FY 2012

Community Health Needs Assessment

&

Recommendations

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Introduction

As a hospital facility described in Internal Revenue Code (IRC) section 501(r), Aria Health is required by IRC section 501(r) to conduct a Community Health Needs Assessment (CHNA) every three years, for tax years beginning after March 23, 2012. The outcomes of the assessment, as well as an implementation strategy for addressing the community health needs, must be reported to the IRS and made publically available[1].

The report must include descriptions of: the community and how it was defined, the CHNA process, how the input from persons representing the community was taken into account, all health needs identified and how they were prioritized, and existing community facilities and resources available to meet the community's health needs. The implementation strategy must be in the form of a written plan that addresses every community health need identified in the CHNA. These needs are "addressed" when the plan describes how the hospital facility plans to meet the health need or why the hospital facility does not intend to meet the health need[1].

Methodology

In conducting the CHNA, multiple methods were used to gather information on the community. Data used in the statistical analysis came from the Public Health Management Corporation's Community Health Data Base 2010 Southeastern Pennsylvania Household Health Survey, US Census, PA Department of Health and The Philadelphia Department of Health[2,3,4],and the CDC Behavioral Risk Factor Surveillance System Survey Data (2010)[5]. The Southeastern Pennsylvania Household Health Survey is a telephone survey conducted biannually of over 10,000 households in Southeastern Pennsylvania. The Household Health Survey collects self reported data, with the purpose of identifying key information related to health status, health behaviors, access to healthcare and utilization and quality of health services. The CDC Behavioral Risk Factor Surveillance System (BRFSS) survey is an ongoing state-based telephone survey conducted by state health departments, which generates information about health risk behaviors, clinical preventive practices, health care access, and chronic disease and injury.

In addition to statistical data, input from community leaders was obtained for the purpose of identifying leading concerns among members of the local communities. Both government officials and leaders of community-based organizations were contacted in each of the campus service areas. Input was gathered on healthcare issues and healthcare access in the community. Additional topics included direction for focus of efforts, ways to access the community, and partnerships with community organizations.

In the statistical analysis, SPSS was used to analyze variables related to demographics, health status, access to care, preventive screening, and health behaviors. These frequencies and crosstabulations were calculated and compared across the six defined service areas. As a measure of comparison, frequencies were run for the same variables in Philadelphia County, Bucks County, and Southeastern Pennsylvania. Rates were also compared to Healthy People 2020 objectives[5].

Service areas were defined by geographic boundaries on the zip code level. The area explored was broken down into primary and secondary areas for each of the individual Aria Health campuses. Some of these boundaries did overlap.

Results

Demographics:

Southeastern Pennsylvania

Southeastern Pennsylvania (SEPA) has a relatively young population, which is nearly 70% white, 20% black and 5.5% Latino race. Thirteen percent of the population speaks a language besides English in the home. Spanish is the most common language spoken, accounting for 44.3%. The poverty rate in SEPA is 12.3% and the unemployment rate is 6.5%. Educational attainment is relatively high, as less than 20% of the population has an education less than high school.

Philadelphia County

In Philadelphia County, the population is relatively young and highly racially mixed. Approximately 18.5% of the population speaks a language other than English in the home, the most common of which is Spanish. Rates of poverty for the county are high at 22.9%. Unemployment rates in this population are also high at 10.9%. Educational attainment for this population is also nearly 30% have less than a high school education and only 53% are high school graduates.

Bucks County

In Bucks County, the population is older and primarily white. Only 8.4% of the population speaks a language other than English in their home and, of those who do, the majority speak Spanish. The poverty rate in this community is low at 4.5%. Unemployment rates are also low at only 3.5%. Educational attainment is also high, with over 30% of the population having a college degree or higher.

Frankford Campus Primary Service Area

The population in the Frankford Campus Primary Service Area is relatively young and racially mixed. Approximately one fifth of population speaks a language other than English in the home and, of those, the predominant language is Spanish. Rates of poverty in this area are high, at 14.7%. Though reported rates of full-time employment are high, the rate of unemployment is also high in this community. Additionally, educational attainment is also low in this community, as more than one quarter of the population has less than a high school education.

Frankford Campus Secondary Service Area

The Frankford Campus Secondary Service area has a young population with over 27% being under the age of 18 and more than 85% under the age of 45. This population is also racially diverse and more than 28% of adults report speaking another language in the home. The most highly reported language spoken is Spanish. In this area, nearly 30% of the population lives in poverty, which is likely reflective of the high unemployment rate, at nearly 13.5%. Educational attainment is also low, with nearly 40% having less than a high school education.

Torresdale Campus Primary Service Area

The Torresdale Campus Primary Service Area has a slightly older population and is less racially diverse. Only 15% of the population report speaking another language in the home, with Spanish being the most commonly reported language. Poverty rates are lower in this community, at 8.5%, which is likely reflective of lower unemployment rates. Of main household wage earners, over 60% report being employed full-time. The retirement rate is also higher, at 22%, which reflects the older age of the population. The population in this area is also more highly educated, with over 57% of the population having a high school degree and over 30% having a college degree.

Torresdale Campus Secondary Service Area

The Torresdale Campus Secondary Service Area has a slightly older population, with more than half of the population ages 45 and older, and over 22% ages 65 and older. The population is primarily white, though the black and Latino populations, together, account for over 25% of the population. Nearly 20% of the population report speaking another language at home, with the most common being Spanish and Russian. Poverty rates are much lower in this population, at only just over 3%. In this population, over 55% of main wage earners report full-time employment and 20% report retirement. Educational attainment is also higher in this population.

Bucks County Campus Primary Service Area

The Bucks County Campus Primary Service Area has a slightly older demographic. The population is predominantly white with very low representation of other races. Only 11% of the population reports speaking another language at home, with Spanish and Italian being the most commonly reported languages. Nearly 6% of the population in this area lives in poverty; however the unemployment rate is low, at only 3.9%. The population is also well educated with over one quarter having a college degree and only 13.5% having less than a high school degree.

Bucks County Campus Secondary Service Area

The Bucks County Campus Secondary Service Area has a relatively even split of ages, with just over half being under age 45 and just under half being age 45 or older. The racial mix in this population is primarily white and only 13.2% speak another language at home. Of those who speak another language, the most commonly reported is Russian. Poverty rates are very low in this population, at only 2.2%. Employment rates are also high, with 97% being employed, 63% employed full time. Additionally, 25% of main wage earners in the population are retired. This population also has high educational attainment, with nearly 45% having a college degree or higher and only 6.4% having less than a high school education.

Health Status:

Southeastern Pennsylvania

In SEPA, nearly 84% if the population reports ""excellent," "very good," or "good" health (referred to here as "good health"). The population exhibits low to moderate rates of diabetes and hypertension. Of those with diabetes, only 60% have taken a class in managing diabetes. Though the rate of overweight is high, at 35.74%, the rate of obesity is relatively low at 26.3%, well below the Healthy People 2020 objective.

Philadelphia County

In Philadelphia County, 77.2% of the population reports their health to be "excellent," "very good," or "good". However, the rates of both diabetes and hypertension in this population are very high, at 13.4% and 35.9% respectively. Additionally, both rates of overweight and obesity are both above the Healthy People 2020 objectives.

Bucks County

In Bucks County, nearly 89% of the population report being in good health. The population exhibits relatively low rates of diabetes (8.3%), though high rates of hypertension (30%). Rates of overweight in the population are high, at 36.6%, though rates of obesity are much lower (21.4%), which is well below the Healthy People 2020 objective.

Frankford Campus Primary Service Area

In the Frankford Campus Primary Service Area, more than three quarters of the population report their health to be "excellent", "very good" or "good". Older adults between the ages of 60 and 74 report the highest rates of "fair" or "poor" health. Compared to the insured population, those who are uninsured report slightly lower rates of "fair" or "poor" health. Reported rates of hypertension in this population, at 28.7%, are just above the Healthy People objective of 26.9%. Hypertension rates are reported highest among the white and biracial/multiracial populations and also increases with age. Reported rates of diabetes are relatively low, at 10%. Diabetes is reported most highly among those who classify themselves as "other" race (45.5%), followed by black (approx 15%) and white (10%) races. Obesity rates are also high in this community, with nearly one third being overweight and 30% being obese. Obesity is most common in the Latino, Native American, and "other" races. Obesity rates peak in the 50 to 59 year age group, trending upward beginning with ages 18 to 39 and downward through ages 75 and older.

Frankford Campus Secondary Service Area

In the Frankford Campus Secondary Service Area, less than 72% of the population report being in "excellent", "very good" or "good" health. Younger adults report the highest rates of good health, though this rate decreases with increasing age. Rates of hypertension, diabetes, and obesity are all high

in this population. Hypertension is reported by nearly 40% of the population and is reported equally by white and black races, at nearly 45%. Diabetes is reported by 15.8% of the population and is most common among the black population at nearly 20%. Obesity rates in this area are well above the Healthy People 2020 objectives, with over 35% of the population overweight and 38.6% obese. Obesity is found to be highest in the 40 to 49 year and 50 to 59 year age groups, while overweight is highest in the 60 to 74 year age group.

Torresdale Campus Primary Service Area

In the Torresdale Campus Primary Service Area, 82% of the population report being in good health, with highest rates in the 18 to 39 year age group and declining with age. Overall, the Asian population rates their health most positively. Reported rates of diabetes and hypertension are high, with 32.4% reporting hypertension and 11.1% reporting diabetes. Those ages 60 to 74 report the highest rates of diabetes and second highest rates of hypertension. Reported rates of both diabetes and hypertension are highest among the white population. The percentage of the population which is overweight exceeds the Healthy People 2020 objectives, with the percentage of those who are normal weight being well below the objective. Both reported overweight and obesity are highest among the 50 to 59 year age group and among the Latino and Asian populations.

Torresdale Campus Secondary Service Area

Of the population in the Torresdale Campus Secondary Service Area, 83% report being in "excellent", "very good" or "good" health. Though the 75 and older age group reports the lowest rates of good health, nearly two thirds report good health. The population also exhibits low rates of hypertension (28.8%) and diabetes (6.8%). Hypertension is reported most commonly in those ages 75 and older and in the white race, while diabetes is most common among those ages 60 to 74 years and in the black race. Despite the low reported rates of diabetes and hypertension, rates of overweight and obesity remain high in this population.

Bucks County Campus Primary Service Area

In the Bucks County Campus Primary Service Area, 86% of the population report being in good health, with the younger age brackets reporting the highest rates and the older age brackets reporting lower rates. Though this population has low reported rates of diabetes (9.4%), it is also characterized by high rates of hypertension (36.5%). The population also has high reported rates of overweight, but slightly lower rates of obesity, which are below the Healthy People 2020 objective.

Bucks County Campus Secondary Service Area

In the Bucks County Campus Secondary Service Area, nearly 87.7% of the population reports good health. In the population ages 75 and older, good health is only reported 55.5% of the time, with this rate being much lower than any of the other age groups. This population also has low reported rates of diabetes, which is reported most commonly by those in the 60 to 69 year age group. Though still above

the Healthy People 2020 objectives, lower rates of hypertension are reported (28.7%). The rate of obesity in the population is very low at 16.7%, however the rate of overweight is very high at 42.6%.

Access to Healthcare:

Southeastern Pennsylvania
Of adults ages 18 to 64 in SEPA, 88.6% report having health insurance. Of those who are uninsured, cost, change of or loss of employment, or lack of eligibility due to working status, are the most common reasons for lack of insurance coverage. Over 11.5% of those who are insured are covered by Medicaid.

Approximately 90% of adults in this population report having a regular source of primary care, with 86% seeking care in a physician's office. Though only 1.5% of the population reports using the emergency room for regular care, 52% of the uninsured use the emergency room instead of a doctor's office.

Cost is an important variable in usage of the healthcare system. In this population, 12.2% report not seeking care when sick due to cost. Additionally, nearly 16% did not fill a prescription for this reason.

Philadelphia County

In Philadelphia County, only less than 84% of the population ages 18 to 64 reports being insured. Of those who are uninsured, most report being uninsured due to cost, working status, or changing/losing a job. Likely due to the high poverty rate in this area, over 19% of the population is insured by Medicaid.

Of the population in Philadelphia County, 87.7% report having a regular source of care, 74.8% of who seek care in physician's office. These numbers are both well below the Healthy People 2020 objectives of 89.4% and 83.9%, respectively. While only 2% report using the emergency room as their primary source of care, over 47% of the uninsured report using the emergency room instead of a doctor's office.

In this population, cost is also an issue affecting many people, where 14% report not seeking care when sick due to cost. Additionally, nearly 18.5% did not use a prescription for this reason.

Bucks County

In Bucks County, 90.9% of adults ages 18 to 64 reports being insured. Of the less than 10% who are uninsured, the majority cites cost or change in employer/lost job as the reason they are uninsured. Only 5.8% of the population is insured by Medicaid. This rate is likely low due to the lower rates of poverty in this area.

Having a regular source of care is reported by over 92% of the population in this area. Additionally, nearly 93% seek regular care in a physician's office. Only 1.5% report using the emergency room as their regular source of care, however, this number is nearly 60% among the uninsured population.

In this population, 11.3% report having not sought medical care when sick due to the cost. Additionally, nearly 15% did not fill a prescription for the same reason.

Frankford Campus Primary Service Area

In the Frankford Campus Primary Service Area, of the population ages 18 to 64, 85% report having health insurance, however this leaves 15% uninsured. Of the uninsured, most report not having insurance due to cost, changing or losing jobs, or unemployment. Likely due to the high poverty rate in this area, 18% of insured adults are covered by Medicaid.

Over 85% of the population in this area report having a regular source of healthcare and, of those, approximately 85% reports a physician's office as their source of regular care. In this area, the reported rate of having a regular source of healthcare is approximately 10% below the Healthy People 2020 objective, but the rate of seeking regular care in a physician's office is above the Healthy People 2020 objective. Less than half of one percent report using the emergency room for their regular care, however, of the uninsured, over 25% report seeking care in the emergency room rather than a doctor's office.

In addition to the 20% of uninsured who lack coverage due to cost, many also report inability to afford other healthcare costs. Over 16% of adults report not seeking care when sick and over 22% did not use a prescription due to cost.

Frankford Campus Secondary Service Area

In the Frankford Campus Secondary Service Area, of 18 to 64 year olds, the reported uninsured rate is 22.2%. Of the uninsured, 40% report not having coverage due to cost, 20% having been denied coverage or not qualifying, and 17% having changed or lost a job. Of the insured, 21% report being covered by Medicaid, which is likely reflective of the high poverty rate in the area.

Less than 85% of adults in this population report having a regular source of healthcare and, of those, less than 70% seek regular care in a physician's office. Both of these rates are below the Healthy People 2020 objectives. In this population, over 3.5% of adults report using the emergency room as their regular source of care. Of the uninsured, 45% seek care at the emergency room rather than a physician's office.

Lack of healthcare due to cost is also a common concern among this population, as nearly 20% report having not sought care when sick due to cost and over 20% report not filling a prescription for this reason.

Torresdale Campus Primary Service Area

In the Torresdale Campus Primary Service Area, of adults ages 18 to 64, 87.7% report being insured. Of the remaining 23% who are uninsured, over 35% report that they could not afford insurance, nearly 18% lack insurance due to change in or loss of employment, and 15% are not eligible due to working status.

However, of the insured, less than 10% report coverage by Medicaid, which is in concordance with the lower rate of poverty in this area.

Of the population in this area, over 90% report having a regular source of healthcare and over 90% of these report seeking care in a physician's office. Though the rate of those seeking care in a physician's office is higher than the Healthy People 2020 objective, the rate of having a regular source of care is below the Healthy People 2020 objective. Of the uninsured, slightly over 40% report using the emergency room for their regular source of care, rather than a doctor's office.

In this population, reported rates of lack of care seeking when sick are slightly lower, at just over 11%. The uninsured are four times more likely to not seek care due to cost than the insured.

Torresdale Campus Secondary Service Area

In the Torresdale Campus Secondary Service Area, insurance rates are low, with only 83.3% of adults ages 18 to 64 report being insured. The majority of people who are uninsured do not have coverage due to cost, working status, or qualifications. Over 10% of the population in this area is insured by Medicaid.

Fewer people in this area report having a regular source of care, at only 85.4% and, of those, 90% report seeking care in a physician's office. Of those who are uninsured, approximately 40% report not having a source of regular care, compared to 11% in the insured population. Additionally, of those who are uninsured, more than one third use the emergency room rather than a doctor's office for care.

In this area, the uninsured are 3.5 times more likely that the insured to not seek care when sick. Over 11% report not seeking care when sick and 20% report not filling a prescription due to cost.

Bucks County Campus Primary Service Area

In the Bucks County Campus Primary Service Area, nearly 90% of the population report being insured, only 5.9% of which are covered by Medicaid. The most reported reason for being uninsured is cost, cited by 67.5% of the uninsured.

Over 90% of adults report having a regular source of care and 93% report seeking that care in a physician's office. Of the uninsured population, less than one third report using the emergency room as their regular source of care.

In this area, over 15% of the population report not seeking care and 20.5% not filling a prescription due to cost. Of the uninsured, 62.1% report not seeking care, compared to 11.8% of those who are insured.

Bucks County Campus Secondary Service Area

In the Bucks County Campus Secondary Service Area, 92.4% of adults ages 18 to 39 report being insured, with the most commonly cited reason for uninsurance being cost. Medicaid insures 7.7% of the insured population in this area.

Over 90% of the population in this area report having a regular source of care and nearly 94% seek that care in a physician's office, both rates above the Healthy People 2020 objective. Among those who are uninsured, 32.4% report using the emergency room as their regular source of care, rather than a physician's office.

Less than 10% of people report having not sought care due to cost. Less than 10% also report not getting a prescription due to cost. These low rates could be reflective of the higher proportion of the population that is insured.

Preventive Screenings:

Southeastern Pennsylvania

In SEPA, over 90% of adults report having their blood pressure screened in the past year. Additionally, nearly 70% of women have had a breast exam, 65.4% a mammogram, and 62% a pap test, in the past year. Of men, over 58% have had a prostate exam in the past year. Rates of sigmoidoscopy or colonoscopy in the past year are relatively low, at 20.8%

Philadelphia County

In Philadelphia County, overall rates for preventive screening are low. While the majority of adults report having the blood pressure screened in the past year, this number is still well below the Healthy People 2020 objective. Breast exams, mammogram screenings, and pap tests are also reported at low rates, at approximately two thirds of women reporting screening. Only just over half of men report having a prostate screening in the past year. Additionally, rates of sigmoidoscopy or colonoscopy are low at just over 22%, well below the Healthy People 2020 objective of over 70%.

Bucks County

In Bucks County, rates of preventive screenings are comparatively high. Over 91% of adults report having their blood pressure screened in the past year. Nearly 70% of women have had a breast exam in the past year, although only approximately 66% have had a mammogram and just over 61% have had a pap test in the past year. Nearly 60% of men have had a prostate exam in the past year. Rates of sigmoidoscopy or colonoscopy are comparatively low in this population, at less than 20%.

Frankford Campus Primary Service Area

In the Frankford Campus Primary Service Area, rates of preventive screening are low. The majority of adults report having their blood pressure screened in the past year, with rates of screening increasing with age. However, of women, reported rates of breast exams, mammograms, and pap tests are well below the Healthy People 2020 objectives. Of men, only slightly more than half of the population report having a prostate exam in the past year. Reported rates of sigmoidoscopy/colonoscopy are also well below the Healthy People 2020 objective.

Frankford Campus Secondary Service Area

In the Frankford Campus Secondary Service Area, overall rates of preventive screenings are low. Blood pressure screening rates are relatively high, at 89.3%. For women, breast exams, mammograms, and pap tests in the past year have been reported by less than two thirds of women. These rates fall below the Healthy People 2020 objectives for breast cancer and cervical cancer screening. Of men, less than 45% report having a prostate exam in the past year. Colorectal exams by sigmoidoscopy or colonoscopy, in the last year, are reported by less than 25% of the population. This rate is well below the Healthy People 2020 goal of 70.5%.

Torresdale Campus Primary Service Area

In the Torresdale Campus Primary Service Area, reported rates of blood pressure screenings are high at nearly 90%. However, breast exams, mammograms, and pap tests among women, in the past year, were reported below the Healthy People 2020 objectives. Additionally, prostate exams in the past year were reported by over 50% of men. Sigmoidoscopy and colonoscopy in the past year are also reported at relatively low rates.

Torresdale Campus Secondary Service Area

In the Torresdale Campus Secondary Service Area, rates of blood pressure screenings in the past year are reported highly. Reported rates of breast exams and mammograms in the past year are low at 64.4% and 60.3% respectively, however, reported rates of pap tests in the lasty year are high, at 66.2%. Rates of prostate screenings are also relatively high in this area, at over 64%. Sigmoidoscopy and colonoscopy rates in the past year are low in this population, at just over 25%.

Bucks County Campus Primary Service Area

In the Bucks County Campus Primary Service Area, reported rates of screening for blood pressure, sigmoidoscopy/colonoscopy, and mammograms in the past year were relatively high (92.0%, 20.2%, and 69.3% respectively). However, breast exams, pap tests, and prostate exams were all reported at comparatively low rates (67.5%, 57.9%, and 49.8% respectively).

Bucks County Campus Secondary Service Area

In the Bucks County Campus Secondary Service Area, reported screening rates are high for blood pressure (93.3%), prostate exam (73.6%), and sigmoidoscopy/colonoscopy (25.8%) in the past year. Screening rates are reported lower for breast exams (65.1%), mammograms (59.8%), and pap tests (59.0%) in the past year, particularly when compared with Healthy People 2020 objectives.

Health Behaviors:

Southeastern Pennsylvania

In SEPA, only 20% of adults report smoking. Of smokers, 57.7% have tried to quit in the past year. The most common method of quitting was without assistance, or "cold turkey". Of previous smokers who have successfully quit, 8.8% have done so in the past year and 66% over 10 years ago.

More than 60% of respondents report exercising three or more times per week, though more than 10% do not exercise at all. Overall, usage of neighborhood recreation facilities is generally low.

Philadelphia County

In Philadelphia County, more than 25% of the population smokes. In the past year, more than 55% of smokers attempted to quit smoking. Of those who successfully quit, over 80% quit without assistance, or "cold turkey". Of previous smokers, 12% quit smoking in the past year and 56.5% quit over 10 years ago.

Over 58% of adults in Philadelphia County report exercising three or more days per week. Though this rate is relatively high, over 14% report not exercising at all. Additionally, less than half of people report ever using public recreation facilities in their neighborhoods.

Bucks County

In Bucks County the smoking rate is relatively low, at fewer than 20%. In the past year, more than 60% of smokers attempted to quit. Of smokers who did quit, 5.9% quit in the past year and nearly 73% quit over 10 years ago.

Rates of exercise three or more days per week are relatively high at 61.4%. Lower percentages of people report not exercising at all, at only 8.5%. Additionally, 64% of people report using public recreation facilities in their neighborhoods.

Frankford Campus Primary Service Area

In the Frankford Campus Primary Service Area, the smoking rate is high at approximately 30%. In the past year, more than half of smokers report having tried to quit. Of those who have successfully quit smoking, over three quarters report quitting "cold turkey". Of previous smokers, more than half report quitting over ten years ago.

In this population, over half of adults report engaging in physical activity three or more days per week for at least thirty minutes. However, another 17% report not engaging in any physical activity. Of those who report engaging in physical activity, very few report using public recreation facilities.

Frankford Campus Secondary Service Area

In the Frankford Campus Secondary Service Area, less than 30% of the population reports smoking. In the past year, almost 65% of smokers report trying to quit smoking. Of those who have quit smoking, over 80% report doing so without assistance or “cold turkey”. Of previous smokers who have quit smoking, 55% report doing so over ten years ago and 11.3% have quit in the past year.

Although over 53% of the population in this area reports engaging in physical activity for at least 30 minutes three or more days per week, another 19% report not engaging in any physical activity. Less than half of those who engage in physical activity use public recreation facilities in their neighborhoods.

Torresdale Campus Primary Service Area

In the Torresdale Campus Primary Service Area, less than one quarter of the population smokes. Though well below the Healthy People 2020 objective of 80%, over half of smokers report having attempted to quit smoking in the past year. Of those who have quit smoking, more than 60% quit over 10 years ago and nearly 10% have quit in the past year. Of those who have quit, nearly 80% have done so “cold turkey.”

Rates of physical activity in this population are relatively low, with nearly 30% reporting exercising less than three days per week and over 13% not exercising at all. Approximately half of respondents report using public recreation facilities in their neighborhoods.

Torresdale Campus Secondary Service Area

In the Torresdale Campus Secondary Service Area, less than one quarter of the population currently smokes. Of smokers, nearly 42% have attempted to quit smoking in the past year. Among previous smokers who have quit, 11.2% have quit in the past year and 71.1% quit over 10 years ago. The most commonly reported method of smoking cessation is “cold turkey”.

Although less than half of the population in this area report using public recreation facilities, 56.2% report exercising three or more times per week for at least 30 minutes. However, a high percentage (15%) report not engaging in any physical activity.

Bucks County Campus Primary Service Area

In the Bucks County Campus Primary Service Area, less than 25% of the population reports smoking and, in the past year, 64% of smokers have attempted to quit. Of past smokers who have quit, 61.1% quit over 10 years ago and over 10% have quit in the past year.

In this area, a high proportion of the population report exercising for at least 30 minutes three or more times per week. Only 9.1% of the population report never engaging in physical activity. Utilization of public recreation facilities is reported by more than half of respondents.

Bucks County Campus Secondary Service Area

In the Bucks County Campus Secondary Service Area, smoking rates are reported lower than the Healthy People 2020 objective, at 11.1%. Of smokers, 65.7% have tried to quit smoking in the past year. Of previous smokers who have quit, nearly 89% have quit smoking over 10 years ago.

Although utilization of public recreation facilities is low in this area, nearly two thirds of people report exercising for at least thirty minutes three or more days per week. Less than 10% report not engaging in physical activity at all.

Social Capital:

Southeastern Pennsylvania

In SEPA, 88.8% of people report feeling that they belong in their neighborhood and over 80% feel that they can trust their neighbors. Many (63%) agree that neighbors do work together to improve their community, however, only 60% report that neighbors are always or often willing to help each other. Additionally, approximately 55% of people report participating in at least one social group or activity.

Philadelphia County

In Philadelphia County, high proportions (85.5%) of people feel that they belong in their neighborhoods. Reported rates of neighbors working together to improve their community are also high, at nearly 73%. However, only approximately 54% agree that neighbors are always or often willing to help each other. Approximately two thirds of people would agree that people in their neighborhoods can be trusted. Despite these numbers, less than 50% of respondents report engaging in any social groups or activities.

Bucks County

In Bucks County, approximately 92% of people feel that they belong in their neighborhood. Reported rates of neighbors working together are low, however, agreement that neighbors are willing to help each other are high. Trust among neighbors is also high. In this community, approximately 60% of people report engaging in one or more social groups or activities.

Frankford Campus Primary Service Area

In the Frankford Campus Primary Service Area, although more than 80% of people in this community feel that they belong in their neighborhoods, results indicate that there is only moderate camaraderie between neighbors and within neighborhoods. Less than two thirds of respondents say that neighbors ever work together and less than half say that neighbors are willing to help each other. However, nearly three quarters of respondents feel they can trust their neighbors. In addition to lack of connectedness among neighbors, few respondents report regular involvement in social groups or activities.

Frankford Campus Secondary Service Area

The Frankford Campus Secondary Service Area is characterized by high levels of trust within the community. Although less than 27% of people strongly agree that they feel belonging in their neighborhood, nearly 72% report that neighbors ever work together to improve the community. Over 50% also agree that neighbors are always or often willing to help each other. However, less than half of people in this community report being involved in at least one activity or social group.

Torresdale Campus Primary Service Area

In the Torresdale Campus Primary Service Area people in the community report feeling that they belong in their neighborhood and can trust their neighbors at relatively high rates. A high percentage of people also report that neighbors are willing to help each other. Despite this, there are relatively low reported rates of neighbors working together to improve their neighborhoods. In this area, people are more likely to be involved in social groups or activities, as slightly less than half of respondents report social involvement.

Torresdale Campus Secondary Service Area

In the Torresdale Campus Secondary Service Area, the majority of people report feeling that they belong in their neighborhoods, that neighbors are willing to help each other, and that their neighbors can be trusted. However, only 56.7% report that neighbors ever work together to improve their neighborhoods. Lower numbers of people in this community report being involved in any social groups or activities.

Bucks County Campus Primary Service Area

In the Bucks County Campus Primary Service Area, a high percentage of people report feeling that they belong in their neighborhood, that their neighbors are willing to help each other, and that they trust their neighbors. However, only half report that neighbors ever work together. Social involvement is higher in this community, as nearly 52% of people report participating in at least one social group or activity.

Bucks County Campus Secondary Service Area

In the Bucks County Campus Secondary Service Area, high proportions of people report feeling belonging in their neighborhood and that they can trust their neighbors. Additionally, more than 66% of people report participating in a social group or activity. However, less than half say that neighbors ever work together or are willing to help each other.

Older Adults:

Southeastern Pennsylvania

In SEPA, nearly three quarters of older adults (those ages 60 and older) are between the ages of 60 and 74. The population is nearly 80% white, 17.3% black, and 1.7% Latino. Approximately 7% of the older adult population speaks a language other than English in their home, the most common of which are Spanish, Italian, and German. The poverty rate among older adults in SEPA is over 10%. Nearly 60% of the older adult population is retired, however, over 26% are working full-time. This population is also fairly educated, as over 50% of older adults have schooling above the high school level.

Over 70% of older adults in SEPA report having good health, although rates of diabetes and hypertension are relatively high. The obesity rate in this population is relatively low, although the rate of overweight is high. Over 94% of older adults report having a regular source of care and over 89% seek this care in a physician's office. Over 98% of the population report being insured. Medicare A insures 67.7%, Medicare B62.2%, and Medicaid only 12.4%.

Of all adults in SEPA, 31.4% report caring for a friend or family member age 60 or older. Of older adults, X% report receiving formal care in their homes. However, 32.2% report receiving informal care for ADLs (activities of daily living) and 35.2% for IADLs (instrumental activities of daily living). In this population, 9% of older adults experience ADL limitations, and over 21% IADL limitations.

Philadelphia County

In Philadelphia County, of the older adult population), nearly two thirds are between the ages of 60 and 74. The population is racially mixed, with approximately 55% white and 38% black. The Latino, Asian, biracial, Native American, and "other race" populations are relatively small. Approximately 9% of older adults in this area speak another language in the home, the most common being Spanish. Additionally, this community sees high rates of poverty at 16.9%. In this population, approximately 60% report being retired and 23% employed full time. Educational attainment in this population is also low, as over 16% have less than a high school education and another 35% have only graduated high school.

In this population, less than 70% of older adults report good health. The population is also characterized by high rates of diabetes and hypertension and moderate levels of overweight and obesity. Approximately 93.5% of older adults have a regular source of primary care, though less than 80% seek care in a physician's office. The majority of older adults are insured (97%), with slightly over two thirds being insured by Medicare A, slightly less than two thirds by Medicare B, and over 18% by Medicaid.

Of all adults in Philadelphia County, over one third of adults care for a friend or family member ages 60 or older. Of older adults, 37% report receiving informal care for ADLs and 36% for IADLs. However, only 8% receive any formal care in their homes. Among this population, 12.2% experience limitations with ADLs and 28.1% with IADLs.

Bucks County

In Bucks County, nearly 70% of the older adult population is between the ages of 60 and 74. The population is primarily white, at 96.2%. Only 3.9% of older adults in this population speak another language in the home, nearly 30% of who speak Spanish, 17% German, and 10% Polish. The poverty rate for older adults in Bucks County is 5.5%. Of main wage earners, nearly 60% are retired and nearly 30% are employed full-time. Educational attainment in this population is also relatively high, as more than 57% report having an education above high school.

Of the older adult population, more than 82% report having good health, though there are moderate to high reported rates of diabetes and hypertension. Though obesity rates are low in this population, the rate of overweight is extremely high. Over 94% of older adults report having a regular source of care and 94.5% seek that care in a physician's office. The majority of older adults are insured, at over 99%. Medicare A insures 68.5% of the population, Medicare B insures 60.8% and Medicaid insures only 9.2%

Although only 5.5% of older adults receive any formal care in their homes, 41% receive informal care for ADLs and nearly 39% for IADLs. The rate of ADL limitations in this population is 7.5% and IADLs 17%.

Frankford Campus Primary Service Area

Of older adults in the Frankford Campus Primary Service Area, 40% are between the ages of 60 and 74. This population is racially mixed, although primarily (65%) white. Very few older adults in this population speak another language in the home; however, of those who do, the languages most commonly spoken are Spanish and German. Additionally, this community experiences high rates of poverty at 10%.

In this population, over 60% of older adults report having good health. Low rates of diabetes, at less than 20%, are reported, though rates of hypertension, at over 60%, are fairly high. Rates of overweight and obesity are also relatively low in this population, exceeding the Healthy People 2020 objectives.

Over 95% of older adults in this population report having a regular source of care and 90.9% of those reports seeking care in a physician's office. The majority of older adults are insured, with over two thirds insured by Medicare A and 61.7% insured by Medicare B. High reported rates of insurance by Medicaid, over 14%, are likely due to the high rate of poverty in this population.

Of all adults in the Frankford Campus Primary Service Area, almost 34% report caring for a friend or family member over the age of 60. Of older adults in this population, 23% report receiving informal help for ADLs and nearly 30% for IADLs. Among older adults, the rate of having one or more ADL is 39.1%, and the rate of one or more IADL is 16.9%. Though many report having informal help with ADLs and IADLs, very few receive any formal care at home.

Frankford Campus Secondary Service Area

In the Frankford Campus Secondary Service Area, approximately one third of older adults are over age 74. More than half of the population is white, over 30% is black, and 12% are Latino. Approximately 15% of the population reports speaking another language in the home, the majority of who speak Spanish. Of older adults who are main wage earners, 22.6% report working full time and 58.4% being retired. Additionally, 19% of older adults live in poverty.

Over 60% of respondents report being in good health, however over one third report having diabetes and nearly two thirds report having hypertension. Additionally, over 48% of older adults are overweight and another 34% obese. Older adults in this community report lower rates of having a regular source of care and a lower percentage report seeking care in a physician's office. Ninety four percent of older adults in this population report being insured, 66.1% by Medicare A and 67.5% by Medicare B. Additionally, 22.4% are insured by Medicaid. The high rate of insurance by Medicaid is likely due to the high rate of poverty among this population.

In this population, over one third of adults report providing care to a family member or friend over the age of 60. Of the older adult population, 10% report receiving formal care in their home for ADLs and IADLs, additionally, 52.5% report receiving informal care for ADLs and 46% for IADLs. Over 38% of older adults report limitations with IADLs and 14.9% with ADLs. High rates of ADL and IADL limitations are likely due to the older age of this population.

Torresdale Campus Primary Service Area

In the Torresdale Campus Primary Service Area, like the population of this area overall, the older adult population is slightly older, with over 22% of the population being ages 60 or older. The older adult population in this area is primarily white, with very little racial diversity. Less than 10% of older adults in this area report speaking a language other than English in their home and of those the primary languages spoken are Spanish, Polish, or German. Additionally, of older adults in this population, 10.7% live in poverty.

Over 70% of older adults rate their health positively, with relatively low reported rates of diabetes and hypertension. However, the reported rate of hypertension is still double the Healthy People 2020 objective. Two thirds of older adults in this population are overweight or obese, though the obesity rate is still below the Healthy People 2020 objective.

Nearly 93% of older adults in this population report having a regular source of care and, of those, 94% report seeking care in a physician's office. Nearly 97% of the population reports being insured, with 70% insured by Medicare A and nearly 65% by Medicare B. Medicaid covers only 11.4% of this population.

Although less than 10% of older adults in this population report receiving formal care for ADLs or IADLs, over 50% report informal care for ADLs and more than one third for IADLs. This population also has lower rates of ADL and IADL limitations, at 9.5% and 26.4% respectively.

Torresdale Campus Secondary Service Area

In the Torresdale Campus Secondary Service Area, more than 60% of older adults are between the ages of 60 and 74, with the remaining approximately 40% age 75 or older. The population is predominantly white and nearly 15% speak another language in the home. Of languages, other than English, spoken in the home, Spanish, Italian and Yiddush are the most common. Less than 3.5% of the population lives in poverty.

Older adults in this area report high rates of good health, at 70%. This population has a low reported rate of diabetes, though over half of the population reports having hypertension. In this area, older adults also have lower rates of overweight and obesity, both rates falling below the Healthy People 2020 objectives.

Nearly 95% of older adults in this area report having a regular source of care and, of those, over 95% report seeking care in a physician's office. All respondents report having health insurance, with 71.1% having Medicare A, 68.4% having Medicare B, and less than 10% having Medicaid.

Though only 8.3% of older adults report receiving formal care services in their home, over 40% and nearly 30%, respectively, report receiving informal care for ADLs and IADLs. In this population, 13.6% of older adults report ADL limitations and 34.3% report IADL limitations.

Bucks County Campus Primary Service Area

In the Bucks County Campus Primary Service Area, over two thirds of older adults are between the ages of 60 and 74. Much like the rest of the population, this population is primarily white. Only 5% of older adults report speaking another language in the home, 31.3% of whom speak Spanish. Just over 6% of older adults in this population live in poverty.

Being in good health is reported by over 75% of older adults in this population. However, almost 20% report having diabetes and over half report having hypertension. Rates of overweight and obesity in this population are also high, as nearly 40% are overweight and 24% obese.

Nearly 98% of older adults in this population report being insured, with over one third being covered by Medicare A, and nearly 58% covered by Medicare B. Only 7.5% report coverage by Medicaid, which is a low percentage, especially given the higher rate of poverty in this area. Nearly 90% of older adults report having a regular source of care and over 90% seek their care in a physician's office.

This population also has much lower rates of ADL and IADL limitations. Only 7.4% of older adults report ADL limitations and 19.5% report IADL limitations. Only 6.4% of older adults report receiving formal care for ADL/IADL limitations, though 30% report informal care for ADL limitations and 45% for IADL limitations.

Bucks County Campus Secondary Service Area

In the Bucks County Campus Secondary Service Area, nearly one third of older adults are age 75 or older. The majority of the population is white and only 13.1% report speaking another language in the home. The most common language spoken, besides English, is German. Only 4.5% of older adults in this area live in poverty.

In this population, 72.6% of older adults report having good health. Low rates of other health indicators, such as diabetes and hypertension are also reported. Despite these indicators, rates of overweight in this population are high, although rates of obesity are below the Healthy People 2020 objective.

Of the 92% of older adults who report having a regular source of care, 92.3% report seeking care in a physician's office. The majority of the population report being insured. Of the insured, 71.7% are insured by Medicare A and 75.7% by Medicare B. Relatively high proportions, 13.2% of older adults, are covered by Medicaid, which is surprising given the lower rate of poverty in this population.

In this population, over 40% of all adults report caring for a friend or family member over the age of 60. Of older adults, only 7.8% report receiving formal care in their homes. More than half of older adults report informal help with ADLs and 47% report informal help with IADLs. In this population, however, rates of IADL limitations are low, while rates of ADL limitations are high.

Community Input

Input from community leaders and members of the local communities were additionally accounted for. Input was obtained from offices of government officials, representatives of community based organizations, clergy, and leaders in community development. Despite differences in overall health of each community, much of the community input remains the same across campus areas. Common themes include concerns regarding diabetes, hypertension, obesity, and nutrition; lack of access to care due to lack of knowledge and financial concerns; and a need to focus on education, awareness, and access to care.

Pennsylvania Representative and PhillyRising coordinator, Manny Citron, identified obesity/nutrition, diabetes, and hypertension as major health concerns that he sees in the community, with major barriers including information and access. He added that he believes a focus on education and awareness, access, and preventive care would be most impactful on health improvement. Eric Stark, CEO of the Lower Bucks Family YMCA, agreed that obesity and nutrition were two of the major health issues facing the community and that awareness through education should be the focus of efforts to improve these conditions. Another issue identified Mr. Stark, as well as Katie Wise, an Health Legal Assistant to Pennsylvania Representative Michael Fitzpatrick and Reverend Shepherd of Campbell AME church in Frankford, is cost of care and lack of insurance coverage. The growing number of uninsured, as well as rising costs, are substantial barriers to care, especially preventive care. Reverend Shepherd also

identified stigma, perception of quality of care, and fear of hospitals to be additional barriers. He suggests getting involved in the community, through various means, to increase comfort among community members with the hospital and the healthcare system.

Discussion

Over the next decade, the Healthy People 2020 initiative will use four foundation health measures to monitor progress toward health promotion. These measures include general health status, health related quality of life, determinants of health, and health disparities[6]. With the goal of improving the health of our community, it is imperative to look to these four factors to guide initiative development.

General Health Status

General health status is a measure comprised of a variety of factors which can provide information on the overall health of a community[7]. This assessment explored general health status through self-reported measures of health, disease status, and rates of disability and limitations.

Self-report is an important measure of health, as it relates to an individual's perception of his or her health. Studies have made correlations between self-rated health status and mortality, where those who rated their health as "fair" or "poor" were at higher risk[8]. As mortality is an indicator of health of a given population, self-rated health can also be used as an indicator of population health. It can be seen in this assessment that, in areas where individuals report better health, there are lower rates of morbidity. As all six service areas have high rates of hypertension and significant rates of diabetes, it can be assumed that the health status of the overall population is decreased.

Based on this measure, the general health status overall varies between service areas. The areas which fall completely within Philadelphia County (the Frankford Campus service areas) have the lowest general health status. The service areas which fall completely within Bucks County (the Bucks Campus service areas) have the best general health status. The Torresdale Campus service areas, which straddle the two counties, have a level health status that is between those of the two counties.

Health Related Quality of Life

Health related quality of life, which focuses on the impact of health status on quality of life, measures well-being through objective health measures and perception of personal health[7]. Objective appraisals can be measured as an individual's functional status or actual health status; while subjective appraisals account for an individual's perception of the health and the impact of functional status on their quality of life[10, 11]. Subjective appraisal of one's health has stronger impact on determining quality of life, as the subjective appraisals of one's health, and thus health related quality of life, are most closely related to one's experienced quality of life[11].

In this assessment, though quality of life was not measured per se, it can also be estimated based on other health indicators, such as self-reported health status, morbidity rates, and disabilities and limitations. Self-reported health status measures the perception of one's health and, thus, subjective appraisals of health. Morbidities and disabilities can be used to measure the objective status of one's health. This said, and given that perception is the key to quality of life, it can be assumed that in areas where health status is rated highly, such as Bucks and Torresdale Campus areas, quality of life measures would also be more positive; while in the Frankford Campus areas, where health is rated more poorly, quality of life would also be decreased.

Determinants of Health

Determinants of health are formed from a broad array of factors, such as social factors, access to health services, and health behaviors[7]. Social determinants of health are comprised of the social and physical environments in which people live, learn, play, work, and age[7]. In this analysis, many social determinants of health, including social support and social interactions, socioeconomic conditions, employment, and education were explored. It has been found that Individuals who are more socially isolated are at increased risk for poor health outcomes, including mortality[12]. For example, studies have linked high social distrust with poorer self-reported health status. Social capital, or the connections between social networks, has been found to be an important factor in the maintenance of public health[11]. Social capital can be broken into two main components, the structural component, which includes associational links to a society, and the cognitive component, which includes people's perceptions of inter-personal trust, sharing, and reciprocity[13]. In this assessment, variables such as feeling a sense of belonging in one's neighborhood, trust among neighbors, willingness to help among neighbors, and working together to improve the community, can be used to rate social capital among the communities explored. Additionally, social capital has been found to impact access to healthcare, which is another factor which plays a large part in overall health status[14]. From the data, we can see that areas of lower social capital, such as the Frankford Service Areas, also have poorer health status, and vice versa.

Access to health services is another important determinant of health, as access to care when sick as well as access to preventive care, have large impacts on overall health. In this assessment, the majority of people report having a source of primary care and seeking primary care from a physician's office. Evidence shows that primary care, as the first point of contact with the health system, facilitates entry into the rest of the health care system and that access to care issues are diminished when the initial point of care is a primary care source[15]. However, those without health insurance coverage are less likely to have a primary source of care, as are minorities[15]. Thus, these population subgroups are more likely to have poorer access to the healthcare system. As the populations in this assessment have significant rates of un-insurance and high rates of poverty, there is likely a lack of healthcare among parts of the population, which can also lead to under-diagnosis of health conditions and, thus, better perceptions of health status with higher negative outcomes, as seen in this assessment.

Health behaviors also have a direct impact on overall health status. As related to this assessment, overall rates of smoking and overweight or obesity are high, while rates of regular physical activity are relatively low. In exploring the factors of smoking and physical activity in relation to health status and deterioration in health, studies have found that non-smoking and physically active participants had overall better health and delay in deterioration of health when compared with smokers and those who were not physically active[16]. In another study, obesity was found to be an even stronger factor affecting physical health when compared to smoking or other health behaviors[17]. Given this information, it is likely that reduced rates of positive health and increased morbidity are associated with the high rates of smoking and obesity and low rates of physical activity in the explored service areas.

Health Disparities

Health disparities are measured as health outcomes seen in greater or lesser extent among populations[7]. Socioeconomic status is one of the most common causes of disparities in health, in addition to race and gender. Socioeconomic status, as often measured by income and education, is associated with higher prevalence of risk behaviors and increase in mortality risk[18]. The high levels of poverty and low educational attainment exhibited in some of these service areas are likely associated with increased disparities and thus poorer health status and outcomes. This impacts most heavily the service areas with higher educational attainment and lower poverty rates, and fewer disparities, as they generally have better rated health statuses. This also holds for racial diversity, as minority populations also exhibit poorer health status. Areas such as the Frankford Campus service areas, have higher rates of racial diversity and thus a greater minority population when compared to Torresdale or Bucks Campus service areas, where the same relationship between health status and disparity can be found in relation to race as to socioeconomic status.

Prioritization

Given Aria Health's strengths and the outcomes of this needs assessment, interventions are recommended for diabetes, hypertension, weight management, preventive screening, and older adult services. These four areas have been prioritized based on community need, relation to strategic plans, availability of resources, and potential impact. In addition, some of those which are not prioritized may benefit from those needs that are prioritized or by ancillary programs which are already offered by the health system, such as smoking cessation and caregiver support programs, and access to primary care. Other areas of interest were not prioritized at this time, including social capital and insurance, as they do not coincide with available resources and/or do not have a potential for large overall impact.

	Community Need	Strategic Plan	Resource Availability	Impact Potential
Health Status Variables				
Diabetes	Yes	Yes	Yes	High
Hypertension	Yes	Yes	Yes	High
Obesity/Overweight	Yes	Yes	Yes	High
Preventive Screenings	Yes	Yes	Yes	High
Access Variables				
Insurance	Yes	No	No	High
Access to Primary Care	Yes	Yes	Yes	Yes
Health Behaviors				
Smoking	Yes	Yes	Yes	High
Exercise	Yes	No	Yes	High
Social Capital	Yes	No	No	Unknown
Older Adults				
Access to support services	Yes	No	Limited	Moderate
Caregiver support	Yes	No	Yes	High

For issues identified that can not be met by Aria Health, there are other community organizations and resources available to ameliorate these issues. Organizations such as the Bucks County Health Improvement Partnership (BCHIP) and Health Partners make available care to the uninsured. Other organizations, like the Frankford Community Development Corporation and PhillyRising, work to build social capital and healthy lifestyles in the community. Aria Health continues to work collaboratively with these agencies in the local communities.

Recommendations

We can work to improve general health status and health related quality of life in these areas by eliminating barriers, targeting poor health behaviors, and reducing disparities. Though it is not within our scope to change barriers such as lack of insurance or financial hardship, we can affect change through education and availability of health services.

Education in this realm can be used to target many of the barriers to healthy lifestyles. These barriers can be eliminated through educational programming which is made available to the public and also targets those populations which experience high barriers and increased disparities.

Recommendations for educational and support interventions include:

- As diabetes has become a major healthcare concern, both in the US and locally, diabetes education is an important step in reducing mortality among the growing diabetic population. In this setting, diabetes education programs should include at least three features: nutrition, physical activity, and treatment management. Treatment management should include overall

chronic disease management as well as how to manage diabetes specifically. Additionally, resources, both internal and external, should be made known and available.

- The large numbers of people with hypertension in the community, along with the growing rate nationally, necessitates heart health education. These education programs should include nutrition, physical activity, and treatment management around healthy lifestyles in regards to maintaining heart health. Available resources both within Aria and in the community should be made available.

- Obesity rates have been rising quickly and high rates of obesity are found in these populations. Obesity and weight loss education are important to reducing obesity and promoting healthy lifestyles. Obesity education should include not just physical activity and nutrition, but also the science behind weight gain/loss and appropriate methods to lose and maintain weight.

- Older adults in these communities could benefit greatly from support services and local resources. Educational programs in local senior centers as well as community- and hospital-based programs would be a great asset. Additionally, informative campaigns or programs around community resources such as food programs, transportation services, and aging support could improve health and self-sufficiency of older adults in the community. Support services can also aid caregivers of older adults, as many people in the community provide support for someone over the age of 60.

- Support groups can be an important tool in increasing quality of life by improving outlook and perception of health and through community building. They can also be a forum for education and dissemination of resources. Support groups tailored to diabetes, hypertension and heart health, weight loss, smoking cessation, and caregiver support could be a great asset to the community.

- Preventive Screenings are an important tool in maintaining good health. Early detection of disease can lead to better outcomes for the patient, which increases the overall health of the community. Making screenings available and easily accessible is necessary for health improvement and maintenance. Access to information and resources is also important in promoting awareness of disease risk and methods of prevention.

Accessibility of health services is an important factor in maintaining health. As noted earlier, those who have a primary care provider have easier and better access to the healthcare system. For the many people who do not have a regular source of care, particularly those who do not have a primary care provider, entry into and utilization of the healthcare system can be major barriers. Knowledge of healthcare resources and availability is also a barrier to obtaining care. These barriers can be improved through increasing and promoting the availability of health-related resources.

Barriers to healthcare can be improved through interventions such as:

- Promoting resources available, both from Aria Health and within the community, is important to building programmatic implementation plans as described above. Partnerships with local community groups and organizations will help to promote activities and services of all involved institutions. These steps are important to community building efforts as well as dissemination of information regarding health and health behaviors as well as linking the community to available resources.

- Health promotion fairs are also a way of promoting resources and engaging the community. Health fairs can involve health screenings, educational information and demonstrations, opportunities to involve community groups and organizations and promotion of resources. Health fairs could be "themed", such as men's health, women's health, healthy heart, diabetes, nutrition, and a general "healthy you" fair.

- Preventive health screenings can be conducted in a variety of settings, including health fairs and as stand-alone events. Screening should involve more than just diagnostics, but should also involve education around appropriate conditions and should make appropriate resources available.

In order to achieve these interventions, it is necessary to work in accordance with other community organizations and members. In addition to internal resources, Aria Health has established relationships with:

- St Anne's Senior Center
- Northeast Senior Center
- Campbell AME Church
- Bristol Township Senior Center
- Mayfair Community Center
- PhillyRising
- Lower Bucks Community "Y"
- Bucks County Health Improvement Partnership

Implementation Plan

Implementation of community benefit activities necessitates development of a comprehensive implementation strategy. For each priority area, community need and target populations were identified, and goals and interventions were developed.

Target Populations:

Diabetes	Adults with or at risk for Type 2 Diabetes
Hypertension	Adults with high blood pressure and/or hypertension in the community
Obesity	Adults who are overweight or obese in the community
Older Adult Services	Older adults in the community
Support Groups	Adults in the community who are affected by topics relevant to the offered support groups (ie. Caregivers, smokers, diabetics, etc).
Preventive Screening	Adults in the community who fit current guidelines for screening

Interventions:

<table>
<tr><th></th><th>Year 1</th><th>Year 2</th><th>Year 3</th></tr>
<tr><td rowspan="2">Diabetes</td><td colspan="3">Partner with local organizations to implement a community-based DSME series for those with or at risk for Type 2 diabetes and their families</td></tr>
<tr><td colspan="3">Continue to offer free diabetes support groups</td></tr>
<tr><td rowspan="3">Hypertension</td><td colspan="3">Continue to offer weekly free blood pressure screenings</td></tr>
<tr><td></td><td colspan="2">Partner with local organizations to implement a community-based hypertension education program</td></tr>
<tr><td></td><td colspan="2">Partner with local physicians/clinics to help identify and treat community members with hypertension who would otherwise not receive care</td></tr>
<tr><td>Obesity</td><td></td><td></td><td>Partner with local community organizations to develop and implement a community-based weight management program</td></tr>
<tr><td rowspan="2">Older Adult Services</td><td colspan="3">Continue to offer free caregiver support groups</td></tr>
<tr><td></td><td colspan="2">Continue and develop relationships with local organizations for older adults to offer educational series and programs relevant to the needs of older adults in the community</td></tr>
<tr><td rowspan="3">Support Groups</td><td colspan="3">Continue and promote current caregiver support groups as established</td></tr>
<tr><td colspan="3">Continue and promote current smoking cessation support groups as established</td></tr>
<tr><td colspan="3">Continue and promote diabetes support groups as established</td></tr>
<tr><td rowspan="2">Preventive Screening</td><td colspan="3">Continue preventive screening efforts as established</td></tr>
<tr><td></td><td colspan="2">Develop additional screening services which are accessible by the community</td></tr>
</table>

Development of these programs and activities will be coordinated by specialized program development committees, consisting of members from strategic planning, specialists in the field, and outreach committee members. Programs will then be adapted to subpopulations and implemented in the community by outreach committee members from each hospital campus. Evaluation information will be collected and measured at the time of the program and follow-up needs assessments will be conducted to measure impact on the community as a whole.

The areas which were not prioritized due to lack of resources, such as insurance and social capital, can still be impacted by the services which were prioritized and which implementation plans have been developed. For example, holding programs and services at area community locations can help build relationships between residents of those areas served, thus increasing social contact and social capital. Additionally, for the uninsured, Aria Health will still provide healthcare services and free health screenings and education, though would be unable to provide insurance per se. This can have an impact on the health of this population, even if it does not completely ameliorate the issue of uninsurance.

Goals:

Category	Goals
Diabetes	Increase awareness of diabetes risk among members of the community
	Increase access to diabetes education
	Increase the % of DSME participants who are able to better control their diabetes
Hypertension	Increase awareness of hypertension among members of the community
	Increase the % of people who are screened for hypertension
	Increase awareness of the risks of hypertension
	Increase the % of people with hypertension who receive follow-up care
Obesity	Increase awareness of obesity as an issue in the community
	Increase BMI screening in the community
	Increase the % of weight loss program participants who are able to sustain weight loss
Older Adult Services	Increase awareness of services available to older adults
	Increase access and utilization of services available to older adults
	Decrease fall risk among older adults in the community
	Increase caretaker's awareness of resources available
Support Groups	Increase access to support for community members with certain problems or conditions (ie. diabetes, hypertension, smoking, etc.)
Preventive Screening	Increase awareness of available screening programs
	Increase the % of adults in the community who receive appropriate screenings based on current guidelines

Conclusion

The populations in these areas are in need of health improvement. While these interventions are recommended for all service areas, special focus should also be given based on unique population needs. With appropriate interventions, health status, access, and disparities can be improved. Key to making these improvements are appropriate interventions focusing on improving health status, health behaviors, access to care, and disparities in the populations. These factors will work together to increase quality of life and the overall population's general health status.

Limitations

This assessment is heavily reliant on the use of secondary data, where the use of primary data would allow for more specific and targeted information collection. Further information should be obtained on the health, health needs, and insight into the communities within the defined service areas in order to institute appropriate intervention measures and follow-up assessments should be conducted following programmatic implementation.

Sources

1. Quensenberry, Preston. Notice and Request for Comments Regarding the Community Health Needs Assessment Requirements for Tax-exempt Hospitals, Notice 2011-52. IRS.gov. 2011. Available at http://www.irs.gov/pub/irs-drop/n-11-52.pdf. Accessed 15 July 2011.

2. Public Health Management Corporation's Community Health Data Base (2010) Southeastern Pennsylvania Household Health Survey.

3. 2000 U.S. Census. Provided by Claritas, Inc., and prepared by Public Health Management Corporation's Community Health Data Base.

4. PA Department of Health and The Philadelphia Department of Public Health, 1997-2000. Prepared by Public Health Management Corporation's Community Health Data Base.

5. Centers for Disease Control and Prevention (CDC). *Behavioral Risk Factor Surveillance System Survey Data*. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, [2010].

6. U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. Healthy People 2020. Topics and Objectives Index. Available at: http://www.healthypeople.gov/2020/topicsobjectives2020/objectiveslist.aspx?topicId=29. Accessed June 18, 2011.

7. U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. Healthy People 2020. Foundation Health Measures. Available at: http://www.healthypeople.gov/2020/about/tracking.aspx. Accessed August 16, 2011.

8. De Salvo, KB, Bloser, N, Reynolds R, et al. Mortality Prediction with a Single General Self-Rated Health Question. Journal of General Internal Medicine. (2005) 20:267-275.

9. Robine, JM, Ritchie, K. Healthy Life Expectancy: Evaluation of Global Indicator of Change in Population Health. British Medical Journal. (1991)302:457-460.

10. Muldoon, MF, Barger SD, Flory JD, et al. What are quality of life measures measuring? British Medical Journal. (1998)316:542.

11. Testa, MA, Simonson DC. Assessment of Quality-of-Life Outcomes. New England Journal of Medicine. (1996)334:85-840.

12. Kawachi, I, Kennedy, BP, Glass R. Social Capital and Self-Rated Health: A contextual analysis. American Journal of Public Health. (1999)89:1187-1193.

13. Subramanian, SV, Kawachi, I. Social Trust and Self-Rated Health in US Communities: A multilevel analysis. Journal of Urban Health. (2002)79(4)suppl. 1:521-534

14. Hendryx, MS, Ahern, MM, Lovrich, NP, et al. Access to Health Care and Community Social Capital. Health Services Research. (2002)37(1):85-100.

15. Starfield, B, Shi, L, Macinko J. Contribution of Primary Care to Health Systems and Health. Milbank Quarterly. (2005)83(3):457-502.

16. Haverman-Nies, A, de Groot, L, Stavern WA. Relation of Dietary Quality, Physical Activity, and Smoking Habits to 10-Year Changes in Health Status in Older Europeans in the SENECA Study. American Journal of Public Health. (2003)93(2):318-323.

17. Sturm, R, Wells, KB. Does Obesity Contribute as Much to Morbidity as Poverty or Smoking? Public Health. (2001)115:229-235.

18. Lantz, PM, House, JS, Lepkowski JM, et al. Socioeconomic Factors, Health Behaviors, and Mortality. Journal of the American Medical Association. (1998)279(21):1703-1708.

Appendix A. Service Area Comparison Figures.

Figure 1. Comparison of Poverty, Education, and Unemployment Status by Service Area. (%)

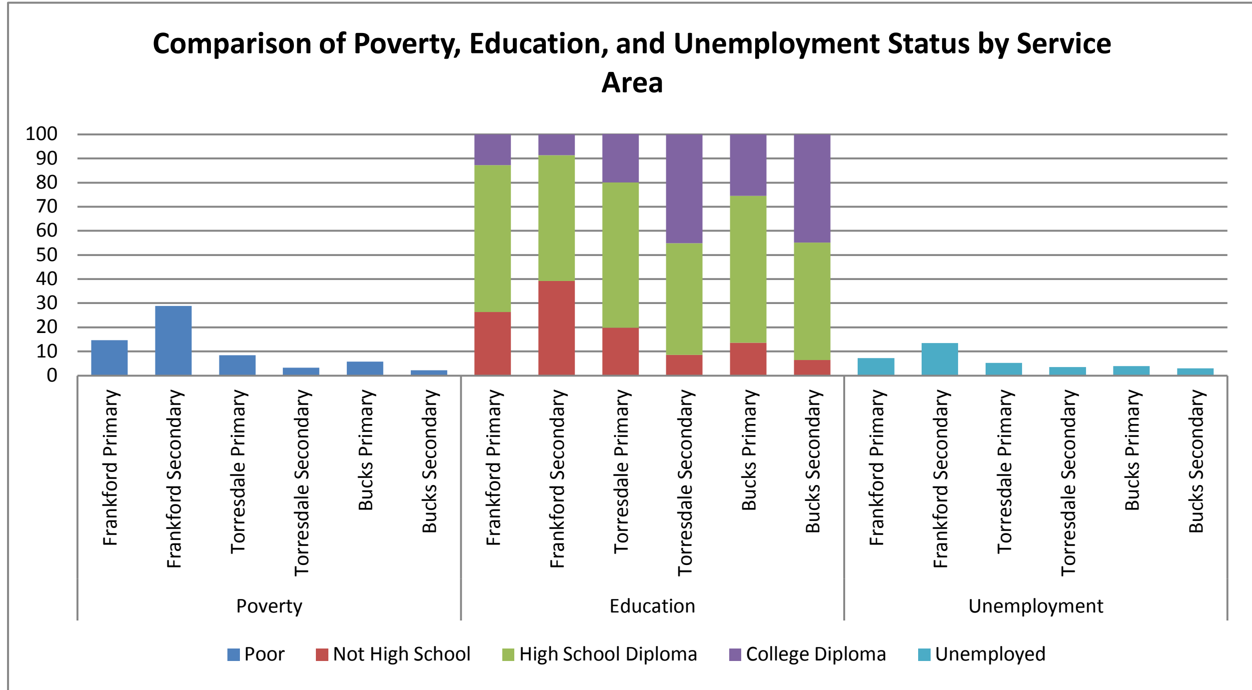

Figure 2. Comparison of Health Variables by Service Area. (%)

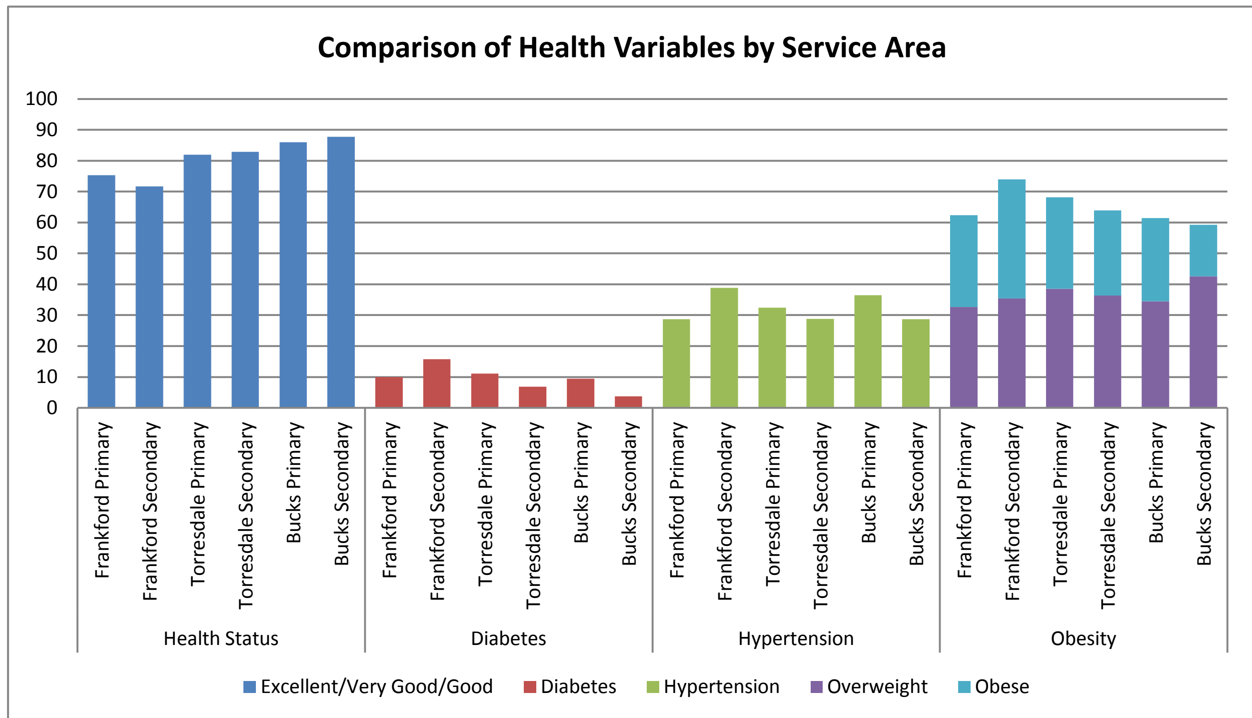

Figure 3. Comparison of Preventive Screening Rates by Service Area. (%)

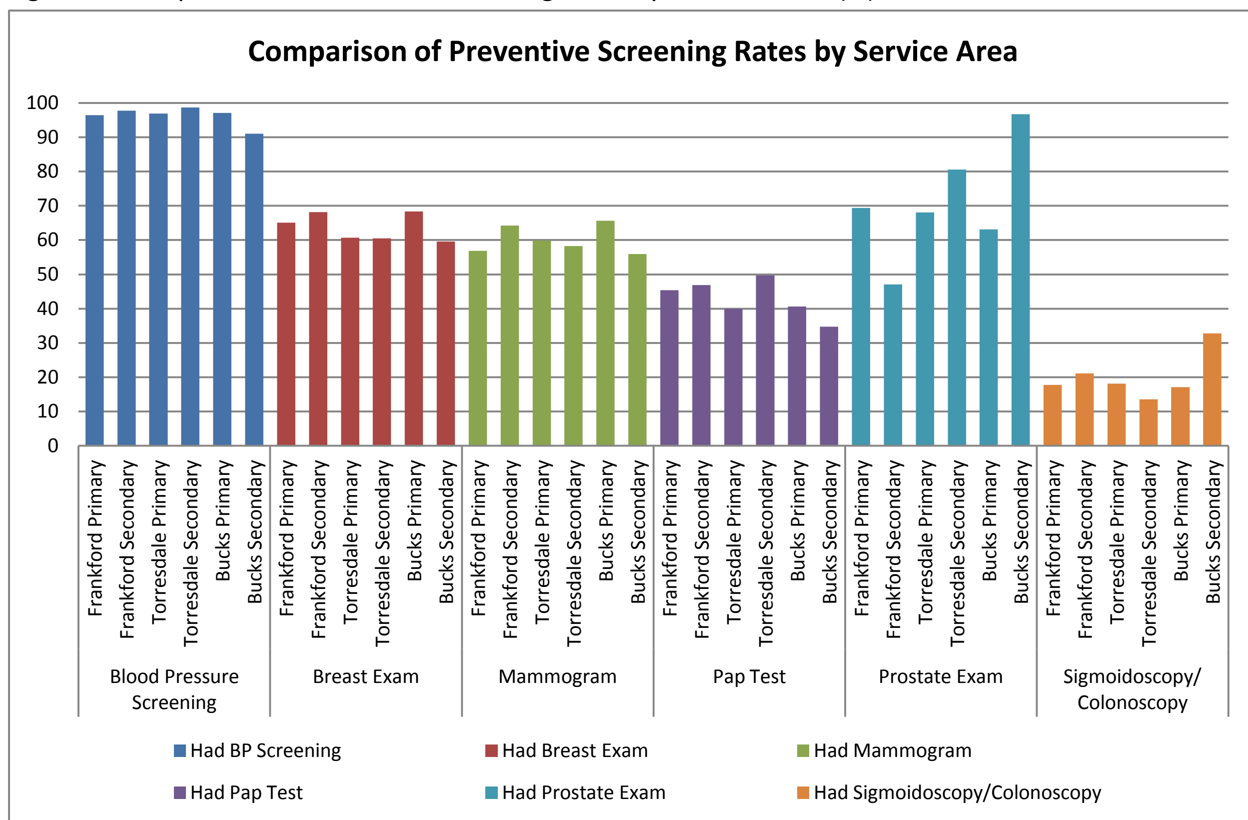

Figure 4. Feelings of Social Connectivity by Service Area. (%)

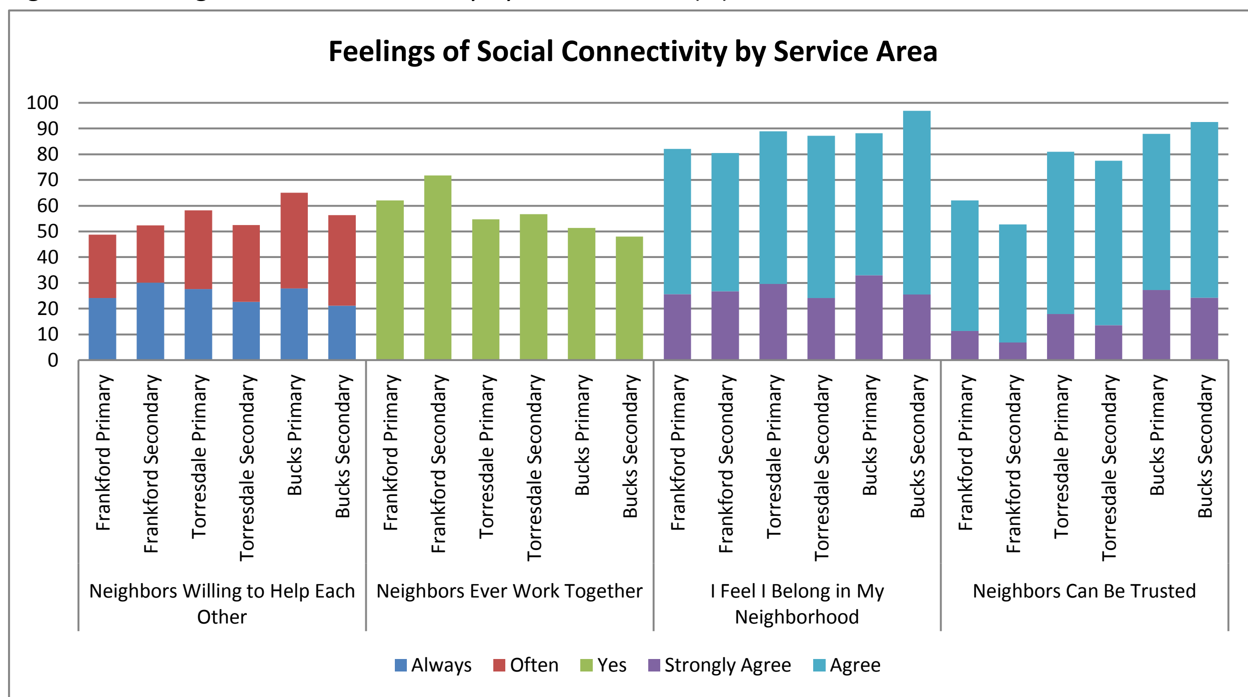

Figure 5. Comparison of ADL/IADL Limitations Among Older Adults by Service Area. (%)