



2019-2021

ST. MARY MEDICAL CENTER &  
ST. MARY REHABILITATION HOSPITAL

COMMUNITY HEALTH NEEDS ASSESSMENT

# St. Mary Medical Center

## Community Health Needs Assessment

### At-A-Glance 2019

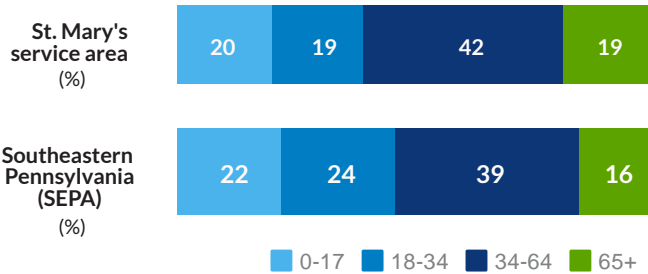
## THE COMMUNITY WE SERVE

### POPULATION SIZE

St. Mary's service area population size is 414,400.

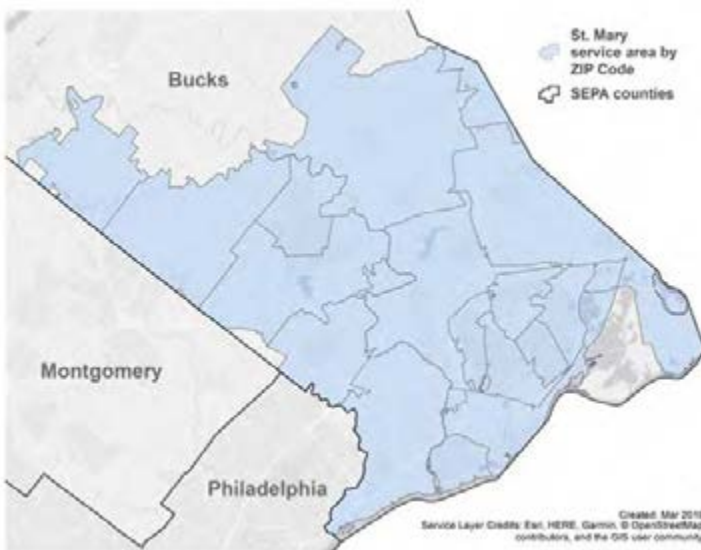
- The 65+ age group is estimated to increase 13% between 2018-2023
- The child population (age 0-17 years) is predicted to decrease 6% between 2018-2023

### AGE DISTRIBUTION



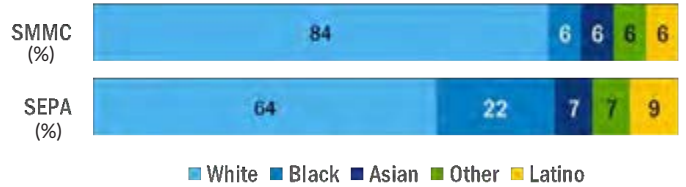
### ST. MARY SERVICE AREA MAP INCLUDING ZIP CODE

The St. Mary service area encompasses the southern half of Bucks County in Southeastern Pennsylvania.



### RACE / ETHNICITY

84% of St. Mary service area residents are white.



### POVERTY STATUS

One in 14 families with children (7%) in the SMMC service area are living in poverty compared to 16% of families with children across SEPA.



### ADDITIONAL SOCIO-DEMOGRAPHIC CHARACTERISTICS

Education	SMMC	SEPA whole
Less than HS	7%	11%
High school graduate	57%	52%
College graduate	36%	37%
Employment (16+ years old)	SMMC	SEPA whole
Employed	94%	92%
Income	SMMC	SEPA whole
Median Household Income	\$87,960	\$70,807
Housing Unit Type	SMMC	SEPA whole
Renter-occupied	25%	34%
Owner-occupied	75%	66%

Source: PHMC's 2018 Demographic Product with primary data sources: 2012-2016 mortality data from PA Department of Health, Bureau of Health Statistics and Registries, Claritas 2018 Pop-Facts Data Base.

# St. Mary Health Service Area Community Health Needs Assessment At-A-Glance 2019

## KEY HEALTH FINDINGS

695 residents responded to the 2018 SEPA HHS in the St. Mary service area.

### HEALTH STATUS



- 83% report "good" to "excellent" health

### ADULT HEALTH BEHAVIORS



- 32% of residents 18+ are overweight
- 37% of residents 18+ are obese (30% in SEPA)
- 50% exercise fewer than 3 days a week



- 18% smoke cigarettes (16% in SEPA) 50% of smokers tried to quit in the past year

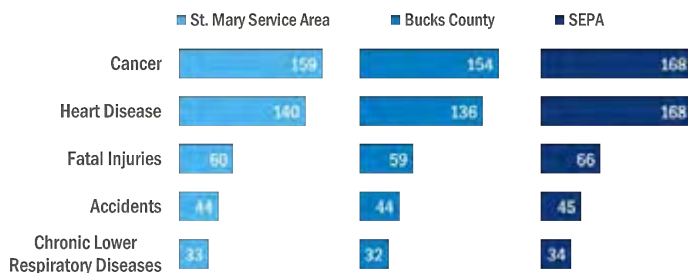


- 17% of SMMC area residents have been diagnosed with a mental health condition, and 60% of those diagnosed are receiving treatment

### LEADING CAUSES OF DEATH IN THE ST. MARY SERVICE AREA, 2012-2016\*\*

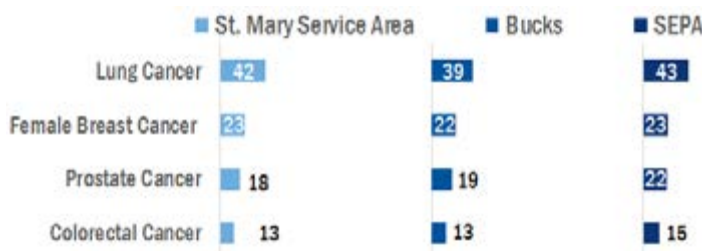
The overall mortality rate in the service area is 689 deaths per 100,000 population, representing 3,916 deaths.

St. Mary service area's mortality rates exceed Bucks County, but remain lower than in SEPA.



### CANCER MORTALITY RATES, 2012-2016

SMMC's service area's cancer mortality rates were comparable to Bucks County and the SEPA region from 2012-2016. Lung cancer mortality rates were highest.



### DRUG OVERDOSE MORTALITY RATES, 2012-2016

The drug overdose mortality rate in the service area is 27 deaths per 100,000 population, representing 106 deaths per year.

St. Mary service area's overdose mortality rate exceeds that of Bucks County (25 per 100,000) and SEPA (26 per 100,000).

## ST. MARY SERVICE AREA AND SEPA: SELECT HEALTH INDICATORS\*

St. Mary service area is performing better along a number of health indicators when compared to the remainder of SEPA region:

- 8% of adults did not seek health care due to cost when sick or injured in the past year in the **St. Mary service area** (vs 11% in remainder of SEPA region)
- 42% of men 45+ have not had a prostate exam within the past year (vs 50% in remainder of SEPA region)
- 24% of adults have visited the ER in the past year (vs 28% in remainder of SEPA region)

The remainder SEPA region is performing better along a number of health indicators when compared to St. Mary service area:

- 69% of adults are currently overweight/obese in the **St. Mary service area** (vs 64% in remainder of SEPA region)
- 10% of adults have not had a blood pressure reading within the past year (vs 7% in remainder of SEPA region)
- 32% of adults 50+ have NOT had a sigmoid colonoscopy within the past 10 years (vs 26% in remainder of SEPA region)
- 25% of women age 18+ have NOT had a pap test within the past 3 years (vs 17% in remainder of SEPA region)

Notes: Age-adjusted mortality rates are calculated per 100,000 population utilizing the Standard 2000 U.S. population distribution.

Sources: \*PHMC's 2018 Southeastern Pennsylvania Household Health Survey; \*\*2018 CHDB Demographic Product with primary data sources: 2012-2016 mortality data from PA Department of Health, Bureau of Health Statistics and Registries, Claritas 2018 Pop-Facts Data Base. These data were provided by the Pennsylvania Department of Health. The Department specifically disclaims responsibility for any analyses, interpretations, or conclusions.



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# EXECUTIVE SUMMARY

## COMMUNITY DEFINITION

This report presents the findings from the St. Mary Medical Center and the St. Mary Rehabilitation Hospital Community Health Needs Assessment (CHNA) for 2019-2021. St. Mary conducted this CHNA to inform population health and social services planning across the communities it serves, as well as to satisfy the requirements for non-profit hospitals via the Affordable Care Act (ACA). St. Mary is part of Trinity Health, a not-for-profit health system striving to deliver people-centered care with compassion and quality.

St. Mary is a 371-bed hospital providing care to generations of families in Bucks County and nearby communities. St. Mary offers advanced non-invasive treatments, adult and pediatric emergency services, inpatient medical and rehabilitation facilities, along with supportive health and wellness programs. St. Mary provides advanced care across four primary Centers of Excellence – Cardiology, Oncology, Orthopedics, and Emergency and Trauma Services.

St. Mary Rehabilitation Hospital is a free-standing 50 bed inpatient rehabilitation facility which offers highly specialized and comprehensive care to patients facing the challenges of recovering from complex illness or injury. The state-of-the-art hospital opened in spring 2014 in partnership with Center Healthcare Corporation (St. Mary Medical Center joint venture 59%).

In addition to its acute care and rehabilitation hospitals, St. Mary includes St. Mary Physician Group, Wound Healing Center, Outpatient Rehabilitation Services, St. Mary LIFE [All-inclusive Care for the Elderly (PACE)], and various imaging and multi-specialty medical offices.

The St. Mary service area population size is 414,400 residents in the southern end of Bucks County. The community (2015 Pop 414,400) for purposes of this needs assessment was defined as the ZIP codes where 88% of St. Mary emergency department and inpatient admissions derive.

# EXECUTIVE SUMMARY

## COMMUNITY HEALTH PRIORITY NEEDS

These assessments create an opportunity for hospitals to have the information they need to develop community benefit programs and services for communities they serve. These community benefit programs and services are aimed at improving community health through direct investments in wellness and prevention both at the individual and community levels, and places population health as a key component in improving the quality and efficiency of health care.

This CHNA report identified unique areas and opportunities where St. Mary Medical Center and St. Mary Rehabilitation Hospital can develop implementation strategies and focus efforts to maintain and elevate its area residents' health status collectively, including:

- Access to mental health care\*
- Access to substance abuse treatment\*
- Access to care for the uninsured, especially those living in poverty\*
- Coronary heart disease
- Education and awareness for lung cancer screening
- Access to prenatal care services
- Education and awareness of women's health screenings - mammogram
- Congestive heart failure
- Nutrition education older adults
- Smoking cessation education for expectant mothers
- Access to blood pressure screenings
- Chronic lower respiratory disease
- Access to dental care for adults and children
- Education and awareness for sig/colonoscopy screening
- Education and awareness for women's health – pap test screening

\*This CHNA report focuses on access to the top three identified priorities broadly defined as access to: mental health care, substance abuse treatment, and care for the uninsured and those living in poverty.

St. Mary and Public Health Management Corporation (PHMC) convened internal and external stakeholders to evaluate and prioritize the unmet health and social influencers of health needs for the service area. The information from this needs assessment will be used by St. Mary Medical Center and St. Mary Rehabilitation Hospital to develop a community health implementation plan.



# ST. MARY MISSION AND VISION

## MISSION

We, St. Mary Medical Center and Trinity Health, serve together in the spirit of the Gospel as a compassionate and transforming healing presence within our communities. As a community of caring people, we are committed to extending and strengthening the healing ministry of Jesus.

## GOVERNING BOARD REVIEW

These findings were reviewed by St. Mary Medical Center Board of Trustees and St. Mary Rehabilitation Hospital Board of Directors and **adopted on May 21, 2019**. With this information, St. Mary will develop community benefit programs and services to address the top three prioritized health and social influencers of health needs that are within our area of expertise as well as our mission to serve the vulnerable and underserved in our area.

## COMMUNICATION

For further information on how St. Mary Medical Center and St. Mary Rehabilitation Hospital will address unmet health and social influencers of health needs, we invite you to review our Community Health Improvement Plan this fall at: [www.stmaryhealthcare.org/communityhealth](http://www.stmaryhealthcare.org/communityhealth)

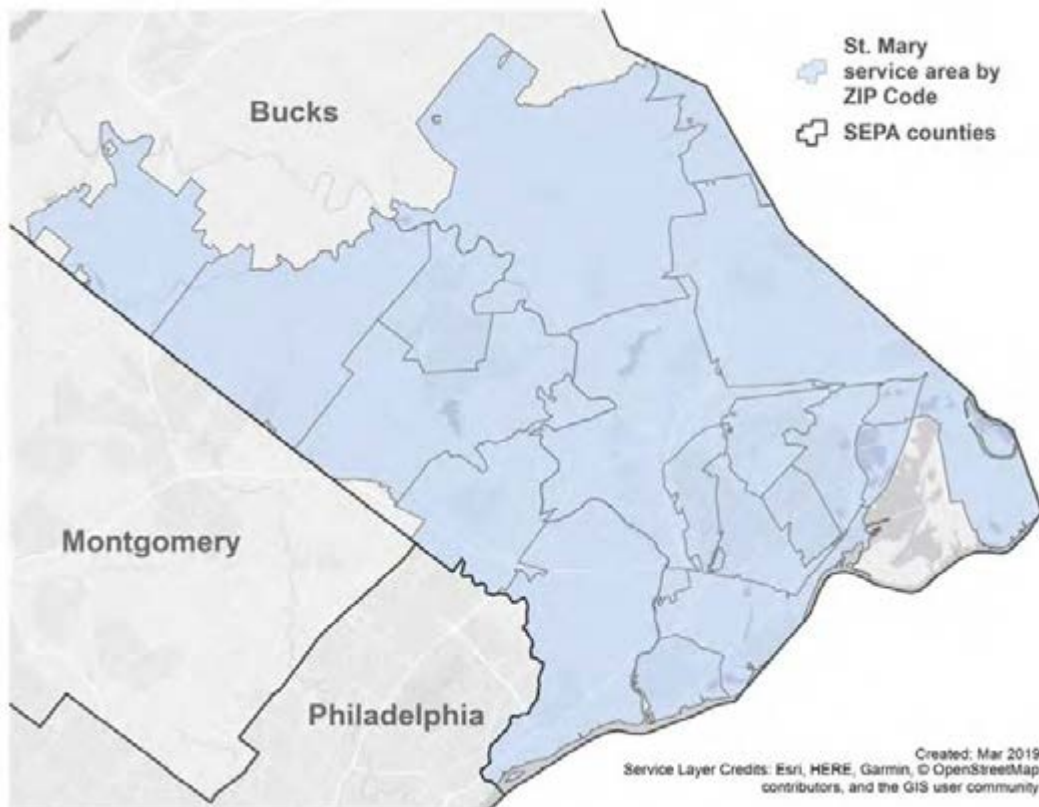
Written comments and feedback on this CHNA can be sent to Lisa Kelly, RN, MBA at [lkelly3@stmaryhealthcare.org](mailto:lkelly3@stmaryhealthcare.org)



# INTRODUCTION

St. Mary regularly maintains and develops strong community-based partnerships and is highly committed to the communities it serves. Additional information about St. Mary and its services is available at <https://www.stmaryhealthcare.org/>

As mentioned, the St. Mary service area population size is 414,400 residents, based on 2018 population estimates derived from Claritas Pop Facts Database. For this CHNA report, the SMMC and SMRH service area, also referred to as the St. Mary community, includes 17 ZIP codes in Bucks County: 18940, 18954, 18966, 18974, 18976, 18977, 19007, 19020, 19021, 19030, 19047, 19053, 19054, 19055, 19056, 19057, and 19067- illustrated in the service area map below. This represents 88% of St. MaryED visits and admissions.



## Key Demographic Facts

- St. Mary has 51% females (n = 211,758) and 49% males (n = 202,642)
- St. Mary area residents identify their race as: 84% white, 6% black, 6% Asian and 5% other while 6% identify as Latino ethnicity.
- The median household income is \$87,960

## METHODOLOGY & DATA SOURCES

This CHNA was completed using a data- and partnership-driven approach to inform its development. As part of this process, St. Mary contracted with Public Health Management Corporation's (PHMC) Research & Evaluation Group (REG), to collect and analyze data, as well as engage the community residents, key stakeholders, and constituents serving the community (PHMC qualifications in Appendix D).

This CHNA incorporates broad measures related to health and well-being, a combination of evidence-based sources, methods and approaches, including:

- Administering the **2018 Southeastern Pennsylvania Household Health Survey (SEPA HHS)** to 695 adult residents (including 314 65+ years old adults) in the St. Mary service area, then analyzing and comparing the results with the remainder SEPA region (N = 6,735, including 2,773 65+ year old adults)
- Comparing to national **Healthy People 2020 (HP 2020) targets** (national benchmark data) using the **vital statistics** data from the Pennsylvania Department of Health<sup>1</sup>
- **2018 United States Census data estimates provided by Claritas Pop-Facts® Premier** identifying state level demographic indicators (such as race, income, employment status) and corresponding maps to inform geographical relationships and demographic determinants thought to disproportionately impact certain communities
- **Community Needs Index scores**, calculated from 2018 Claritas census estimates, used by Catholic Health Ministries to describe social and economic barriers to the health care system
- **County Health Rankings**, a Robert Wood Johnson Foundation program, for Bucks County
- **2018 Claritas Market Prevalence** by disease category as provided by St. Mary
- Conducting a **community meeting** with stakeholders, community members, and partner organizations

Data sources and more detail on methods can be found in Appendix C.

<sup>1</sup> Pennsylvania Department of Health, Bureau of Health Statistics and Registries. (2018). 2012-2016 Mortality [Data file]. Calculations by PHMC.

# METHODOLOGY & DATA SOURCES

In addition to the above, as part of the methods for developing this CHNA report, the St. Mary CHNA Steering Committee met to review the combined scores from the provider and external stakeholder surveys in order to further prioritize the unmet health needs that St. Mary has the capacity to address. Members of the Steering Committee included staff from Strategic Planning, Care Management, Community Health & Well-Being local and regional staff, and Population Health Management Team. The Simplex Method was applied during this meeting, which evaluated the following criteria and applied the rating and ranking scales below.

- Severity of health issue
- Magnitude of population affected
- Clear disparities/inequities (e.g., race/ethnicity, geography, gender, etc.)
- Identified by Community/Collaborative group as health issue
- Existing health system capacity to address

RATING SCALE	RANKING SCALE
5 - High impact on population health	3 - Overriding importance
4 - Medium to High impact	2 – Important
3 - Medium impact	1 - Worthy of consideration, but not major factor
2 - Low impact	
1 - Minimal impact on population health	

Results of the Steering Committee identified the following three health needs were priority to address: 1) Access to Mental Health Care, 2) Access to Substance Abuse Treatment, and 3) Access to Care (especially those living in poverty). The scores of the unmet health needs are shown below in Appendix B and the prioritization tables available at the time of the committee meeting are in Appendix G.



# ST. MARY COMMUNITY HEALTH PRIORITY NEEDS

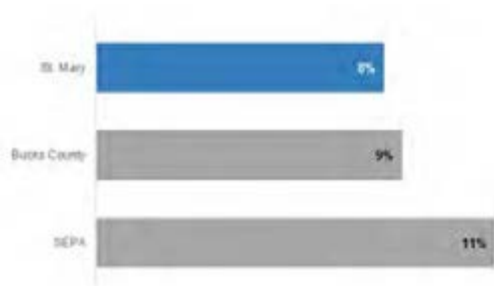
In the following analyses looking more closely at St. Mary community health priority needs, St. Mary service area rates are compared to Bucks County and SEPA (southeastern Pennsylvania, consisting of five counties – Bucks, Chester, Delaware, Montgomery and Philadelphia). Since the HHS is sample based, unlike Census and Vital statistics data, we also conducted statistical significance tests, to compare areas where St. Mary might perform better or worse than the remainder SEPA region. To run such tests, cases cannot be in both the St. Mary service area and the comparison group, so we made comparisons to the portion of SEPA that excluded St. Mary service area. Due to small smaller sample sizes in Bucks County, we did not break the county into St. Mary and non-St. Mary, but compared to all of Bucks County without incorporating statistical significance tests.

## ACCESS TO EQUITABLE HEALTH CARE

Health insurance coverage provides individuals with the ability (i.e., insurance) to access medical care. Without health insurance individuals may face barriers to accessing care. Those with a regular source of health care (e.g., a medical provider to call when they are sick) are typically able to obtain care quicker and easier compared to those without a regular source of care. In addition, when care is sought at a place where the individual has been a regular patient, the care provided can be offered in view of the patient's history (e.g., medical records) and ideally within a relationship with a trusted provider.

In 2018, 8% of St. Mary service area residents ages 18-64 reported not having health insurance coverage. Comparatively, 11% of the remaining portion of SEPA and 9% of Bucks County as a whole reported not having health insurance coverage. Despite having a lower percentage of uninsured adults when compared to SEPA and Bucks County, the St. Mary service area still does not meet the HP 2020 goal of 100% health insurance coverage (i.e., 0% uninsured).

**St. Mary service area has the lowest percent of uninsured adults compared to Bucks County and remainder SEPA.**



When individuals delay or put off obtaining health care and medical prescriptions due to cost it can impact both immediate and long-term health outcomes. Adults in the St. Mary service area were significantly less likely to not seek care due to cost (8%), compared to adults in the remainder of SEPA (11%)<sup>2</sup> region and compared to Bucks County (10%) as well as Pennsylvania (11%).<sup>3</sup> St. Mary service area performed better than SEPA in emergency room utilization; 24% of adults in St. Mary service area visited the ER in the past year compared to 28% of adults in the remainder SEPA region.<sup>4</sup>

<sup>2</sup> The relationship was found to be statistically significant (Pearson chi-square,  $p < .05$ ).

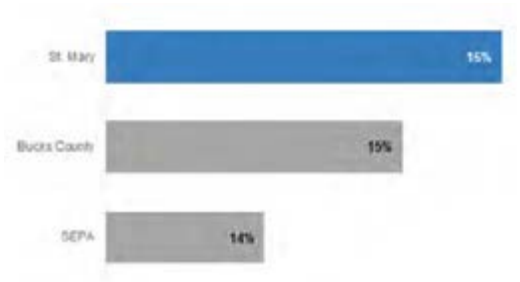
<sup>3</sup> Pennsylvania Department of Health. Health Care Access, Pennsylvania Adults, 2016. <https://www.health.pa.gov/topics/HealthStatistics/BehavioralStatistics/BehavioralRiskPAAAdults/Documents/State%20Report/2016/2016trends.aspx>

<sup>4</sup> Pearson chi square test of significance  $p < .05$

# ST. MARY COMMUNITY HEALTH PRIORITY NEEDS

## REGULAR SOURCE OF HEALTH CARE

Having a usual source of health care is associated with better health outcomes, lower costs, and fewer health disparities. The percent of St. Mary service area adults without a regular source of care (16%) was comparable to the remainder of SEPA (14%).<sup>5</sup>



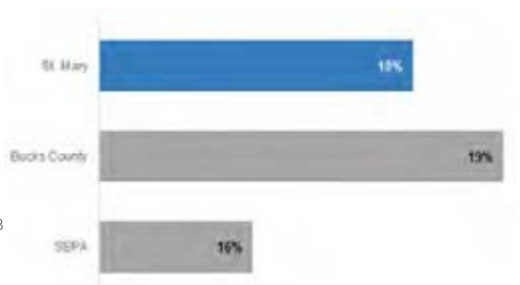
## DENTAL CARE

Oral and dental health are central to a person's quality of life. Dental public health focuses on improving oral health for all Americans by reducing disparities and expanding access to effective prevention programs. In the St. Mary service area, 34% of area residents reported not having seen a dentist in the past year, compared to 29% of remainder SEPA region area residents.<sup>6</sup> Relatedly, 35% of St. Mary service area children aged 3+ did not see a dentist compared to 23% of the remainder SEPA region.<sup>7</sup> **Overall, when compared to surrounding areas, St. Mary area residents are not accessing dental care and prevention services as thoroughly as their counterparts.**

## HEALTH BEHAVIORS

### Smoking

Smoking is a neurologically addictive habit that creates immediate and sustained health problems for individuals who smoke and those who inhale secondhand smoke regularly. Eighteen percent of St. Mary service area adults (age adjusted prevalence rate adults age 18+) currently smoke cigarettes, which is not significantly different than the remainder of SEPA (16%), as are the non age-adjusted rates (15% for both regions).<sup>8</sup> Attempting to quit smoking is often a precursor to actually quitting. Half of smokers in the St. Mary service area did not make an attempt to quit in the past year, which was comparable to the remainder SEPA region (49%).



**In the St. Mary service area, 18% of residents smoke cigarettes (age-adjusted), which is lower than Bucks County, and slightly higher than the remainder SEPA region.**

With the introduction of e-cigarettes to the market, smoking patterns have changed. Smoking is now on the rise in younger adult populations due to the introduction of e-cigarettes, vapes, and Juuls. These e-cigarette devices typically carry more nicotine than traditional cigarettes and are sold in fruity flavors that elicit a younger audience. Current cigarette smokers may use both e-cigarettes and traditional cigarettes. Among smokers in the St. Mary service area, 9% also used an e-cigarette in the past month, compared to 8% in the remainder SEPA region.

<sup>5</sup> The relationship was found to be marginally statistically significant (Pearson chi-square,  $p = .08$ )

<sup>6</sup> Pearson chi square test of significance  $p < .05$

<sup>7</sup> Due to small sample size ( $n=100$ ), child data should be interpreted with caution when comparing to SEPA. Pearson chi square test of significance  $p < .001$

<sup>8</sup> Percentages using age-adjusted calculations are not statistically tested. Pearson's chi square on non age-adjusted differences (i.e. crude prevalence rate) were not significant – St. Mary 15% vs. remaining SEPA 15%.

# ST. MARY COMMUNITY HEALTH PRIORITY NEEDS

## Nutrition

"Good" nutrition and regular physical activity are important parts of leading a healthy lifestyle and healthy living broadly. Relatedly, there is general consensus that for example:

- Regular consumption of sugary sweetened beverages (SSB), such as soda, sports drinks, sweetened teas, and fruit drinks, is associated with obesity and other poor health outcomes such as type-2 diabetes, and cardiovascular disease
- Lack of exercise predisposes adults to related health issues such as obesity, hypertension, diabetes, depression, and cardiovascular disease
- Eating a vegetable and fruit rich diet as part of an overall healthy diet may help protect against certain types of cancers as well as reduce risk for heart disease, including heart attack and stroke.<sup>9</sup>

Overall, "combined with physical activity, your diet can help you to reach and maintain a healthy weight, reduce your risk of chronic diseases, and promote your overall health".<sup>10</sup> When compared to remainder SEPA region, St. Mary adult area residents are slightly more likely, though not statistically significant, to:

- Have had sugary drinks at least once per day in the past month (28% St. Mary vs. 27% remainder SEPA region)
- Eat less than 4 servings of fruits and vegetables per day (80% St. Mary; 79% Bucks County; 77% remainder SEPA region)

## Exercise

The U.S. Department of Health and Human Services' Physical Activity Guidelines for Americans 2nd Edition recommends that adults (ages 18-64) get 2.5 hours of moderate aerobic physical activity each week.<sup>11</sup> Forty-five percent of St. Mary service area residents reported exercising for 30+ minutes *less than* three days a week, compared to 42% of Bucks County and remainder SEPA area residents. Additionally, 12% of St. Mary service area children (3+ years old) participated in physical activity *less than* three times per week, which is comparable to the remainder of SEPA (13%). These differences do not attain statistical significance.

## Mental Health

Mental health can impact health behaviors and physical health. For example, depression increases the risk for chronic health conditions, including stroke, type 2 diabetes, and heart disease. Likewise, poor physical health can impact mental health. Chronic health conditions, such as cancer, diabetes, Alzheimer's disease, and coronary heart disease increase the risk for depression.<sup>12</sup> According to the National Survey on Drug Use and Health, in 2016 an estimated 44.7 million adults aged 18 or older had a mental illness in the past year representing 18% of adults in the United States.<sup>13</sup> In the St. Mary service area, 17% of adults reported that they have ever been diagnosed with a mental health condition, and 40% of them are currently not receiving treatment.

<sup>9</sup> United States Department of Agriculture. (2016). Retrieved from [www.choosemyplate.gov/vegetables-nutrients-health](http://www.choosemyplate.gov/vegetables-nutrients-health)

<sup>10</sup> President's Council on Sports, Fitness, & Nutrition. (2017). Retrieved from <https://www.hhs.gov/fitness/eat-healthy/importance-of-good-nutrition/index.html>

<sup>11</sup> U.S. Department of Health and Human Services. Physical Activity Guidelines for Americans 2nd Edition, 2018.

<sup>12</sup> National Institute of Mental Health. Chronic Illness & Mental Health. <https://www.nimh.nih.gov/health/publications/chronic-illness-mental-health/index.shtml>

<sup>13</sup> The National Survey on Drug Use and Health defines a mental illness as having any mental, behavioral, or emotional disorder in the past year that met DSM-IV criteria (excluding developmental disorders and substance use disorders).



# ST. MARY COMMUNITY HEALTH PRIORITY NEEDS

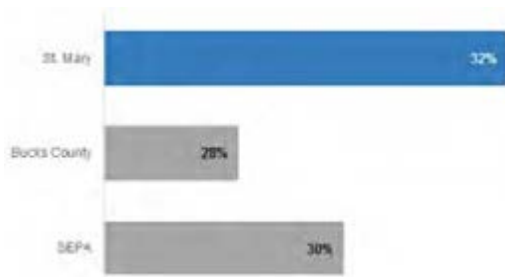
## HEALTH CONDITIONS

### Overweight and Obesity

Body mass index (BMI) has been a major predictor of overall health, with a BMI of 25-29.9 considered overweight, and 30+ considered obese. Overweight and obesity are strongly correlated with high blood pressure, diabetes, cancer, heart disease, and asthma. The HP 2020 goal for obesity is 30.5% (or less) of adults age 20+.<sup>14</sup>

- In St. Mary service area 32% (age-adjusted) of adults (age 18+) are obese, which does not meet the HP2020 goal, while Bucks County (28%) and the remainder of SEPA region (30%), meet the HP2020 goal
- St. Mary service area also has a higher percentage of adults either overweight or obese (69%) compared to Bucks County (66%) and the remainder of SEPA (64%)

**32% of St. Mary service area residents are considered obese, not meeting the HP2020 goal (30.5% or less)**



In the St. Mary service area, 28% of children are overweight or obese, which is slightly higher than Bucks County (26%) and the remainder of SEPA (26%). Moreover, child obesity in the St. Mary service area (15%) is slightly higher than Bucks County (13%) though slightly lower than the remainder of SEPA region (16%).

### High Blood Pressure

In the U.S. 33% of adults have high blood pressure (or hypertension), which, is slightly higher than the SEPA region (32%) and the St. Mary service area (30%).<sup>15</sup> In 2019, approximately 108,131 (30%) of St. Mary service area residents had high blood pressure, indicating that although St. Mary Service Area is faring better than the national average, there are still many adults with this chronic disease.

### Asthma

Approximately 25 million people in the U.S. have asthma, and episodes of reversible breathing problems can range from mild to life threatening.<sup>16</sup> Fifteen percent of adult St. Mary service area residents have ever been diagnosed with asthma, compared to 19% of remainder SEPA region area residents.<sup>17</sup>

<sup>14</sup> Healthy People 2020 [Internet]. Washington, DC: U.S. Department of Health and Human Services [cited April 23, 2019]. Available from: <https://www.healthypeople.gov/2020/leading-health-indicators/2020-lhi-topics/Nutrition-Physical-Activity-and-Obesity/data#NWS-9>

<sup>15</sup> Centers for Disease Control and Prevention. National Center for Health Statistics (2016). Table 53. Selected health conditions and risk factors by age: United States, selected years 1988-1994 through 2015-2016. Available at: <https://www.cdc.gov/nchs/data/hus/2017/053.pdf>

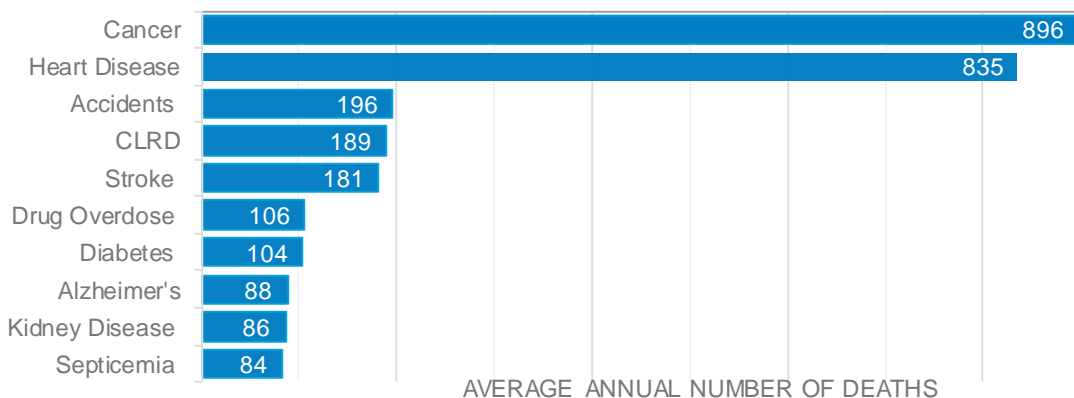
<sup>16</sup> Healthy People 2020 [Internet]. Washington, DC: U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion [cited March 23, 2019]. Available from: <https://www.healthypeople.gov/2020/topics-objectives/topic/respiratory-diseases>

<sup>17</sup> Chi square test of significance p<.05

# ST. MARY COMMUNITY HEALTH PRIORITY NEEDS

## MORTALITY AND LEADING CAUSES OF DEATH

### ST. MARY LEADING CAUSES OF DEATH | 2012-2016



Between 2012-2016, cancer and heart disease were the top two causes of death for the St. Mary service area, accounting for 44% of all deaths. Cancer was the first leading cause of death in the St. Mary service area, different from US as a whole, where heart disease accounts for the most deaths.<sup>18</sup> The St. Mary service area had a lower age-adjusted death rate at 689.4 per 100,000 residents than that of SEPA, which was 732.4 deaths per 100,000 residents.<sup>19</sup>

#### Drug overdose and mortality rates

Co-occurring mental illness and substance use disorders are increasing substantially in the US, with deaths due to suicide and overdose imposing a major public health concern.<sup>20</sup> The St. Mary service area performed worse than SEPA and Bucks County regarding drug overdose (all substances).

- Drug overdose accounted for 26.7 deaths per 100,000 residents in the St. Mary service area, higher than that of Bucks County (24.6 deaths per 100,000 residents) and SEPA (26.0 deaths per 100,000 residents)
- Death due to drug-induced causes was the 6th leading cause of death for St. Mary service area residents, which, was higher than the national average of 19.8 per 100,000 deaths according to the 2016 vital statistics report.<sup>1</sup>

<sup>18</sup> Heron, M. (2018). Deaths: Leading causes for 2016. National Vital Statistics Reports; vol 67 no 6. Hyattsville, MD: National Center for Health Statistics. 2018.

<sup>19</sup> Age-adjusted death rates allow for comparison between populations that vary in age distribution. This can lead to changed rank orders of leading causes of death, as causes that are influenced by older age, in particular, typically get adjusted downward due to age-adjustment based on the 2000 standard national population distribution.

<sup>20</sup> Bohnert, A., & Ilgen, M. (2019). Understanding links among opioid use, overdose, and suicide. The New England Journal of Medicine, 380, 71-79.

# ST. MARY COMMUNITY HEALTH PRIORITY NEEDS

## Suicide

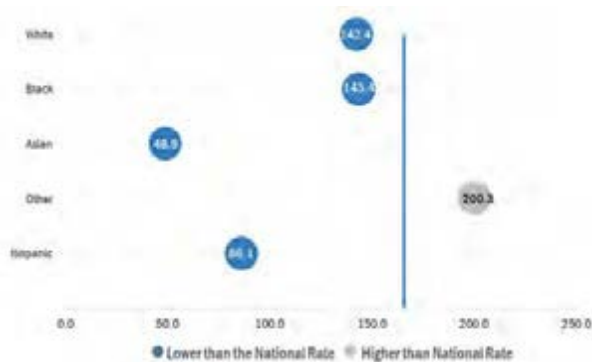
Untreated or undetected mental health conditions may lead to violent or self-destructive behavior, such as suicide. Suicide is a leading cause of death for all Americans, with no single factor contributing to its cause, indicating a vital need for prevention efforts across the St. Mary service area and SEPA regions. Considering all forms of suicide, between 2012-2016, the HP2020 goal of 10.2 deaths per 100,000 people is not being met in the:

- St. Mary service area (11.5 suicide deaths per 100,000 residents)
- US overall (13.5 suicide deaths per 100,000 residents)
- Bucks County (11.7 suicide deaths per 100,000 residents)
- SEPA whole (10.6 suicide deaths per 100,000 residents)

Of those deaths, suicide by firearm reached 4.4 deaths per 100,000 people, which was higher than the SEPA region (4.0 firearm deaths per 100,000 residents), but less than that of Bucks County alone (4.8 firearm deaths per 100,000 residents).

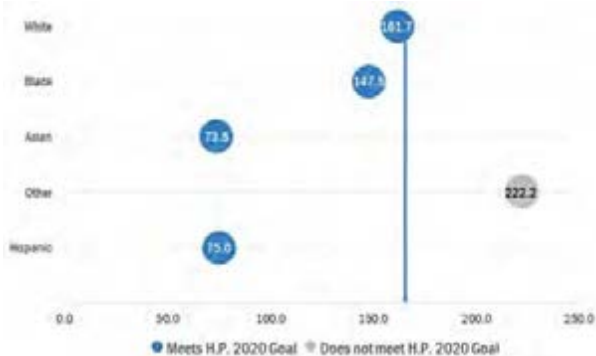
## Heart Disease

**When examining heart disease mortality rates by race and ethnicity, people who self-identified as "other" race had the highest age-adjusted heart disease mortality rate (200.3 deaths per 100,000 residents), when compared to white, black and Asian.**



## Cancer

**Considering race and age-adjusted mortality rates due to cancer, people who self-identified as "other" race had the highest age-adjusted cancer mortality rate and did not meet the HP2020 goal (less than 161.4 deaths per 100,000 residents).**



# DEMOGRAPHIC INDICATORS

Population size and trends impact the number of persons using and needing services in an area and are important to consider in characterizing and prioritizing health needs. Relatedly, demographic characteristics such as age, gender, race/ethnicity, and language can affect the prevalence of specific diseases and conditions and barriers to care related to educational attainment, economic status, race, ethnicity, and language.

Socioeconomic characteristics such as educational attainment, employment, and income impact health status and access to care. High levels of educational attainment are related to health literacy, healthier behaviors, and improved health status. Employment and income affect insurance status and the ability to pay out of pocket for health care expenses. Key demographic characteristics of St. Mary service area are highlighted below.

## POPULATION SIZE

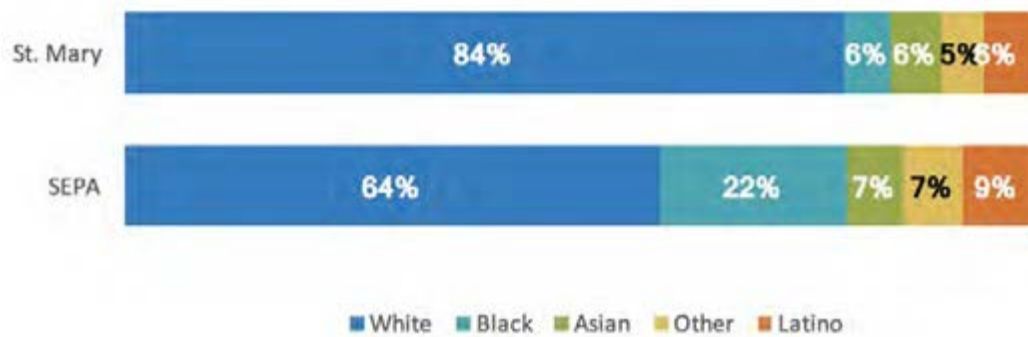
The estimated population size of St. Mary service area is 414,400. Between 2010 and 2018, the St. Mary service area population decreased slightly by a few thousand, or 0.9%. The older adult population, aged 65+, are projected to increase by 13% between 2018 and 2023.

## GENDER, RACE/ETHNICITY, AGE DISTRIBUTION, LANGUAGE

Twenty percent of residents in St. Mary service area are between 0-17 years old, 20% are 18-34, 42% are 35-64, and 19% are 65+ years old. Similar to SEPA (48% males; 52% females), 49% of St. Mary service area residents identify as male and 51% female.

The St. Mary service area population is racially and ethnically homogenous when compared to the remainder SEPA region. St. Mary service area residents primarily identify as white (84%), 6% identify as black, 6% identify as Asian, and 5% identify as "other" race; 6% are Latino.<sup>21</sup> Although white residents represent the majority racial demographic in the St. Mary service area as well as SEPA, there is a larger minority population in SEPA, most notably black (22%).

### Race and ethnicity distribution in St. Mary service area and SEPA.

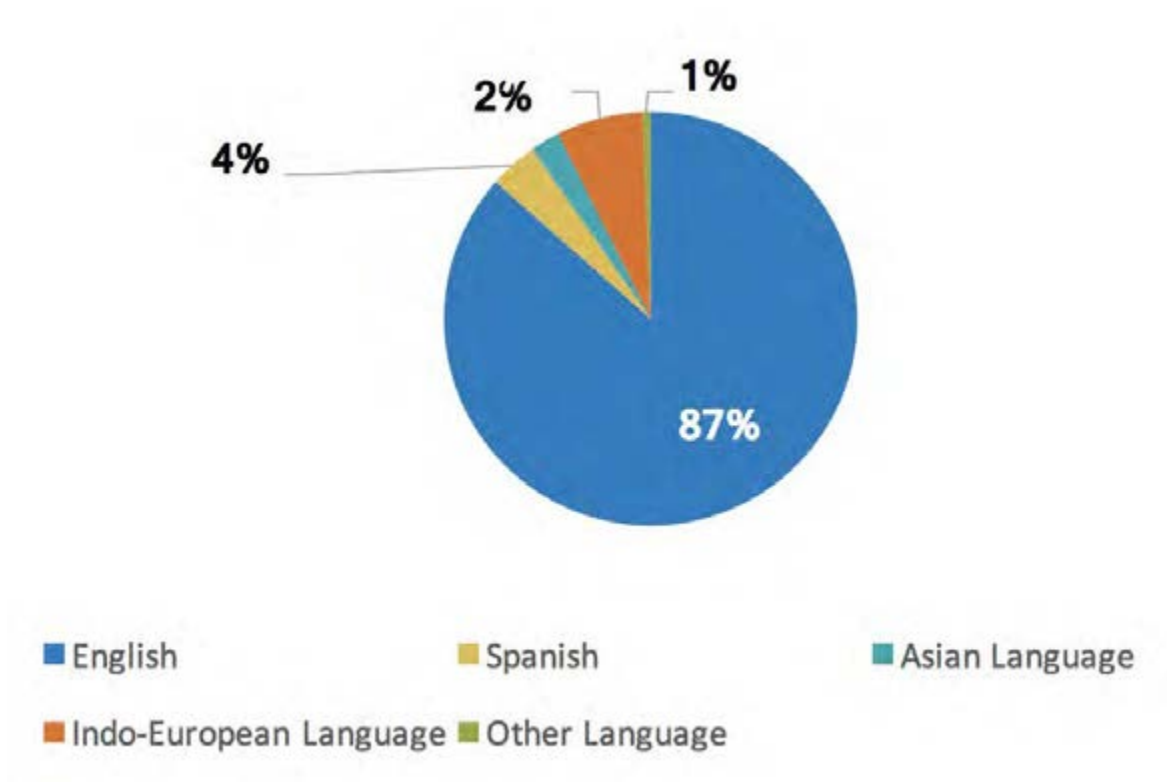


<sup>21</sup> The 2010 U.S. Census report that people of Hispanic origin may be of any race. For the U.S. Census, ethnic origin is considered to be a separate concept from race.

# DEMOGRAPHIC INDICATORS

According to the World Health Organization (WHO), “the sheer scale of human displacement has turned migrant health into a priority global public-health issue, an issue rendered more complex by the diversity of the populations involved.”<sup>22</sup> Fourteen percent of residents in St. Mary service area speak a language other than English in their household, mainly either an Indo-European language (7%) or Spanish (4%).

Immigrants have unique cultural challenges in accessing health care, exacerbating known health inequities that are generally associated with immigrant status, length of time in the US, and primary language spoken at home.



<sup>22</sup> World Health Organization. (2008). Overcoming migrants' barriers to health. <https://www.who.int/bulletin/volumes/86/8/08-020808/en/>

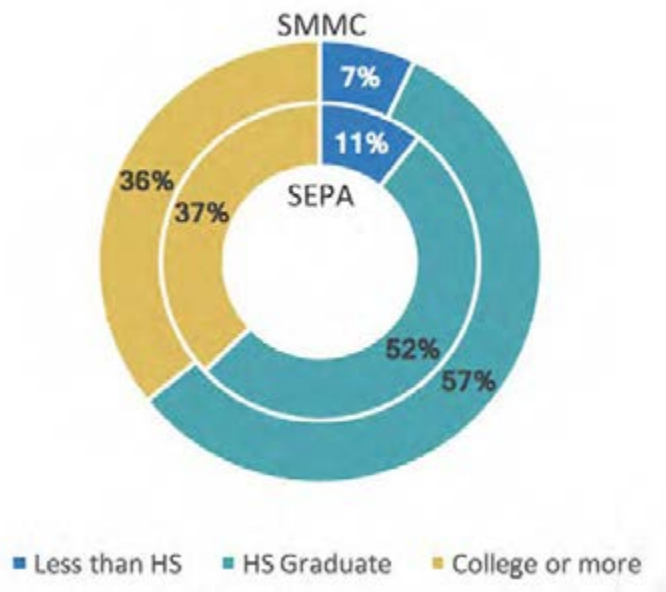


# DEMOGRAPHIC INDICATORS

## INCOME, POVERTY, EMPLOYMENT, EDUCATION

Socioeconomic characteristics such as educational attainment, employment, and income impact health status and access to care. High levels of educational attainment are related to increased health literacy, healthier behaviors, and improved health status. Employment and income affect insurance status and the ability to pay out-of-pocket for health care expenses.

The St. Mary service area, Pennsylvania, and SEPA all vary on socio-demographic characteristics such as education, employment, poverty status, and income. The St. Mary service area has a higher level of high school educational attainment (93%) than SEPA (89%) and Pennsylvania (90%).<sup>23</sup> Among St. Mary service area and SEPA residents with a high school degree, almost 40% also have at least a college degree. In Pennsylvania as a whole, comparatively, only 30% of high school graduates attain a college degree or more. Educational attainment in the St. Mary service area when compared to SEPA is illustrated below.



Six percent of adults aged 16 years and older are unemployed in the St. Mary service area, which is lower than SEPA (8%) and similar to Pennsylvania (7%).<sup>24</sup>

The 2018 median household income in St. Mary service area was \$87,960, which was higher compared to SEPA (\$70,807).<sup>25</sup> The St. Mary service area has the lowest percentage of families with children population living in poverty (7%), followed by Pennsylvania (13%) and SEPA (16%).

<sup>23</sup> <https://www.census.gov/quickfacts/fact/table/pa/IPE120217#IPE120217>

<sup>24</sup> [https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS\\_17\\_5YR\\_S2301&prodType=table](https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_17_5YR_S2301&prodType=table)

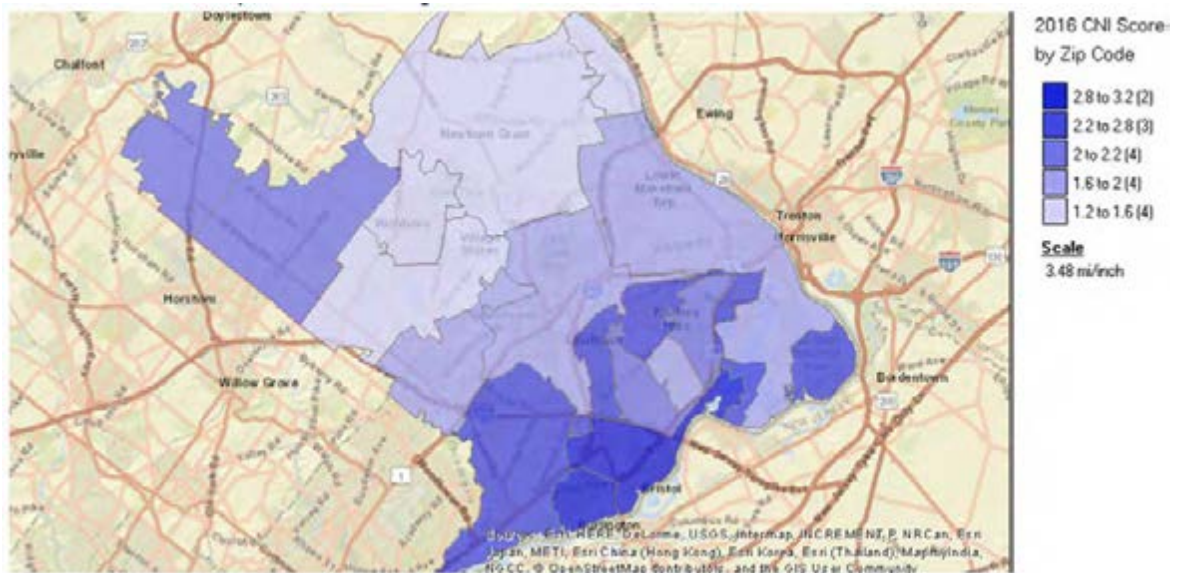
<sup>25</sup> Median income is calculated by the U.S. Census by dividing the income distribution into two equal groups, half having income above that amount, and half having income below that amount. For households and families, the median income is based on the distribution of the total number of households and families including those with no income. The median income for individuals is based on individuals 15 years old and over with income. [https://www2.census.gov/programs-surveys/acs/tech\\_docs/subject\\_definitions/2017\\_ACSSubjectDefinitions.pdf](https://www2.census.gov/programs-surveys/acs/tech_docs/subject_definitions/2017_ACSSubjectDefinitions.pdf)

# DEMOGRAPHIC INDICATORS

## SOCIAL DETERMINANTS OF HEALTH

Social determinants of health, such as education, income, and employment (described in previous section) affect the health of the community, and also impact health outcomes. The Community Need Index (CNI) uses many of the socioeconomic indicators from the U.S. Census to assign a community need score to each zip code in the U.S. The indicators are drawn from five major, common, and persistent barriers to “good” health (income, culture/language, education, insurance, and housing). They are used to measure the multiple factors which are known to limit health care access.

The total CNI score for St. Mary service area is 2.1 across all zip codes within the hospital’s service area. The highest barriers are Culture (3.2), and Housing (3.1), while the lowest barriers are Insurance (1.0) and Income (1.6). Two zip codes within the service area exceed a CNI score of 5.0, both within the Housing barrier (19007 and 19020). CNI scores for individual zip codes range from a low of 1.2 (18966 and 18954) to a high of 3.2 (19007). The barrier with the highest CNI score, culture, has four zip codes ranking 4.0 within the service area.



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# HEALTH STATUS AND HEALTH OUTCOMES

## HEALTH STATUS

Self-assessed health is a commonly used measure of quality of life and a predictor for mortality. The percentage of St. Mary service area adults who rate their health as fair or poor is higher in 2018 (17%) compared to 2015 (14%). In 2018 there were no significant differences between adults in the St. Mary service area (17%) and the remainder of SEPA (20%) in self-reported health ratings. Bucks County adults (17%) reporting fair or poor health was only slightly lower than St. Mary service area. However, a higher percentage of adults in St. Mary service area rated their health as fair or poor compared to the U.S. (17% St. Mary service area vs. 12% US).<sup>26,27</sup>

## ADOLESCENT BIRTH RATES

The teen birth rate in the St. Mary service area was 9 births per 1,000 women aged 15–19, which is significantly lower when compared to SEPA teen birth rates from 2012-2016 (19 births per 1,000 women annually, aged 15-19), as well as across the U.S. (20 births per 1,000 women aged 15-19).

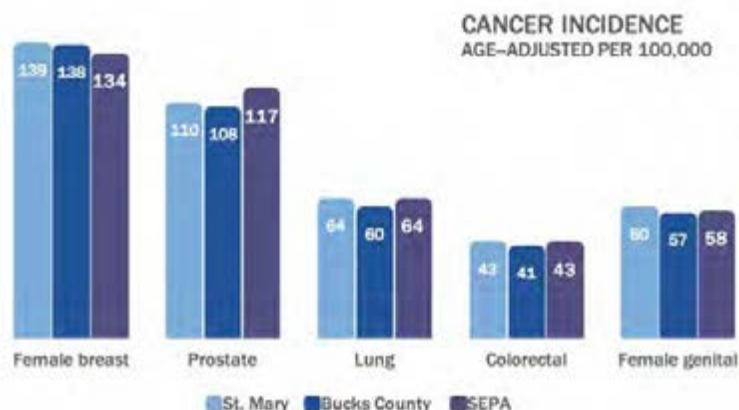
Among racial and ethnic groups in the St. Mary service area, the birth rate varies, with Latina teenage girls having the highest birth rate at 26 births per 1,000 girls compared to 7 births per 1,000 for white teenage girls. However, there were significantly more births among white teenage girls (71) than Latina teenage girls (24).

## CANCER INCIDENCE AND SCREENINGS

From 2012-2016, the age-adjusted cancer incidence rate for the St. Mary service area was 500 new cancer diagnoses per 100,000 people, slightly higher than SEPA (491 new cancer diagnoses per 100,000 people in the same years).

- Female breast cancer rates in the St. Mary service area (139 new diagnoses per 100,000 females) are higher than SEPA (134 new diagnoses per 100,000 females)
- Incidence rates for prostate cancer in the St. Mary service area (110 new diagnoses per 100,000 males) are lower than SEPA (117 new diagnoses per 100,000 males)

The table below illustrates the age-adjusted cancer incidence rates for female breast, prostate, lung, colorectal, and female genital cancer in the St. Mary service area, Bucks County, and SEPA.



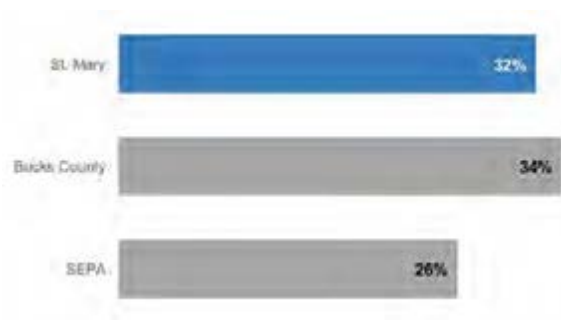
<sup>26</sup> Blackwell DL, Villarroel MA. Tables of Summary Health Statistics for U.S. Adults: 2017 National Health Interview Survey. National Center for Health Statistics. 2018. Available from: <http://www.cdc.gov/nchs/nhis/SHS/tables.htm>. SOURCE: NCHS, National Health Interview Survey, 2017.

<sup>27</sup> The comparison of self-assessed health status rating with the U.S. involved age-adjusted self-assessed health.

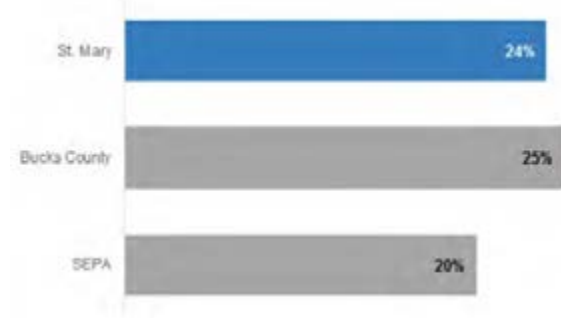
# HEALTH STATUS AND HEALTH OUTCOMES

In regards to recommended cancer screenings, St. Mary service area performs better than SEPA in prostate exams. Forty-two percent of men age 45+ in the St. Mary service area report not having had a prostate exam in the past year, which was significantly less than the remainder of SEPA (50%).<sup>28</sup>

**Among adults age 50+ in the St. Mary service area, 32% have not had a sigmoid colonoscopy screening within the past 10 years, which is significantly higher compared to the remainder of the SEPA region (26%).<sup>29</sup>**



**More women age 50-74 report that they have not had a mammogram in the past 2 years in the St. Mary service area (24%, both age-adjusted and crude prevalence) compared to the remainder of the SEPA region (20% age adjusted, 19% crude prevalence).<sup>30</sup>**



**More St. Mary service area women age 18-64 (17%) have not had a pap test in the past 3 years compared to the remainder of the SEPA region (14%).<sup>31</sup>**



<sup>28</sup> Pearson's chi square test of significance  $p < .05$

<sup>29</sup> Pearson's chi square test of significance  $p < .01$

<sup>30</sup> Not a statistically significant difference based on crude prevalence, but fairly close given the truncated sample size ( $p = .10$ ) Does not meet the HP 2020 goal of 81% of women (age 50-74) receiving a breast cancer screening based on most recent guidelines.

<sup>31</sup> Percentages based on age-adjusted values. Pearson's chi square test based on crude prevalence is highly significant at ( $p < .001$ ), St. Mary - 25% vs. remainder SEPA - 17%.

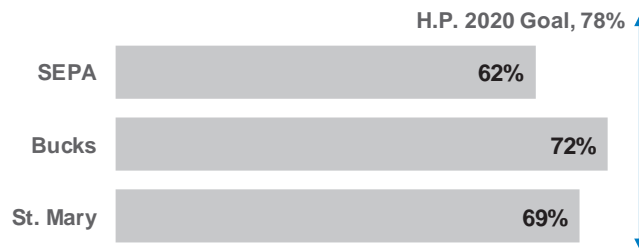
# POPULATIONS OF INTEREST

## MATERNAL HEALTH

Sixty-nine percent of women from the St. Mary service area initiated on-time prenatal care, or first trimester of pregnancy, which is lower than the US (77%)<sup>32</sup> and though above the remainder SEPA region (62%). The St. Mary service area is below the HP 2020 goal of 78% of women who deliver a live birth receiving prenatal care beginning in the first trimester.<sup>33</sup>

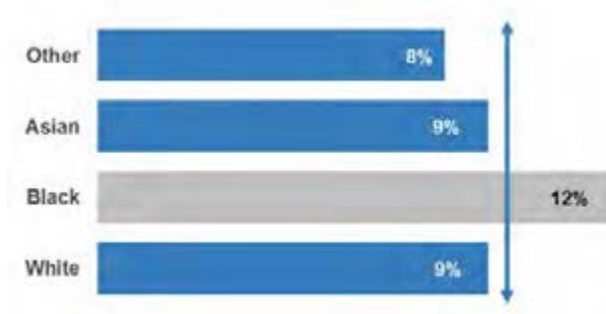
In the St. Mary service area, white women giving birth from 2012-2016 have met the HP 2020 goal related to prenatal care, but black, Asian, and Latina women have not. Among white women, 73% started prenatal care in the first trimester. Among black women, 48% started prenatal care in the first trimester, and 71% Asian women initiated prenatal care during this time.

**The St. Mary service area has not yet met the HP 2020 goal for on-time prenatal care.**



The percentage of infants born preterm (less than 37 weeks completed of gestation) in the St. Mary service area (9%) is comparable to SEPA (10%) and the U.S. (10%). The St. Mary service area has met the HP 2020 goal of no more than 9.4% of live births born preterm.

**The St. Mary service area has met the HP 2020 goal for preterm births.**



The percentage of infants born low birth weight (LBW) (born at less than 2,500 grams or 5 pounds) in the St. Mary service area (8%) is comparable to SEPA (9%) and higher than the U.S. (8%). Thus, the St. Mary service area exceeds the acceptable number set by the HP 2020 goal of no more than 7.8% of infants born low birth weight.

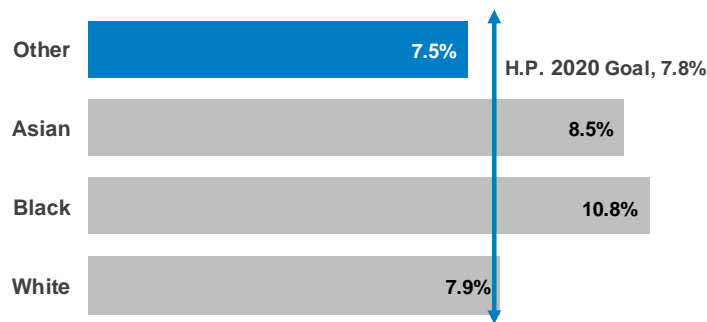
<sup>32</sup> Osterman MJK, Martin JA. Timing and adequacy of prenatal care in the United States, 2016. National Vital Statistics Reports, vol 67 no 3. Hyattsville, MD: National Center for Health Statistics. 2018. Retrieved from: [https://www.cdc.gov/nchs/data/nvsr/nvsr67/nvsr67\\_03.pdf](https://www.cdc.gov/nchs/data/nvsr/nvsr67/nvsr67_03.pdf)  
<sup>33</sup> U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. Healthy People 2020. Maternal, Infant, and Child Health Objectives. Healthy People 2020. Retrieved from <https://www.healthypeople.gov/2020/topics-objectives/topic/maternal-infant-and-child-health/objectives>



# POPULATIONS OF INTEREST

In the St. Mary service area there were 78.7 LBW births per 1,000 white infant births and 103.4 LBW births per 1,000 among black infant births. Among Hispanic women there were 70.3 LBW births per 1,000 infant births.

**The St. Mary service area has met the HP 2020 goal for low birth weight.**



Additionally, the St. Mary service area has not met the HP 2020 goal for absence of cigarette smoking among pregnant women. In the St. Mary service area, 11% of pregnant mothers smoke during pregnancy. Among white pregnant women 14% smoke during pregnancy, which is further higher than the HP 2020 goal of 1%.

## INFANT MORTALITY

In the St. Mary service area, there were 4 infant deaths per 1,000 live births, which meets the HP 2020 target for infant deaths (6.0 infant deaths per 1,000 live births). Mortality rates are highest for Latino/a infants (4.6 infant deaths per 1,000 live births). This rate is two times higher than that of Asian infants (2.2 infant deaths per 1,000 live births) and slightly higher than white infants (3.9 infant deaths per 1,000 live births) and black infants (3.2 infant deaths per 1,000 live births).

## RECOMMENDATIONS AND NEXT STEPS

As earlier mentioned, this CHNA report identified 15 unmet health needs, prioritizing access issues specific to mental health care, substance abuse treatment, and uninsured as well as populations living in poverty, for this CHNA cycle.

St. Mary is well positioned to focus efforts at enhancing community health (including ongoing implementation strategy development and planning) to maintain and elevate its area residents' health status. To better address health needs for St. Mary area residents, St. Mary should consider:

- Assessing priorities around access to affordable healthcare and identifying areas of opportunity and partnerships to increase access to care for uninsured and under-insured St. Mary service area residents
- Strengthening cross-sector collaborations and partnerships with local health departments, police force, schools, transportation, sanitation, etc., to leverage shared assets across the community (given CNI scores and persistent barriers to interacting with local healthcare system)
- Consider strategic development and priority setting about mental health, focusing on reducing incidents of drug overdose,
- Increase education to providers about mental health treatment and diagnosis as education to the community about mental health
- Increasing partnerships with national guiding bodies (such as the American Cancer Association) to provide education around healthy living globally and cancer risk and early detection specifically; provide resources to those living with cancer (focus on prevention and harm reduction)
- Educating patients about risk factors for stroke, such as obesity, smoking, high blood pressure, and diabetes
- Program development and community program expansion around healthy living across life span, or partnerships with other civic- and/or community-based organizations to do so, with special attention given to children and families, as well as on smoking
- Assessing St. Mary service area infrastructure and local resources, and expanding prevention services (particularly to areas or sub-populations disproportionately impacted by sociodemographic or other health disparities)

A 2018 report in Modern Healthcare also spotlights some important concepts:<sup>34</sup>

- Efforts to improve communities have largely been siloed across the country and little collaboration exists; hospitals would benefit from a cooperative approach
- Evidence shows that health fairs and screenings don't make a big difference, but working on access and health equity and impacting social conditions does
- Hospitals are doing a better job of communicating with the community through these CHNAs, though without frequent re-assessments, "the disconnect between a hospital's mission and the community's expectations will likely grow"

<sup>34</sup> Kacic, A. Flaws in reporting create knowledge vacuum regarding community benefits. Modern Healthcare InDepth. 2018; 20-26.

## RECOMMENDATIONS AND NEXT STEPS

St. Mary can take a “deep dive” approach about its broad community, and also assess locally, existing programs and implementation strategies, and, between CHNA cycles, conduct more deliberate and ongoing evaluation of its programs to understand program effectiveness, impact, and potential to be replicated and/or sustained across broader geographic areas. St. Mary may also want to consider priority areas and opportunities to develop multiple metrics assessing areas where the needle may be moved overall, though thoughtfully balancing in accord with unique service area needs.

St. Mary service area has some socio-economic heterogeneity, most notably, lower SES residents in its southern tier (Bristol, Bensalem, Falls) compared to the remainder of St. Mary service area. One possible consideration for future CHNA planning and implementation is to compare this sector to the remainder of St. Mary, as they may differ in health status and needs. One indicator of socio-economic heterogeneity is household income, where Bristol Borough, in the southern end of the service area, has a 2018 median household income of \$47,690, compared to \$87,960 for the entire St. Mary service area. It also has poorer health outcomes, although the 2018 HHS Survey sample size is too small for firm analysis and conclusions. Disparities between Bristol Borough and the remainder of St. Mary service area is followed by Bristol Township and Bensalem, also near the southern tip, with median household incomes a little above \$60,000, and Falls, just above \$70,000. One could anticipate higher usage of ER and other differences in services used and needed based on the economic and social disparities faced by these southern tier neighborhoods.

For firmer assessments of the sub-regional differences in St. Mary service area, data could be ascertained from hospital admittance data and compared to census demographic distributions, and complemented with survey health data from over-sampling ZIP codes that encompass the poorer socioeconomic sectors, such as Bristol (19007). Similar over-samples have been collected for cities such as Chester in Delaware County and Pottstown in Montgomery County, enabling more precise comparisons of health needs and outcomes compared to the surrounding areas.

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# APPENDIX B. CHNA STEERING COMMITTEE PRIORITIZATION RESULTS

The St. Mary Steering Committee reviewed the combined scores from the provider and external stakeholder surveys to further prioritize what unmet health needs. The committee applied the Simplex Method with the following criteria and the scales below. The final ranking of unmet health needs is also shown below.

- Severity of health issue
- Magnitude of population affected
- Clear disparities/inequities (e.g., race/ethnicity, geography, gender, etc.)
- Identified by Community/Collaborative group as health issue
- Existing health system capacity to address

RATING SCALE				RANKING SCALE			
5 - High impact on population health				3 - Overriding importance			
4 - Medium to High impact				2 – Important			
3 - Medium impact				1 - Worthy of consideration, but not major factor			
2 - Low impact							
1 - Minimal impact on population health							

				Majority vote on impact on population health if this need is not addressed by St. Mary	Steering Committee Ranking & Weighting (Simplex Method)	Total Score	Final Ranking
Access to Mental Health Care	Rank	# Respondents	Score				
Internal	1	7	88	High			
External	1	15	201	High			
		22	289		75	364	1

				Majority vote on impact on population health if this need is not addressed by St. Mary	Steering Committee Ranking & Weighting (Simplex Method)	Total Score	Final Ranking
Access to Substance Abuse tre	Rank	# Respondents	Score				
Internal	2	7	87	High			
External	3	15	175	High			
		22	262		75	337	2

				Majority vote on impact on population health if this need is not addressed by St. Mary	Steering Committee Ranking & Weighting (Simplex Method)	Total Score	Final Ranking
Access to Care for Uninsured, especially those living in poverty	Rank	# Respondents	Score				
Internal	6	6	63	High			
External	2	15	194	High			
		21	257		66	323	3



# APPENDIX B. CHNA STEERING COMMITTEE PRIORITIZATION RESULTS

Coronary Heart Disease	Rank	# Respondents	Score	Majority vote on impact on population health if this need is not addressed by St. Mary	Steering Committee Ranking & Weighting (Simplex Method)	Total Score	Final Ranking
Internal	3	8	83	High			
External	5	14	118	Med-High			
		22	201		55	256	4

Education & awareness for lung cancer screening	Rank	# Respondents	Score	Majority vote on impact on population health if this need is not addressed by St. Mary	Steering Committee Ranking & Weighting (Simplex Method)	Total Score	Final Ranking
Internal	5	8	71	Med-High			
External	6	15	109	Med-High to Med			
		23	180		63	243	5

Access to Prenatal Care Services	Rank	# Respondents	Score	Majority vote on impact on population health if this need is not addressed by St. Mary	Steering Committee Ranking & Weighting (Simplex Method)	Total Score	Final Ranking
Internal	8	7	52	Med-High			
External	4	15	129	High			
		22	181		57	238	6

Education & awareness of womens health screenings - mammogram	Rank	# Respondents	Score	Majority vote on impact on population health if this need is not addressed by St. Mary	Steering Committee Ranking & Weighting (Simplex Method)	Total Score	Final Ranking
Internal	4	8	74	Med-High			
External	10	14	97	High-Med			
		22	171		42	213	7

Congestive Heart Failure	Rank	# Respondents	Score	Majority vote on impact on population health if this need is not addressed by St. Mary	Steering Committee Ranking & Weighting (Simplex Method)	Total Score	Final Ranking
Internal	7	6	54	High			
External	11	14	89	Med-High to Med			
		20	143		48	191	8

Nutrition Education Older Adults	Rank	# Respondents	Score	Majority vote on impact on population health if this need is not addressed by St. Mary	Steering Committee Ranking & Weighting (Simplex Method)	Total Score	Final Ranking
Internal	13	6	39	Med-High to Med			
External	7	14	106	High			
		20	145		39	184	9

# APPENDIX B. CHNA STEERING COMMITTEE PRIORITIZATION RESULTS

Smoking Cessation education expectant mothers	Rank	# Respondents	Score	Majority vote on impact on population health if this need is not addressed by St. Mary	Steering Committee Ranking & Weighting (Simplex Method)	Total Score	Final Ranking
Internal	15	6	32	Med-High to Med			
External	8	14	104	Med-High			
		20	136		31	167	10

Access to blood pressure screening	Rank	# Respondents	Score	Majority vote on impact on population health if this need is not addressed by St. Mary	Steering Committee Ranking & Weighting (Simplex Method)	Total Score	Final Ranking
Internal	14	6	38	Med-High			
External	12	14	88	Med-High			
		20	126		38	164	11

Chronic Lower Respiratory Disease	Rank	# Respondents	Score	Majority vote on impact on population health if this need is not addressed by St. Mary	Steering Committee Ranking & Weighting (Simplex Method)	Total Score	Final Ranking
Internal	11	6	42	Med-High			
External	15	14	70	Medium			
		20	112		51	163	12

Access to dental care adults and children	Rank	# Respondents	Score	Majority vote on impact on population health if this need is not addressed by St. Mary	Steering Committee Ranking & Weighting (Simplex Method)	Total Score	Final Ranking
Internal	12	6	41	Med-High			
External	9	14	101	High-Med			
		20	142		18	160	13

Education & awareness for sig/colonoscopy screening	Rank	# Respondents	Score	Majority vote on impact on population health if this need is not addressed by St. Mary	Steering Committee Ranking & Weighting (Simplex Method)	Total Score	Final Ranking
Internal	9	6	48	Med-High			
External	14	14	79	Med-High			
		20	127		28	155	14

Education & awareness for women's health - pap test screening	Rank	# Respondents	Score	Majority vote on impact on population health if this need is not addressed by St. Mary	Steering Committee Ranking & Weighting (Simplex Method)	Total Score	Final Ranking
Internal	10	7	44	Med-High			
External	13	14	85	Medium			
		21	129		14	143	15

## APPENDIX C. METHODOLOGY AND DATA SOURCES: FULL TEXT

This CHNA was completed using a data and partnership driven approach to inform its development. As part of this process, St. Mary contracted with Public Health Management Corporation's (PHMC) Research & Evaluation Group (REG), to collect and analyze data, as well as engage the Greater Delaware Valley community residents, key stakeholders and constituents serving the community. Multiple data sources and a variety of data collection methods were used to comprehensively characterize the populations and inform understanding of community health needs. Data sources included:

- **The 2018 Southeastern Pennsylvania Household Health Survey (SEPA HHS)**, R&E Group developed and has fielded the SEPA HHS for the past 35 years. The 2018 SEPA HHS was administered to 7,501 households, using a random-digit dial phone survey method, across Montgomery, Chester, Delaware, Philadelphia, and Bucks Counties. The SEPA HHS provides a unique and comprehensive source of health-related data, solely focused on the SEPA region. Additionally, the SEPA HHS offers unique insights into the local health and social services issues and landscapes, and includes questions unavailable from other sources. It is the principal data source for this CHNA report. In-depth survey methodology and accompanying documentation can be found at <http://www.chdbdata.org/>
- **2018 United States Census** data estimates provided by Claritas Pop-Facts® Premier provided a picture of the socioeconomic and demographic characteristics of MHS's service area. Census-based demographic data are derived from 2018 Claritas Pop-Facts® Premier and processed by PHMC. Claritas Pop-Facts® Premier is a proprietary database comprised of demographic data adapted from the U.S. Census, American Community Survey (ACS) and other known and highly utilized data sources, such as residential data from the U.S. Postal Service, utility companies and marketing firms.
- **Vital Statistics** data from the Pennsylvania Department of Health details trends in leading causes of death, cancer incidence, and birth outcomes.<sup>1</sup>
- **Stakeholder Meeting** data from key community members and constituents was also collected from stakeholders in the St. Mary service area. St. Mary staff identified a list of potential participants based on their knowledge and involvement in the community.
- Thematic and descriptive analysis of data elucidated additional, unique health-related barriers, needs, resources, and strengths of prominent population subgroups for example, otherwise limited in scope or unable to be captured by broadband, quantitative means. Participants also commented on the previous CHNA and its outcomes.

The CHNA additionally incorporates broad measures related to health and well-being, including Healthy People 2020 goals, as a comparator for findings from secondary data analyses, and to assist with prioritization of health needs in St. Mary community.

Service area zip codes used in this CHNA report included: 18940, 18954, 18966, 18974, 18976, 18977, 19007, 19020, 19021, 19030, 19047, 19053, 19054, 19055, 19056, 19057, 19067.

Health needs were identified and prioritized by chi-square tests of significance comparing the health status, access to care, health behaviors, and utilization of services for residents to results for SEPA in the 2018 SEPA HHS. Mortality and indicators from the HHS were compared to state and national benchmarks, such as Healthy People 2020 (H.P. 2020) goals, where possible. Input from community stakeholders was used to fill information gaps and to further identify and prioritize unmet needs, particularly for populations of interest. Additional data sources were also considered, such as the online surveys, and contributed to the evidence base behind identified need.

<sup>1</sup> Pennsylvania Department of Health, Bureau of Health Statistics and Registries. (2018). *2012-2016 Mortality [Data file] and 2012-2016 Birth outcomes [Data file]*. These data were provided by the Pennsylvania Department of Health. The Department specifically disclaims responsibility for any analyses, interpretations, or conclusions.



## APPENDIX D. PHMC QUALIFICATIONS

Public Health Management Corporation (PHMC) is a 501(c)(3) non-profit corporation founded in 1972. PHMC serves as a facilitator, developer, intermediary, manager, advocate, innovator, and researcher in the field of public health.

The Research & Evaluation Group (R&E Group) at PHMC has extensive experience working in applied research and evaluation of health services, public health, social services, and education systems in the Southeastern Pennsylvania region. With more than 50 successfully completed Community Health Needs Assessments (CHNA) since 2013, R&E Group brings a wealth of expertise and content knowledge to the CHNA process.

R&E Group develops CHNAs in partnership with our clients, using a number of data-oriented approaches, to best integrate secondary and primary data in order to describe the most pressing health-related needs of hospitals' service populations. We leverage data to produce actionable CHNAs that detail the health-related characteristics, real world implications, and community health needs of hospitals' communities. For more information about R&E Group, please visit us at [www.phmcresearch.org](http://www.phmcresearch.org)

### CORE CHNA TEAM

**Diana Harris, MBe, PhD, CHNA Director** – gave oversight to the CHNA process, including, budget management, as well leading the data collection and analytic processes, and guiding the overarching architecture and design of all MLH CHNA report writing from pre-to post-production. Dr. Harris is a Research Scientist with 15+ years of combined professional work experience in nationally ranked academic medical settings, as well as public and private industry sectors. She is a health disparities researcher with excellent qualitative data and research design skills; an ability to conceptualize, initiate, and foster R&E collaborations with multiple stakeholders and constituents; as well as disseminate data orally and through peer reviewed publications to wide-ranging audiences. Dr. Harris has a PhD in Public Health from Temple University and a Masters in Bioethics from University of Pennsylvania.

**Gary Klein, Senior Data Analyst, PhD** – responsible for creating all data files and performing all statistical analyses of the quantitative data. Dr. Klein has over 25 years of experience working on diverse research and evaluation projects, including the Southeastern Pennsylvania Household Health Survey and supportive demographic-based files. He specializes in programming tasks to clean, merge, aggregate and analyze data as well as weighting survey data. Dr. Klein has a PhD in Sociology from Temple University.

**Sarah String, M.P.H., Project Manager** – earned her M.P.H. from Arcadia University in 2016; she also has a B.S. in Biology with a minor in Chemistry from Houghton College. Sarah has worked on the Community Health Database team since 2015, processing data and working with members to conduct meaningful program evaluations using the Southeastern Pennsylvania Household Health Survey data and supportive demographic files.

## APPENDIX D. PHMC QUALIFICATIONS

**Mattie Bodden, Research Coordinator, B.S.** – assisted with scheduling focus groups, development of qualitative instruments, facilitation of focus groups and interviews, extracting themes, and report writing. Ms. Bodden also developed data visualization for the CHNAs, coordinated tasks around building reports, and assisted with technical logistics of CHNA implementation. Ms. Bodden has five years of experience in implementing research and program evaluation including qualitative and quantitative data coding, analysis and interpretation skills; visualization of both qualitative and quantitative data findings; ability to disseminate data orally and in writing; as well as ability to communicate and collaborate with stakeholders broadly. Ms. Bodden has a Bachelor of Science in Public Health from Rutgers University- New Brunswick.

**Darion Porter, Research Assistant, B.A.** – assisted with the logistics of CHNA implementation, including developing flyers and recruitment materials, screening and tracking participants, and scheduling focus groups. He assisted with focus group and interview development, facilitation, analysis, and report writing. Mr. Porter assisted Dr. Klein in secondary data file preparation and analysis and prepared maps that describe geovisualization of data findings. Mr. Porter also has experience in qualitative research including developing interview guides; conducting interviews, focus groups, and observations; and coding and analyzing data. Mr. Porter has a BA in Environmental Studies from Temple University.

### **Acknowledgements:**

Shyanne Ruiz, Operations Assistant (formatting and visualization)

Emma Pitcher, B.S. Candidate 2019, Project Assistant (data and review)

Andrew Jones, M.P.A. Candidate 2019, Intern (data and review)

Venise Salcedo, M.P.H. Candidate 2020, Intern (data and review)

Justine Wilson, B.S. Candidate 2019, Intern (data and review)



## APPENDIX E. IMPACT STATEMENT FROM 2016 CHNA

### **ACCESS TO BEHAVIORAL HEALTH CARE**

FY17: Access to quality behavioral health services and education programs for low-income, uninsured persons diagnosed with a behavioral health disorder in partnership with Health and Social Service Agencies were provided through our community benefit grants program in FY17. Family Service Association (FSA) provided mental health counseling and treatment for 96 persons at the Bucks County Emergency Shelter. Two FSA clinicians (one is Spanish speaking) provided the following mental health services at and the Bucks County Health Improvement Partnership (BCHIP) Adult Clinic: 14 initial behavioral health assessments; 206 individual and Family therapy sessions; 2 Psychiatric Evaluations; 6 medication monitoring sessions; 79 full depression screenings and 5 suicide severity assessments for low income uninsured patients at the clinic. FSA behavioral health clinicians also provided focused behavioral health therapy and information and referral for 40 children and their families enrolled at the St Mary Children's Health Center; St. Mary Grant support: Gaudenzia and Today, Inc. for substance abuse recovery and stabilization services for 5 uninsured patients; St. Mary Grant support: Bucks County Housing Group for case management services and housing for 12 families (13 adults, 22 children) who were chronically homeless with mental health disorder; and for anti-bullying and suicide prevention programs for school-aged youth through the Peace Center and Minding Your Mind Foundation for 7,400 school-aged youth in Bucks County.

FY18: In FY18, access to quality mental health services and education programs for low-income, uninsured persons diagnosed with a behavioral health disorder in partnership with Health and Social Service Agencies was provided through our community benefit grants program. Family Service Association (FSA) provided mental health counseling and treatment for 80 families at the Bucks County Health Improvement Partnership (BCHIP) Adult Clinic and St. Mary Children's Health Center. Mental health screening and intervention included assessment, individual and family therapy, medication monitoring, depression screenings, and psychiatric referral as needed for low income uninsured patients at the above noted health centers. St. Mary also awarded grant support to FSA for school-based mental health counseling services for 10 students in crisis. Substance abuse recovery and stabilization services for 12 uninsured Bucks County residents was provided through grant support to Gaudenzia, Inc.; Grant support for Bucks County Housing Group case management services and housing for 22 persons (8 adults, 14 children) who were chronically homeless with mental health disorder; suicide prevention education through Minding Your Mind Foundation for 10,200 school-aged youth in 16 Bucks County Schools.

### **ROUTINE CANCER SCREENINGS IN WOMEN**

FY17: Improved access to routine cancer screenings and education for low-income uninsured individuals, including 258 mammograms for low income uninsured women ages 40 and up who meet screening criteria. Five breast cancer cases were diagnosed and treated in FY17. This effort was carried out in partnership with Bucks County Health Improvement Partnership, the St. Mary Radiology Team and Breast Surgeons at St. Mary Breast Center, and the St. Mary Regional Cancer Center.

FY18: Improved access to routine cancer screenings and education for low-income uninsured individuals, including 226 mammograms for low income uninsured women ages 40 and up who meet screening criteria. This effort was carried out in partnership with Bucks County Health Improvement Partnership, the St. Mary Radiology Team and Breast Surgeon at St. Mary Breast Center, and the St. Mary Regional Cancer Center.

## APPENDIX E. IMPACT STATEMENT FROM 2016 CHNA

### **EDUCATION PROGRAMS TO ADDRESS HEART HEALTHY LIFESTYLES**

FY17: Provided heart healthy lifestyle education programs for low-income and vulnerable patient populations including: a childhood obesity prevention program for 3,452 school-aged youth and their families; a diabetes self-management and prevention program for 17 adults with diabetes and 25 adults at risk for Type 2 diabetes; and increased access to healthy affordable fresh fruits and vegetables for those in poverty and the broader community through two food insecurity programs, Farm to Families and Fresh Connect Mobile Food Pantry, which reached 1,105 community members in FY17. These programs are carried out in partnership with Bucks County School District Nurses, St. Christopher's Foundation for Children "Farm to Families Initiative," Lancaster Farm Fresh, Breast Feeding Resource Center, Penn State University, St. Mary Wellness Center, and Lower Bucks YMCA. SMRH addressed the unmet health need of heart healthy lifestyle education for low-income and vulnerable patient populations in FY17. The hospital took the following actions:

Clinical therapy staff educated patients and their families, as well as community members, about the importance of safe and appropriate exercise and activity. This was conducted through monthly support group meetings held at SMRH, including Stroke, Amputee and Parkinson's Support Groups, and engaged community participants in walking and nutrition education during St. Mary and American Heart Association Heart Chase educational event located on St. Mary Rehabilitation Hospital Walking Trail.

Nutritional services staff also educated patients and their families about the importance of a healthy and balanced diet. Participants learned how to prepare healthy meals during a hands-on preparation and tasting experience at the Activities of Daily Living Center on the SMRH campus.

FY18: Provided healthy lifestyles and heart healthy lifestyle education programs for low-income and vulnerable patient populations including: a childhood obesity prevention program for 7,736 school-aged youth and their families; diabetes prevention program for 99 adults at risk for Type 2 diabetes; increased access to healthy affordable fresh fruits and vegetables for those in poverty and the broader community through two food insecurity programs; and Farm to Families and Fresh Connect Mobile Food Pantry, which both combined reached 4,737 community members in FY18. These programs are carried out in partnership with Bucks County School District Nurses, Lower Bucks YMCA, St. Christopher's Foundation for Children "Farm to Families Initiative," Lancaster Farm Fresh and Hunger and Nutrition Coalition.

## APPENDIX E. IMPACT STATEMENT FROM 2016 CHNA

### **ACCESS TO CARE**

FY17: Provided primary and preventive health care services for low-income uninsured eligible adults and children through support and enrollment into Medicaid and St. Mary Financial Assistance programs. In FY17, 2,589 Medicaid patients received services at St. Mary, and 17,725 patients qualified and received St. Mary financial assistance. At the St. Mary Children's Health Center, 3,100 children received medical care and the Mother Bachmann Maternity Center delivered 445 babies in FY17. St. Mary also provided grant support and charity care for 777 Bucks County Health Improvement Partnership Adult Clinic patients.

FY18: Provided primary and preventive health care services for low-income uninsured eligible adults and children through support and enrollment into Medicaid and St. Mary Financial Assistance programs. In FY18, 2,604 Medicaid patients received services at St. Mary, and 16,201 patients qualified and received St. Mary financial assistance. At the St. Mary Children's Health Center, 3,878 children received medical care and the Mother Bachmann Maternity Center delivered 350 babies in FY18. St. Mary also provided grant support and charity care for 822 Bucks County Health Improvement Partnership Adult Clinic patients.

### **HOMELESSNESS**

FY17: The homeless, or those at risk of becoming homeless, received improved access to eviction prevention resources, housing, and case management services for through our grant support, in partnership with the following nonprofit organizations: Advocates for the Homeless and Those in Need, which reached 7,356 individuals through Code Blue, Wheels to Meals and Those and Need Mission; Bucks County Housing Group, which provided supportive housing for 31 families (95 individuals) and diversion from housing crisis for 361 households; Interfaith Housing Visions, which provided eviction prevention assistance for 14 families; and Way Home, Inc., which provided congregate living for 11 homeless males.

FY18: The homeless, or those at risk of becoming homeless, received improved access to eviction prevention resources, housing, and case management services through our grant support, in partnership with the following nonprofit organization: Bucks County Housing Group, which provided supportive housing for 80 individuals.

## APPENDIX F. SUMMARY OF SEPT. 2018 STAKEHOLDER MEETING

### DEMOGRAPHICS OF COMMUNITY STAKEHOLDERS

The hospital solicited and took into account input from persons or organizations that represent the broad interests of the community it serves. This input was solicited from local community representatives of the medically underserved, low-income, and minority populations in the service area and from public health officials, social service providers, and clinicians.

Community organizations at the External Stakeholder Meeting on September 17th, 2018 included members from local nonprofit health and social service agencies, Bucks County Health Department, public health experts, medical staff and many community members. Stakeholders at the meeting were most often directors, administrators, and managers at their respective organizations. Many of the stakeholders worked in social work, social services, and held various health administration positions. Individuals worked in their respective positions for an average of seven and a half years, ranging from less than a year to eighteen years at their current position.

External Stakeholder Community Organizations and members included:

1. Catholic Health Care Services –
2. Penn Community Bank
3. Bucks County Opportunity Council
4. Catholic Social Services
5. Family Service Association Bucks County & Opioid Behavioral Health Center of Excellence for Bucks County
6. Community Member & Mission Board Member
7. Bucks County Health Dept
8. Bucks County Health Dept
9. St. Mary Health Center, St. Mary Children's Health Center & Mother Bachmann Maternity Center (clinics)
10. BCHIP
11. St. Mary Foundation
12. St. Mary Community Health & Well-Being
13. St. Mary Mission Integration

### COMMUNITY FEEDBACK

In order to gain qualitative data on the health needs of the St. Mary community and to gain feedback from prior CHNA completed in 2016, stakeholders were asked to complete a health ranking exercise to evaluate the following health indicators:

- Routine Cancer Screenings
- Education Programs to address Cancer/Coronary Heart Disease
- Healthy Lifestyle Education
- Mental Health
- Affordable Food & Safe Places to Play
- Alzheimer's disease
- Smoking (including Juuls & vapes)
- Asthma
- Falls (older adults)
- Access to Care

## APPENDIX F. SUMMARY OF SEPT. 2018 STAKEHOLDER MEETING

In order to identify the most pressing needs of the community, community stakeholders were asked to evaluate the health indicators according to two factors- impact on the population and importance. Stakeholders were asked to rate each health indicator based on the impact they thought it would have on the St. Mary population if the health need was not met. They used a rating scale of one to five, with one having a minimal impact on the population and five having the highest possible impact. Stakeholders then ranked each health indicator based on how important they felt that the health need is within the St. Mary population. They used a scale of one to three, with one being worthy of consideration but not a major factor, and three being of overriding importance to the community. A score for each health indicator was calculated by multiplying the rank and rate awarded to each health indicator. The higher the score given to a health indicator, the greater the potential impact and importance to the community, and as a result considered a higher priority for St. Mary's to address in the future. The average score for each health indicator is given below.

Health Ranking Exercise Results			
Health Indicator	M	R	SD
Mental Health	15	3	1
Access to Care	14	7	2
Affordable Food & Safe Places to Play	9	13	4
Routine Cancer Screenings	8	9	3
Asthma	8	13	4
Smoking (including Juuls & Vapes)	8	13	3
Cancer & Coronary Heart Disease Education	7	13	3
Healthy Lifestyle Education	7	13	4
Falls (older adults)	6	13	5
Alzheimer's	6	13	4

Notes: N = 13. M = mean, R = range, SD = standard deviation. Maximum score possible is 15.  
\*Surveys with inaccurate calculations were omitted from this assessment.

Mental Health and Access to Care had the highest average scores and were most often assigned the highest priority among community members. In addition, mental health was ranked to have "overriding importance" by all stakeholders. Indicators with health education components were consistently rated important to community members, but were not seen as high impact areas for the community. Falls among older adults and Alzheimer's were deemed the lowest priority amongst community stakeholders. Community members commented that needs such as housing, transportation, and opioid awareness were additional issues with high importance and impact in the community.

Stakeholders consistently noted mental health as a high priority in the community, and commented that the lack of access to mental health services destabilizes families, with long waiting lists being especially difficult for low income families. Poverty was mentioned by multiple stakeholders as having a high impact on the community, with low income families cutting food and housing to make ends meet. One stakeholder indicated that low income community members often see health care, especially preventive care, as a luxury rather than a necessity. It was also noted that income impacts community members' access to care, with issues such as transportation to health services being cited by stakeholders as a major deterrent for patients. Stakeholders suggested providing direct patient care for services such as immunizations and STD/HIV testing, as well as health literacy programs to help overcome health barriers in the community.



# APPENDIX G. 2018-2019 SMMC HEALTH NEEDS TABLE

Health Need	Impacted Population(s)	Evidence around health need <sup>1,2,3,4</sup>	Additional health needs considerations
<b>1st Leading Cause of Death: Cancer</b>	All residents	<ul style="list-style-type: none"> <li>Cancer caused on average 896 deaths annually (mortality rate 159.2 per 100,000)<sup>1</sup></li> <li>Prevalence of breast cancer: 6,462 cases<sup>2</sup></li> <li>Prevalence of lung cancer: 1,235 cases<sup>2</sup></li> <li>Of women ages 50-74, 75.9% had a mammogram in the past two years; this does not meet Healthy People 2020 goal (81.1%)<sup>3</sup></li> <li>32.4% of adults (age 50+) have not had sigmoid/colonoscopy in the past 10 years, which is significantly worse than that of SEPA (25.9%)<sup>4</sup></li> <li>25.3% of women (age 18-64) have not had a pap test in the past 3 years, which is significantly worse than that of SEPA (17.4%)<sup>4</sup></li> <li>15.3% of adult residents currently smoke</li> <li>Heart disease caused on average of 835 deaths annually (mortality rate 140 deaths per 100,000)<sup>1</sup></li> <li>Prevalence of coronary heart disease: 18,842 cases<sup>2</sup></li> <li>Prevalence of congestive heart failure: 11,290 cases<sup>2</sup></li> <li>CLRD was the third leading cause of death (excluding fatal injuries and unintentional injuries) contributing 189 deaths annually (mortality rate 32.9 deaths per 100,000)<sup>1</sup></li> <li>Prevalence of emphysema: 6,629 cases<sup>2</sup></li> <li>Prevalence of hypertension: 116,123 cases<sup>2</sup></li> <li>9.8% of adults have not had a blood pressure screening in the past year, which is significantly worse than SEPA (7.1%)<sup>4</sup></li> </ul>	<ul style="list-style-type: none"> <li>Education and awareness of women's health screening – mammogram</li> <li>Education and awareness of women's health screening – pap test</li> <li>Education and awareness for Lung cancer screening</li> <li>Education and awareness for sig/Colonoscopy screening</li> <li>Coronary heart disease</li> <li>Congestive heart failure</li> <li>Chronic lower respiratory disease</li> <li>Access to blood pressure screening</li> <li>Access to quality mental health treatment</li> <li>Access to substance abuse treatment</li> <li>Access to care for uninsured, especially those living in poverty</li> </ul>
<b>2nd Leading Cause of Death: Heart disease</b>	All residents	<ul style="list-style-type: none"> <li>Of residents with mental health condition, 40.3% are not currently receiving treatment<sup>4</sup></li> <li>Prevalence of anxiety and depression: 19,752 cases<sup>2</sup></li> <li>Mortality rate due to drug-induced causes (28.9 deaths per 100,000) was higher than Bucks County (26.8 per 100,000) and SEPA (26.8 per 100,000)<sup>1</sup></li> <li>Unemployment rate is 6.3%<sup>2</sup></li> <li>8.1% of residents are uninsured in the service area<sup>4</sup></li> <li>15.5% of residents do not have a usual place of care when they are sick or need health advice<sup>4</sup></li> <li>Among single parents with children, 22.1% live in poverty<sup>2</sup></li> <li>The proportion of white mothers who smoked while pregnant (13.5%) was higher than in Bucks County (11.4%) and SEPA (9%)<sup>4</sup></li> </ul>	<ul style="list-style-type: none"> <li>Smoking cessation education expectant mothers</li> <li>Access to prenatal care services</li> </ul>
<b>3rd Leading Cause of Death: Chronic lower respiratory disease (CLRD)</b>	All residents	<ul style="list-style-type: none"> <li>The rate of live births with low birth weight (83 per 1,000) was higher than Bucks County (78.9 per 1,000) and exceeded the Healthy People 2020 goal (76 per 1,000)<sup>4</sup></li> <li>The percent of premature births (9.1%) was higher than in Bucks County (8.9%) and SEPA (8.4%)<sup>1</sup></li> <li>Majority of residents (80.3%) eat &lt; 4 servings of fruit and vegetables a day, significantly worse than SEPA (76.9%)<sup>4</sup></li> <li>Over two-thirds of residents (69.4%) are currently overweight or obese (BMI 25+) compared to neither (BMI &lt; 25); this is significantly worse than SEPA (63.5%)<sup>4</sup></li> <li>About one-third of children in the service area are overweight or obese</li> <li>About one-third (33.5%) of adults have not seen a dentist in the past year, significantly worse than SEPA (29.4%)<sup>4</sup></li> <li>35% of children have not seen a dentist in the past year, significantly worse than SEPA (22.6%)<sup>4</sup></li> </ul>	<ul style="list-style-type: none"> <li>Nutrition education for adults</li> <li>Access to dental care for adults and children</li> </ul>
<b>Mental health care</b>	All residents & low income residents		
<b>Substance abuse treatment</b>	All residents & low income		
<b>Access to care</b>	Low income uninsured residents		
<b>Maternal and infant health</b>	All Mothers and infants		
<b>Weight Management</b>	All residents		
<b>Dental Screenings</b>	All residents		

<sup>1</sup>St. Mary service area includes the following zip codes: 18940, 18954, 18966, 18974, 18976, 18977, 19007, 19020, 19021, 19030, 19047, 19053, 19054, 19055, 19056, 19057, 19057.

**Data Sources**

- Public Health Management Corporation. Community Health Data Base. (2018). Demographic Product 2018. Retrieved from <https://CHDBDataPortal.phmcc.org>  
Underlying primary data sources: 2012-2016 birth and birth outcomes data from PA Department of Health, Bureau of Health Statistics and Registries; and 2012-2016 mortality data from PA Department of Health, Bureau of Health Statistics and Registries
- Claritas 2018 Market Prevalence by Disease Category. (Dec. 2018). Additional data source from St. Mary Medical Center collaborator, Lisa Kelly, Director Community Health & Well-Being and Volunteers
- Claritas 2018 Community Needs Index. (Dec. 2018). Additional data source from St. Mary Medical Center collaborator, Lisa Kelly, Director Community Health & Well-Being and Volunteers
- Public Health Management Corporation. Community Health Data Base. (2018). Household Health Survey.

# APPENDIX H.

## CHI-SQUARE TESTS OF SIGNIFICANCE DATA TABLE

### ST. MARY SERVICE AREA & REMAINDER OF SOUTHEASTERN PENNSYLVANIA (SEPA) COMPARISON

**KEY:**

**ns** = not significant, **.05** = statistically significant,  
**.01** = very statistically significant, **.001** = very highly statistically significant  
**Green** = Region is statistically significantly better than the other  
**Red** = Region is statistically significantly worse than the other

Health Measure	St. Mary Service Area	Remainder of SEPA	p Value
<b>ADULT (18 – 64)</b>	<b>N=695</b>	<b>N=6,735</b>	
In fair or poor health	17.3%	19.5%	ns
Has ever been told by a health professional they have or had high blood pressure	30.0%	31.8%	ns
Has ever been told by a health professional they have or had Diabetes	13.5%	12.3%	ns
Has ever been told by a health professional they have or had Asthma	15.2%	18.5%	.05
Currently overweight or obese (BMI 25+) compared to neither (BMI < 25)	69.4%	63.5%	.001
Currently obese (BMI 30+) compared to not obese (BMI < 30)	32.7%	29.8%	ns (p=.09)
Ever been diagnosed with a mental health condition	17.3%	22.9%	.001
Is NOT currently receiving treatment for said mental health condition	40.3%	43.4%	ns
Did not seek health care due to the cost during a time they were sick or injured in the past year	8.3%	10.6%	.05
Did not fill a prescription due to the cost in the past year	12.8%	13.3%	ns

# APPENDIX H.

## CHI-SQUARE TESTS OF SIGNIFICANCE DATA TABLE

### ST. MARY SERVICE AREA & REMAINDER OF SOUTHEASTERN PENNSYLVANIA (SEPA) COMPARISON

**KEY:**

**ns** = not significant, **.05** = statistically significant,  
**.01** = very statistically significant, **.001** = very highly statistically significant  
**Green** = Region is statistically significantly better than the other  
**Red** = Region is statistically significantly worse than the other

Currently uninsured	<b>8.1%</b>	<b>11.1%</b>	<b>.05</b>
Does NOT have a USUAL person or place of care to go when they are sick or need health advice	<b>15.5%</b>	<b>13.2%</b>	<b>ns (p=.08)</b>
Has NOT visited a healthcare provider in the past year	<b>14.1%</b>	<b>12.2%</b>	<b>ns</b>
Has not seen a dentist in the past year	<b>33.5%</b>	<b>29.4%</b>	<b>.05</b>
Has visited the emergency room in the past year	<b>23.8%</b>	<b>27.6%</b>	<b>.05</b>
Has not had a blood pressure reading in the past year	<b>9.8%</b>	<b>7.1%</b>	<b>.01</b>
Adult 50 years or older that has NOT had a sigmoid/colonoscopy in the past 10 years	<b>32.4%</b>	<b>25.9%</b>	<b>.01</b>
Women 18 to 64 years old that have NOT had a pap test in the past 3 years	<b>25.3%</b>	<b>17.4%</b>	<b>.001</b>
Women ages 50 to 74 that have not had a mammogram in the past 2 years	<b>23.8%</b>	<b>19.3%</b>	<b>ns</b>
Men over the age of 45 that have not had a prostate exam in the past year	<b>42.2%</b>	<b>49.6%</b>	<b>.05</b>
Usually has LESS than 4 servings of fruits or vegetables a day	<b>80.3%</b>	<b>76.9%</b>	<b>.05</b>
Usually exercises for 30+ minutes LESS than 3 days a week	<b>44.8%</b>	<b>42.0%</b>	<b>ns</b>
Currently smokes cigarettes	<b>15.3%</b>	<b>15.3%</b>	<b>ns</b>
Smokes and has NOT tried to quit in the past year	<b>49.6%</b>	<b>49.4%</b>	<b>ns</b>
Smokes and has used an e-cigarette in the past month	<b>9.0%</b>	<b>7.9%</b>	<b>ns</b>
Rated as having low social capital	<b>27.3%</b>	<b>29.9%</b>	<b>ns</b>



# APPENDIX H.

## CHI-SQUARE TESTS OF SIGNIFICANCE DATA TABLE

### ST. MARY SERVICE AREA & REMAINDER OF SOUTHEASTERN PENNSYLVANIA (SEPA) COMPARISON

**KEY:**

**ns** = not significant, **.05** = statistically significant,  
**.01** = very statistically significant, **.001** = very highly statistically significant  
**Green** = Region is statistically significantly better than the other  
**Red** = Region is statistically significantly worse than the other

Has drank soda, a fruit drink, or bottled tea once or more a day in the past month	<b>28.0%</b>	<b>26.6%</b>	<b>ns</b>
<b>OLDER ADULTS (65+)</b>	<b>N=314</b>	<b>N=2,773</b>	
In fair or poor health	<b>21.0%</b>	<b>22.8%</b>	<b>ns</b>
Has an ADL limitation	<b>13.2%</b>	<b>15.0%</b>	<b>ns</b>
Has an IADL limitation	<b>25.4%</b>	<b>31.2%</b>	<b>.05</b>
Has signs of major depression	<b>11.2%</b>	<b>11.8%</b>	<b>ns</b>
Talks with friends or relatives less than once a week	<b>5.4%</b>	<b>5.4%</b>	<b>ns</b>
<b>CHILDREN (0-17)</b>	<b>N=100</b>	<b>N=1,136</b>	
In fair or poor health	<b>3.3%</b>	<b>3.8%</b>	<b>ns</b>
Participates in physical activity less than 3 times per week (Ages 3+)	<b>12.1%</b>	<b>12.6%</b>	<b>ns</b>
Currently obese (BMI 95-100 percentile) (Ages 6+)	<b>19.5% *</b>	<b>26.3%</b>	<b>ns</b>
Currently overweight (BMI 85-94 percentile) (Ages 6+)	<b>19.5%</b>	<b>26.8%</b>	<b>ns</b>
Has NOT seen a dentist in the past year	<b>35.0%</b>	<b>22.6%</b>	<b>.001</b>

Source: PHMC's 2018 Southeastern Pennsylvania Household Health Survey

\*15% is the percentage of children who are obese (children with BMI 95-100) out of the entire child population. 19% is the percentage of children who are obese out of children who are of normal weight.

# APPENDIX I. DATA TABLES: COUNTY HEALTH RANKINGS

Measures	County State		
	Bucks	PA	US *
<b>Health Outcomes</b>	6		
<i>Length of Life</i>	9		
Premature death /100,000	6,000	7,500	7,500
<i>Quality of Life</i>	11		
% Adults reporting fair or poor health	12%	15%	16%
Avg. physically unhealthy days/month	3.2	3.9	3.8
Avg. mentally unhealthy days/month	3.7	4.3	3.8
% Live births with low birth weight <2500g	8%	8%	8%
<b>Health Factors</b>	2		
<i>Health Behaviors</i>	1		
% Adults report currently smoking cigarettes	12%	18%	17%
% Adults reporting BMI >= 30	28%	30%	31%
Food environment index (0-worst; 10-best)	8.9	8.2	7.3
% Adults 20+ reporting no leisure-time physical	19%	22%	26%
% Pop. with adequate access to locations for physical activity	90%	84%	62%
% Adults reporting binge drinking	21%	21%	17%
% Alcohol-impaired driving deaths	29%	28%	30%
Newly diagnosed chlamydia cases /100,000	245	444.7	497.3
Teen birth rate /1,000 female pop., ages 15-19	8	20	38
<i>Clinical Care</i>	4		
% adults under age 65 without health insurance	5%	7%	14%
Ratio of pop. to primary care physicians	1,160:1	1,230:1	2,030:1
Ratio of pop. to dentists	1,210:1	1,460:1	2,570:1
Ratio of pop. to mental health providers	440:1	530:1	1,105:1
Preventable hospital stays/1,000 Medicare	42	45	56
% Diabetic Medicare enrollees receiving HbA1c test * Source: County Health Rankings, 2017 (Not in 2019 data)	88%	86%	86%
% Female Medicare enrollees receiving	46%	44%	61%
<i>Social &amp; Economic Factors</i>	5		
% Students who graduate HS in 4 years	94%	87%	84%
% Adults, age 25-44 with some college education	73%	64%	57%
% Pop. age 16+ unemployed but seeking work	4.2%	4.90%	5.30%
% Under age 18 in poverty	8%	17%	22%
Income Inequality	4.3	4.8	4.4
% Children in single parent households	22%	34%	32%
# of member associations per 10,000	7.6	12.3	12.6
Violent crime /100,000	96	315	198
Injury mortality /100,000	72	81	77
<i>Physical Environment</i>	52		
Avg. daily fine particulate matter in micrograms/cubic meter (PM2.5)	10.1	10.6	9.2
Health-related drinking water violations (yes/no)	Yes		
% Households with severe housing problems	15%	15%	14%
% Workforce driving alone to work	82%	76%	81%
% Commuting 30+ mins to work, driving alone	43%	36%	30%

\*Source: America's Health Rankings, 2018 and 2019



# APPENDIX I. DATA TABLES: COUNTY HEALTH RANKINGS

## Data tables: Demographic, birth outcomes, and mortality

**Table 1. 2018 U.S. Census Socio-Demographic Indicators: St. Mary Service Area**

	<u>St. Mary Service Area</u>	<u>SEPA</u>
Total Population N(%)	414,400	4,111,194
<u>Age</u>		
0-17	82,577 (19.9)	897,970 (21.8)
18-34	82,219 (19.8)	968,461 (23.6)
35-64	172,674 (41.7)	1,592,845 (38.7)
65+	76,930 (18.6)	651,918 (15.9)
<u>Gender</u>		
Male	202,642 (48.9)	1,981,595 (48.2)
Female	211,758 (51.1)	2,129,598 (51.8)
<u>Race/Ethnicity*</u>		
White	347,267 (83.8)	2,622,941 (63.8)
Black	22,792 (5.5)	916,796 (22.3)
Asian	24,450 (5.9)	279,561 (6.8)
Other	20,306 (4.9)	287,783 (7.0)
Latino	26,522 (6.4)	374,118 (9.1)

*Note:* \*Race is defined as a person's self identified social group. Ethnicity determines whether a person is of Hispanic or Latino descent. Source: Claritas 2018 Pop-Facts Data Base. Calculations prepared by PHMC.

**Table 2. 2018 U.S. Census Socio-Economic Indicators: St. Mary Service Area**

	<u>St. Mary Service Area</u>	<u>SEPA</u>
Total Population N(%)	414,400	4,111,194
<u>Income</u>		
Median Household Income	\$87,960	\$70,807

Source: Claritas 2018 Pop-Facts Data Base. Calculations prepared by PHMC.

# APPENDIX I. DATA TABLES: COUNTY HEALTH RANKINGS

**Table 2.1 2018 U.S. Census Socio-Economic Indicators:  
St. Mary Service Area**

	<u>St. Mary Service Area</u>	<u>SEPA</u>
Total Population 25+ N(%)	297,490	2,824,892
<u>Education</u>		
Less than HS	20,824 (7.0)	302,263 (10.7)
HS Graduate	170,164 (57.2)	1,474,593 (52.2)
College or More	106,501 (35.8)	1,048,034 (37.1)

*Note:* Educational attainment refers to the highest level of education completed in terms of the highest degree or the highest level of schooling completed, and is asked of all civilians 25 years old and over.

Source: Claritas 2018 Pop-Facts Data Base. Calculations prepared by PHMC.

**Table 2.2 2018 U.S. Census Socio-Economic Indicators:  
St. Mary Service Area**

	<u>St. Mary Service Area</u>	<u>SEPA</u>
Total Population 16+ N(%)	342,509	3,317,575
<u>Employment</u>		
Employed	320,931 (93.7)	3,062,122 (92.3)
Unemployed	21,578 (6.3)	255,453 (7.7)

*Note:* Employment is calculated as all civilians 16 years old and over who were either (1) "at work" or (2) "with a job but not at work."

Source: Claritas 2018 Pop-Facts Data Base. Calculations prepared by PHMC.

# APPENDIX I. DATA TABLES: COUNTY HEALTH RANKINGS

**Table 2.3 2018 U.S. Census Socio-Economic Indicators:  
St. Mary Service Area**

	<u>St. Mary Service Area</u>	<u>SEPA</u>
Total Families with children n(%)	47,908	478,192
<u>Poverty Status</u>		
Families living in poverty WITH children	3,401 (7.1)	77,947 (16.3)

Source: Claritas 2018 Pop-Facts Data Base. Calculations prepared by PHMC.

	<u>St. Mary Service Area</u>	<u>SEPA</u>
Total Families without children n(%)	65,590	535,454
<u>Poverty Status</u>		
Families living in poverty WITHOUT children	1,725 (2.6)	26,855 (5.0)

Source: Claritas 2018 Pop-Facts Data Base. Calculations prepared by PHMC.

**Table 2.4 2018 U.S. Census Socio-Economic Indicators:  
St. Mary Service Area**

	<u>St. Mary Service Area</u>	<u>SEPA</u>
Total Households N(%)	158,134	1,582,081
<u>Housing Unit Type</u>		
Renter-occupied	39,059 (24.7)	537,681 (34.0)
Owner-occupied	119,075 (75.3)	1,044,400 (66.0)

Source: Claritas 2018 Pop-Facts Data Base. Calculations prepared by PHMC.

# APPENDIX I. DATA TABLES: COUNTY HEALTH RANKINGS

**Table 3. 2018 U.S. Census Language Spoken at Home:  
St. Mary Service Area**

	<u>St. Mary Service Area</u>	<u>SEPA</u>
Total Population 5+ N(%)	394,021	3,864,457
<u>Language Spoken at Home</u>		
English	340,828 (86.5)	3,249,121 (84.1)
Spanish	14,972 (3.8)	231,712 (6.0)
Asian Language	9,062 (2.3)	154,549 (4.0)
Indo-European Language	26,793 (6.8)	193,466 (5.0)
Other Language	2,364 (0.6)	35,609 (0.9)

Note: Language spoken at home is calculated for all citizens 5 years and over.

Source: Claritas 2018 Pop-Facts Data Base. Calculations prepared by PHMC.

**Table 4. 2012-2016 Average Annualized Fertility Rates for  
Women 15-44 Years by Race and Ethnicity: St. Mary Service  
Area**

	<u>St Mary Service Area</u>	<u>Bucks County</u>	<u>SEPA</u>
All Women 15-44 N (Rate per 1,000)	3,399 (45.9)	5,099 (47.2)	47,453 (58.9)
<u>Race/Ethnicity*</u>			
White	2,562 (42.2)	4,086 (43.9)	24,426 (48.2)
Black	248 (52.8)	273 (53.2)	13,289 (64.7)
Asian	274 (52.8)	337 (52.5)	3,526 (55.1)
Other	264 (79.2)	324 (38.7)	4,582 (19.6)
Latina	343 (65.2)	432 (64.0)	6,060 (75.9)

Note: The fertility rate is calculated per 1,000 women 15-44 years of age. White, Black, Asian and Other races include Latinas. \*Unknown race and ethnicity appear only for the total. . =Not Displayed.

Source: Pennsylvania Department of Health, Bureau of Health Statistics and Research. Calculations prepared by PHMC.

# APPENDIX I. DATA TABLES: COUNTY HEALTH RANKINGS

**Table 5. 2012-2016 Average Annualized Fertility Rates for Women 15-19 Years by Race and Ethnicity: St. Mary Service Area**

	<u>St. Mary Service Area</u>	<u>Bucks County</u>	<u>SEPA</u>
<b>All Women 15-19 N(Rate per 1,000)</b>	107 (8.7)	139 (7.1)	2,592 (19.3)
<b><u>Race/Ethnicity*</u></b>			
White	71 (7.1)	98 (5.8)	541 (6.6)
Black	16 (22.3)	17 (21.4)	1,377 (40.4)
Asian	.	.	43 (5.1)
Other	18 (21.5)	22 (11.9)	495 (11.1)
Latina	24 (26.1)	31 (26.5)	686 (50.5)

*Note:* The fertility rate is calculated per 1,000 women 15-44 years of age. White, Black, Asian and Other races include Latinas. Rates are not calculated when there are less than 6 occurrences of the event over the course of 2012-2016. \*Unknown race and ethnicity appear only for the total.

Source: Pennsylvania Department of Health, Bureau of Health Statistics and Research. Calculations prepared by PHMC.

**Table 6. 2012-2016 Average Annualized Percentage of Women Receiving Late or No Pre-natal Care by Race and Ethnicity: St. Mary Service Area**

	<u>St. Mary Service Area</u>	<u>Bucks County</u>	<u>SEPA</u>
<b>All Live Births N (%)</b>	1,036 (30.9)	1,343 (26.8)	16,946 (37.6)
<b><u>Race/Ethnicity*</u></b>			
White	679 (26.9)	922 (23.0)	6,430 (27.0)
Black	128 (52.5)	139 (51.7)	6,302 (52.0)
Asian	78 (28.9)	91 (27.4)	1,244 (36.9)
Other	129 (49.9)	160 (50.3)	2,213 (51.5)
Latina	165 (49.2)	204 (48.5)	2,851 (50.0)

*Notes:* White, Black, Asian, and Other races include Latina/os. \*Unknown race and ethnicity only appear for the total. The percentage of women receiving late or no prenatal care is calculated as the percentage of all live births that have birth certificate data on receipt of prenatal care. Late prenatal care is defined as not having a recorded prenatal care visit in the 1st or 2nd trimesters, or none at all.

Source: Pennsylvania Department of Health, Bureau of Health Statistics and Research. Calculations prepared by PHMC.



# APPENDIX I. DATA TABLES: COUNTY HEALTH RANKINGS

**Table 7. 2012-2016 Average Annualized Low Birth Weight by Race and Ethnicity: St. Mary Service Area**

	<u>St. Mary Service Area</u>	<u>Bucks County</u>	<u>SEPA</u>
<b>All Live Births</b>			
<b>N (Rate per 1,000)</b>	283 (83.0)	404 (78.9)	4,329 (90.9)
<b><u>Race/Ethnicity*</u></b>			
White	202 (78.7)	310 (75.5)	1,686 (68.7)
Black	27 (107.5)	29 (106.1)	1,779 (133.3)
Asian	28 (103.4)	33 (97.1)	282 (79.7)
Other	19 (73.2)	23 (71.1)	406 (88.3)
Latino/a	24 (70.3)	31 (70.6)	527 (86.7)

Note: Low birth weight is defined as an infant weighing less than 2500 grams (5.5 lbs.) at birth. The low birth weight rate is calculate per 1,000 live births. White, Black, Asian and Other races include Latino/as. \*Unknown race and ethnicity appear only for the total. . =Not Displayed. Rates are not calculated when there are less than six occurrences of the event over the course of 2012-2016.

Source: Pennsylvania Department of Health, Bureau of Health Statistics and Research. Calculations by PHMC.

**Table 8. 2012-2016 Average Annualized Percentage of Infants Born Prematurely by Race and Ethnicity: St. Mary Service Area**

	<u>St. Mary's Service Area</u>	<u>Bucks County</u>	<u>SEPA</u>
<b>All Live Births N (%)</b>	313 (9.2)	462 (9.1)	4,622 (9.7)
<b><u>Race/Ethnicity*</u></b>			
White	233 (9.1)	366 (8.9)	2,041 (8.4)
Black	29 (11.6)	31 (11.2)	1,703 (12.8)
Asian	23 (8.5)	30 (8.8)	256 (7.3)
Other	20 (7.5)	25 (7.6)	434 (9.5)
Latino/a	28 (8.1)	35 (8.1)	576 (9.5)

Note: Prematurity is defined as the birth of an infant before 37 weeks gestation. The percentage of infants born prematurely is calculated as a percentage of all live births that have birth certificate data on gestational age. White, Black, Asian and Other races include Latino/as. \*Unknown race and ethnicity appear only for the total. . =Not Displayed. Rates are not calculated when there are less than 6 occurrences of the event over the course of 2012-2016.

Source: Pennsylvania Department of Health, Bureau of Health Statistics and Research. Calculations by PHMC.

# APPENDIX I. DATA TABLES: COUNTY HEALTH RANKINGS

**Table 9. 2012-2016 Average Annualized Infant Mortality Rate by Race and Ethnicity: St. Mary Service Area**

	<u>St. Mary Service Area</u>	<u>Bucks County</u>	<u>SEPA</u>
<b>All Live Births N (Rate per 1,000)</b>	14 (4.0)	19 (3.7)	315 (6.6)
<b><u>Race/Ethnicity*</u></b>			
White	10 (3.9)	14 (3.5)	92 (3.8)
Black	1 (3.2)	1 (4.4)	148 (11.1)
Asian	1 (2.2)	1 (3.6)	11 (3.0)
Other	-	-	28 (6.0)
Latino/a	2 (4.6)	2 (4.2)	35 (5.7)

*Note:* Infant mortality is defined as the death of an infant within the first year of birth and is calculated per 1,000 live infant births. White, Black, Asian and Other races include Latino/as. Unknown race and ethnicity is included only in the total. -=Not Displayed. Rates are not calculated when there are less than 6 occurrences of the event over the course of 2012-2016.

Source: Pennsylvania Department of Health, Bureau of Health Statistics and Research. Calculations by PHMC.

# APPENDIX I. DATA TABLES: COUNTY HEALTH RANKINGS

**Table 10. 2012-2016 Age-Adjusted Annualized Mortality Rates for Selected Causes of Death: St. Mary Service Area**

	<u>H.P. 2020 Goal</u>	<u>St. Mary Service Area</u>	<u>Bucks County</u>	<u>SEPA</u>
<b>All Causes of Death (Rate per 100,000)</b>		689.4	670.7	732.4
All Cancers	161.4	159.2	153.8	168.4
Female Breast Cancer	20.7	22.5	22.0	22.9
Lung Cancer	45.5	41.7	39.3	43.2
Colorectal Cancer	14.5	13.2	13.2	15.2
Prostate Cancer	21.8	18.4	19.0	21.6
Cervical Cancer	2.2	.	.	2.2
Heart Disease	.	140.3	135.6	167.8
Stroke	34.8	30.6	32.6	39.2
Diabetes	66.6*	17.9	17.4	17.9
Kidney Disease	.	14.7	13.8	15.5
Liver Disease	.	6.1	6.2	7.1
Chronic Lower Respiratory Disease	.	32.9	31.8	34.1
Influenza and Pneumonia	.	11.2	11.3	13.7
Septicemia	.	14.6	12.6	14.3
HIV/AIDS	3.3	.	.	2.6
Alzheimer's Disease	.	14.4	16.4	14.1
Homicide	5.5	2.0	1.7	8.7
Homicide by firearm	.	.	.	7.0
Firearm Deaths	9.3	5.5	5.8	11.4
Suicide	10.2	11.5	11.7	10.6
Suicide by Firearm	.	4.4	4.8	4.0
Fatal Injuries	53.7	60.2	59.3	65.7
Drug Overdose (all substances)	.	26.7	24.6	26.0
Drug-Induced Causes	11.3	28.9	26.8	26.8
All Accidents (Unintentional injuries)	36.4	44.1	43.5	44.9
Motor Vehicle Accidents	.	7.2	7.8	5.9

Note: \*Diabetes-related mortality data are derived from the multiple-cause-of-death files. Data include all mentions of diabetes on the death certificate, whether as an underlying cause or a multiple cause of death. Diabetes is approximately three times as likely to be listed as multiple cause of death than as underlying cause. Mortality rates are calculated per 100,000 population. Denominators to calculate age-adjusted rates to the Standard 2000 population derive from 2010 Census Zip Code Tabulation Area data broken down into 11 age groups. .=Not displayed.

Source: Pennsylvania Department of Health, Bureau of Health Statistics and Research. Calculations by PHMC.

## APPENDIX J. RESULTS FROM PROVIDER SURVEY

In February 2019 an online survey was distributed to providers at St. Mary asking to rate the impact of identified health needs on the St. Mary service area. The following table displays the number of respondents and how they scored the impact of each health need.

**Provider perceptions of health needs and possible impact on St. Mary service area population.**

<b>Health Needs</b>	<b>High impact</b>	<b>Medium to high impact</b>	<b>Medium impact</b>	<b>Low impact</b>	<b>Minimal impact</b>	<b>Total N</b>
Education and awareness of women's health screening - mammogram	1	6	.	.	.	7
Education and awareness of women's health screening - pap test	.	7	.	.	.	7
Education and awareness for lung cancer screening	1	6	.	.	.	7
Education and awareness for sig/colonoscopy screening	2	5	.	.	.	7
Coronary heart disease	4	2	1	.	.	7
Congestive heart failure	5	2	.	.	.	7
Chronic lower respiratory disease	2	4	.	.	.	6
Access to blood pressure screening	2	3	2	.	.	7
Access to quality mental health treatment	5	1	1	.	.	7
Access to substance abuse treatment	5	1	1	.	.	7
Access to care for uninsured, especially those living in poverty	5	2	.	.	.	7
Smoking cessation education expectant mothers	1	3	3	.	.	7
Access to prenatal care services	1	5	1	.	.	7
Nutrition education for adults	1	3	3	.	.	7
Access to dental care for adults and children	.	3	2	2	.	7

Note: . = no response

Source: St. Mary Medical Center 2018-2019 Community Health Needs Assessment: Provider Survey

# APPENDIX J. RESULTS FROM EXTERNAL STAKEHOLDER SURVEY

In February 2019 an online survey was distributed to external stakeholders asking to rate the impact of identified health needs on the St. Mary service area. The following table displays the number of respondents and how they scored the impact of each health need if not addressed by St. Mary.

**External Stakeholder Perceptions of Health Needs and Possible Impact on St. Mary Service Area Population**

<u>Health Needs</u>	<u>High impact</u>	<u>Medium to high impact</u>	<u>Medium impact</u>	<u>Low impact</u>	<u>Minimal impact</u>	<u>Total N</u>
Education and awareness of women's health screening - mammogram	2	5	7	2	·	16
Education and awareness of women's health screening - pap test	2	5	6	3	·	16
Education and awareness for lung cancer screening	3	5	5	2	·	15
Education and awareness for sig/colonoscopy screening	2	8	4	1	·	15
Coronary heart disease	3	7	5	·	·	15
Congestive heart failure	3	6	6	·	·	15
Chronic lower respiratory disease	2	4	7	1	1	15
Access to blood pressure screening	4	5	4	2	·	15
Access to quality mental health treatment	12	3	·	·	·	15
Access to substance abuse treatment	13	2	·	·	·	15
Access to care for uninsured, especially those living in poverty	13	2	·	·	·	15
Smoking cessation education expectant mothers	3	6	4	1	1	15
Access to prenatal care services	7	5	3	·	·	15
Nutrition education for adults	5	4	4	2	·	15
Access to dental care for adults and children	6	6	2	1	·	15

Note: · = no responses

Source: St. Mary Medical Center 2018-2019 Community Health Needs Assessment: Stakeholder Survey



# APPENDIX J. RESULTS FROM EXTERNAL STAKEHOLDER SURVEY

External stakeholders were also asked which specific populations they served. The table below lists the number of participating stakeholders who serve each special population.

### Communities Served by External Stakeholders

<u>Populations of Interest</u>	<u>Number of stakeholders</u>
Children	11
Women	15
Elderly	13
Minority	14
Low income	15
Medically underserved	9
Uninsured	11
Limited English proficiency	9

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Source: St. Mary Medical Center 2018-2019  
Community Health Needs Assessment: Stakeholder Survey

## APPENDIX K. COMMUNITY RESOURCE INDEX

In order to identify any existing community health resources throughout the St. Mary service area, organizations were identified using 2-1-1 SEPA, an online database of health services and providers. The following is a list of the community health resources with the highest total referrals in their respective zip codes, along with a list of services they offer taken directly from the 2-1-1 SEPA database. This list is not exhaustive, but rather a snapshot of other organizations meeting community needs. A complete listing and further information is available online at <http://211sepa.org/>.

1. **19067 - Morrisville Presbyterian Church (8 total referrals)**  
771 North Pennsylvania Avenue, Morrisville
  - Food pantries; Hunger/food issues
2. **19056 – SEPA VITA Sites (1 total referral)**  
2180 Veterans Highway, Levittown
  - Tax preparation assistance
3. **19055 - Housing Link (171 total referrals)**  
7 Library Way, Levittown
  - At risk for homelessness
  - Crisis intervention hotlines/helplines/residential treatment
  - Emergency shelter clearinghouse
  - Homelessness issues
  - Housing-related coordinated entry
4. **19054 – Catholic Social Services – Southeast Pennsylvania (35 total referrals)**  
100 Levittown Parkway, Levittown
  - Case/care management
  - Family counseling
  - Food pantries; Hunger/food issues
  - Individual counseling
  - Outreach programs
  - Post-Traumatic Stress Disorder
5. **19047 – Family Service Association of Bucks County (6 total referrals)**  
4 Cornerstone Drive, Langhorne
  - Adults
  - Anxiety disorders
  - Behavior modification
  - Children
  - Clinical psychiatric evaluation
  - Depression
  - Individual counseling
  - Older adults
6. **19030 – Lester Bahrt Food Pantry at First United Methodist Church Fairless Hills (4 total referrals)**  
840 Trenton Road, Fairless Hills
  - Food pantries; Hunger/food issues
7. **19020 – Congregation Tifereth Israel of Lower Bucks County (16 total referrals)**  
2909 Bristol Road, Bensalem
  - Food donation programs; Food pantries; Hunger/food issues

## APPENDIX K. COMMUNITY RESOURCE INDEX

- 8. 19007 – Bucks County Opportunity Council (200 total referrals)**  
226 Mill Street, Bristol
  - Electric, gas, and heating service payment assistance
  - Low-income
  - Rental deposit assistance
  - Rent payment assistance
  - Trash/recycling service payment assistance
  - Water service payment assistance
  - Homelessness issues
  - Food pantries; Hunger/food issues
  - Economic self-sufficiency programs
  - Weatherization programs
- 9. 18976 – Toys for Tots (USMC) (2 total referrals)**  
(No Address), Warrington
  - Food stamps/SNAP
- 10. 18974 – Bucks County Housing Group (28 total referrals)**  
626 Jacksonville Road, Warminster
  - Adults
  - Children
  - Homeless shelter
  - Homeless women
  - Supportive housing residents
  - Public housing
  - Transitional housing/shelter
  - Automobiles
  - Vehicle donation programs
- 11. 18966 – Jesus Focus Ministry (6 total referrals)**  
1030 2nd Street Pike, Southampton
  - Food pantries
  - Hunger/food issues
- 12. 18954 – Hearing Loss Association of America – Pennsylvania State Office (2 total referrals)**  
25 Upper Holland Road, Richboro
  - Advocacy
  - Audiology
  - Deafness/hearing loss
  - Speech and hearing volunteer opportunities
  - Speech and language pathology
- 13. 18940 – Chandler Hall (1 total referral)**  
99 Barclay Street, Newtown
  - Adolescent/adult immunizations
  - Adult day health programs
  - Bereavement counseling
  - Case/care management
  - Health care
  - Health education
  - Health screening/diagnostic services

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### 14. 18901 – Bucks County Opportunity Council (67 total referrals)

1282 Almshouse Road, Doylestown

- Electric, gas, and heating service payment assistance
- Low-income
- Rental deposit assistance
- Rent payment assistance
- Trash/recycling service payment assistance
- Water service payment assistance
- Food pantries; Hunger/food issues
- Economic self-sufficiency programs

