, United Way of NNJ, , Saint Clare's, Hopatcong Health Alliance, SC Dept. of Health, SC Dept. of Human Services, Norwescap, WIC, Project Self-Sufficiency	2013 Q4	Increase resources listed in 2-1-1 by 15%	Increase 2-1-1 usage by 10%	Increase participation in community programs by 15%
36% of U.S. population has limited HL[1],with higher numbers among racial/ethnic minorities, seniors, and low SES populations; H/L and lower income population less likely to complete well visits and receive preventive services	Create Tools for Community/Patient to Better Understand their Health	Develop web/mobile/paper patient checklist for guiding patient-provider communication	Atlantic Health System, Atlantic ACO	2014 Q3	5,000 people reached	5% increase in recommended preventive care in total population	Increase utilization of preventive services by 20%
		Develop health education tools for low HL population	NMC Community Health, SC Dept. of Health	2014 Q1	5,000 people reached		
Physical Access (Transportation)							
Many in Sussex County lack adequate transportation to get to medical appointments.	Inform the public about options for clinics and transportation	Create a "Using Clinics in Sussex County" guide	NMC Community Health, Saint Clare's, Sussex County Department Env. Services	2013 Q4	5,000 people reached	Increase usage of clinics and awareness of transportation services	Reduce the number of people unable to attend medical appointments due to cost

[1]National Center for Education Statistics, 2003

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