CalvertHealth

2020
Calvert County
COMMUNITY HEALTH
NEEDS ASSESSMENT

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Table of Contents

Executive Summary

CalvertHealth is pleased to present its 2020 Community Health Needs Assessment (CHNA). As federally required by the Affordable Care Act, this report provides an overview of the methods and processes used to identify and prioritize significant health needs in CalvertHealth's service area. CalvertHealth partnered with Conduent Healthy Communities Institute (HCI) to conduct the 2020 CHNA.

The goal of this report is to offer a meaningful understanding of the most pressing health needs across CalvertHealth's service area, as well as to guide planning efforts to address those needs. Special attention has been given to the needs of vulnerable populations, unmet health needs or gaps in services, and input from the community. Additionally, a section has been added to this report that focuses on the COVID-19 pandemic and its impact on Calvert County.

Findings from this report will be used to identify, develop and target CalvertHealth initiatives to provide and connect patients with resources to improve these health challenges in the community.

Service Area

The service area for CalvertHealth is defined as the geographical boundary of Calvert County, MD. The geography of Calvert County, with its long, narrow peninsula and one main road running north to south, results in increased transportation issues, which are noted in more detail later in this report.

FIGURE 1. CALVERTHEALTH SERVICE AREA
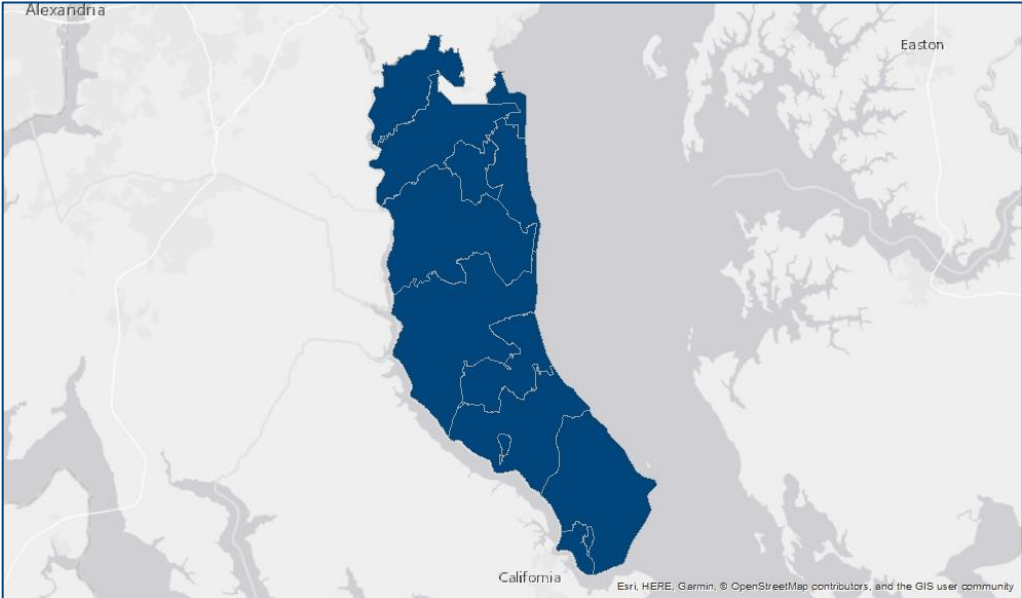
Demographics

Calvert County has a population of approximately 92,633. The age distribution of Calvert County skews slightly older. The racial makeup of Calvert County is somewhat homogenous, with 80.3% of the population identifying as White. Black or African American community members represent the second largest proportion of all races in Calvert County, and at 12.8% is the only other race that makes up more than 10% of the population. Regarding economic stability, families living in North Beach, Chesapeake Beach, Prince Frederick, and Lusby have the highest rates of poverty.

Methods for Identifying Community Health Needs

Secondary Data

The secondary data used in this assessment were obtained and analyzed from CalvertHealth's Community Dashboard http://www.healthycalvert.org/. This includes a comprehensive set of more than 240 community health and quality of life indicators covering over 20 topic areas. Indicator values for Calvert County were compared to other counties in Maryland and nationwide to compare health topics and relative areas of need. Other considerations for health areas of need included trends over time, Healthy People 2020 targets, and disparities by age, gender, and race/ethnicity.

Primary Data / Community Input

The needs assessment was further informed by: (1) interviews with community members who have a fundamental understanding of Calvert County's health needs and represent the broad interests of the community, and (2) a community survey distributed throughout Calvert County.

Summary of Findings

The CHNA findings are drawn from an analysis of an extensive set of secondary data (240 indicators from national and state data sources) and in-depth primary data from community leaders, non-health professionals, and organizations that serve the community at large, vulnerable populations, and/or populations with unmet health needs.

Through a synthesis of the primary and secondary data the following top health needs were determined and listed in scored rankings from highest to lowest

1. Cancer
2. Heart Disease & Stroke
3. Women's Health
4. Mental Health & Mental Health Disorders
5. Exercise, Nutrition & Weight
6. Substance Abuse
7. Oral Health
8. Older Adults & Aging
9. Education
10. Transportation
11. Environment

Disparities

The identification of disparities along race/ethnicity, gender, age, and geographic lines is important for informing and focusing strategies that will address the prioritized health needs. Primary and secondary data revealed significant community health disparities based on race/ethnicity, with Black and Hispanic populations more negatively impacted than other groups in Calvert County. Furthermore, the data show that older adults face increased health issues, while populations in certain geographic areas experience higher socioeconomic need and potentially poorer health outcomes.

Prioritized Areas

On July 22, 2020, members from various departments within CalvertHealth and representative members of the community came together to learn about the significant health needs identified through primary and secondary data analysis in a virtual session led by consultants from HCI. This session was followed by an online scoring exercise of each health topic based on how well they met five criteria. HCI calculated the results to come up with a ranked list of significant health needs. The CalvertHealth leadership team met on July 28, 2020 to review the ranking while considering the five criteria for prioritization. The following four health areas were identified as priorities to address:

CalvertHealth's Prioritized Health Needs
Cancer
Heart Disease & Stroke
Mental Health & Mental Disorders
Exercise, Nutrition, & Weight (including Obesity)

Women's Health

Primary and secondary data sources brought to light warning indicators in Women's Health. These indicators pointed to breast cancer rates being higher than both Maryland and the U.S. values, and cervical cancer rates were higher than the Maryland value. Primary data revealed women's personal struggles with exercise and weight management. Therefore, in identifying Cancer and Exercise, Nutrition & Weight as priority areas, interventions and outreach will include considerations to address women's health issues identified in this CHNA.

COVID-19 Impact Snapshot

At the time that CalvertHealth began its tri-annual CHNA process, Calvert County was in the midst of dealing with the COVID-19 pandemic. The CHNA project team looked for additional sources of secondary data and gathered primary data to provide a snapshot of the impact of COVID-19 on Calvert County between March 2020 and July 2020. More details of these findings are found in the "COVID-19 Impact Snapshot" section of this report.

Conclusion

This report describes the process and findings of a comprehensive health needs assessment for the residents of Calvert County, MD. The prioritization of the identified significant health needs will guide the community health improvement efforts of CalvertHealth. Following this process, CalvertHealth will outline how it plans to address the top four prioritized health needs in its Implementation Strategy. CalvertHealth is dedicated to serving Southern Maryland residents by providing exceptional care, promoting wellness and making a difference in every life we touch.

Introduction

As a not-for-profit, tax-exempt hospital, CalvertHealth is pleased to present its 2020 CHNA report, which provides an overview of the significant community health needs identified in CalvertHealth's primary service area, Calvert County, MD.

The goal of this report is to offer a meaningful understanding of the most pressing health needs across CalvertHealth's service area, as well as to guide planning efforts to address those needs. Special attention has been given to the needs of vulnerable populations, unmet health needs or gaps in services, and input gathered from the community.

Findings from this report will be used to identify, develop, and target CalvertHealth's initiatives to provide and connect patients with resources to improve health challenges in their communities.

> **This report includes a description of:**
>
> - The community demographics and population served;
> - The process and methods used to obtain, analyze and synthesize primary and secondary data;
> - The significant health needs in the community, taking into account the needs of uninsured, low-income, and marginalized groups;
> - The process and criteria used in identifying certain health needs as significant and prioritizing those significant community needs.

About CalvertHealth

CalvertHealth Medical Center is a private, not-for-profit, community-owned hospital. Founded in 1919, and formerly known as Calvert Memorial Hospital, CalvertHealth has been taking care of Southern Maryland families for more than 100 years. CalvertHealth Medical Center is accredited by The Joint Commission, licensed by the Maryland Department of Health and Mental Hygiene and certified for Medicare and Medicaid. There are 270 active and consulting physicians representing over 72 different specialties.

CalvertHealth is governed by a community board of directors who volunteer their service to the hospital; they represent the community and take an active role in the operation of Calvert Health System. You can find more information about the hospital at CalvertHealth's website: https://www.calverthealthmedicine.org/

In addition to the main hospital campus, satellite medical office buildings in Dunkirk, Solomons, Twin Beaches and Prince Frederick, CalvertHealth works to ensure that quality care is no more than 15 minutes from anywhere in Calvert County. CalvertHealth is dedicated to the seamless delivery of high-quality medical services for each patient. This means supplying services from acute, critical care to rehabilitation and primary medical care, and other outpatient services, all in the same continuum. It also means providing community health education, wellness programs and reaching out to neighbors through community partnerships.

Service Area

The service area for CalvertHealth is defined as the geographical boundary of Calvert County, MD. CalvertHealth Medical Center is the only hospital in Calvert County with medical office buildings in Prince Frederick, Dunkirk, Lusby, Solomons, and Twin Beaches. Although Calvert County is relatively close to Washington D.C., the long and narrow geography of the peninsula results in a rural atmosphere with transportation challenges for residents.

FIGURE 2. CALVERTHEALTH CARE LOCATIONS
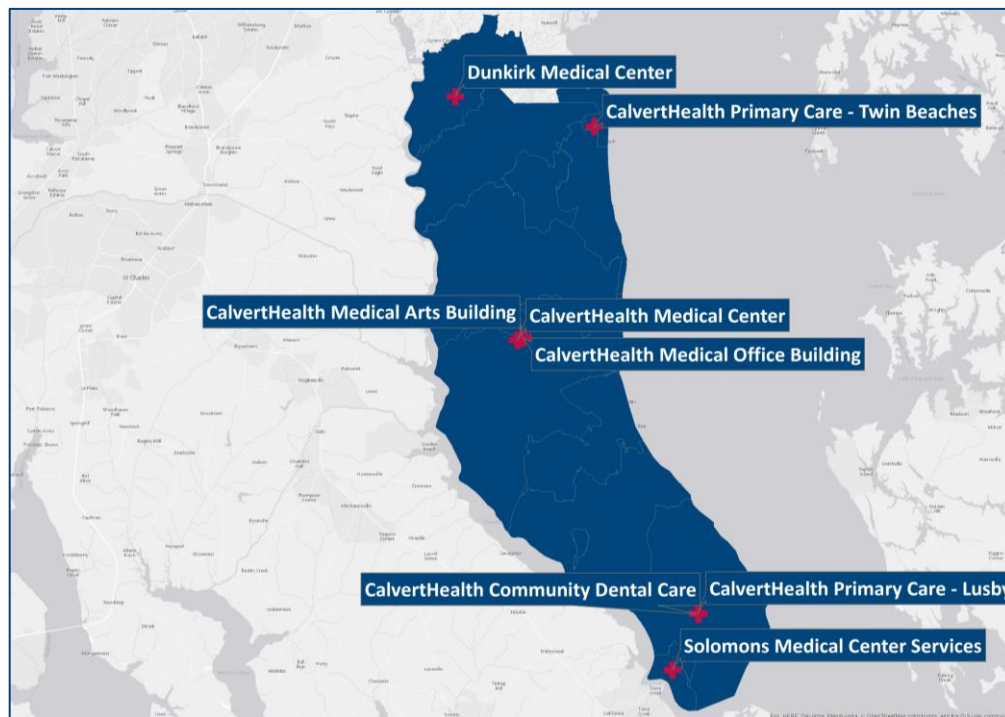
Consultants

CalvertHealth commissioned Conduent Healthy Communities Institute (HCI) to conduct its 2020 Community Health Needs Assessment. HCI works with clients across the nation to drive community health improvement outcomes by assessing needs, developing focused strategies, identifying appropriate intervention programs, establishing monitoring systems, and implementing performance evaluation processes. To learn more about Conduent Healthy Communities Institute, please visit https://www.conduent.com/community-population-health/.

Report authors from HCI Include:
- Traci Van, Senior Advisor
- Monica Duque, MPH, Research Associate
- Zack Flores, Project Coordinator

Evaluation of Progress Since Prior CHNA

The CHNA process should be viewed as a three-year cycle. An important piece of that cycle is revisiting the progress made on priority health topics set forth in the preceding CHNA. By reviewing the actions taken to address a priority health issue and evaluating the impact those actions have made in the community, it is possible to better target resources and efforts during the next round of the CHNA cycle.

Priority Health Needs from Preceding CHNA

FIGURE 3. THE CHNA CYCLE

CalvertHealth's priority health areas for years 2017-2019 were:

- Exercise, Nutrition, & Weight (including Obesity)
- Cancer
- Heart Disease & Stroke
- Mental Health & Mental Disorders

Highlights of Priority Health Needs Progress

The following section includes notable highlights from a few of the initiatives implemented since the last CHNA to address the priority health needs. For a more detailed list of CalvertHealth's initiatives and outcomes see Appendix A.

Exercise, Nutrition & Weight (including Obesity):
CalvertHealth developed and implemented several programs to increase the importance of healthy eating to reduce the onset of diseases. These programs focused on strategies for weight loss and increasing physical activities among participants. Of note, the Weight Loss for Life Program served 102 community members who lost an average of 4.3 pounds during the eight-week program.

Cancer:
To improve early detection of cancer and help reduce the prevalence of cancer in the community, an emphasis was placed on enhancing community education and screenings for skin, breast, lung, and oral cancers. In collaboration with community partners and with the mobile health unit, several events were held in various locations throughout the community. More than 700 community members participated in services offered. For one participant of a CalvertHealth skin cancer screening event, an abnormality was detected, which resulted in a follow-up with a dermatologist who determined it was a melanoma.

Heart Disease & Stroke:
CalvertHealth focused on educating the community in understanding what contributes to heart disease and stroke. In collaboration with local senior centers, an Ask the Expert program was implemented, bringing weekly health education services. Additionally, the Senior Life Center was started in three senior centers, focusing on chronic disease management and healthy lifestyle changes.

Mental Health & Mental Disorders:
Understanding the close connection between mental health and substance abuse, the Opioid Stewardship Committee at CalvertHealth was formed in 2015 using a multidisciplinary approach to decrease opioid utilization in the Emergency Department. In 2019, the committee expanded to include
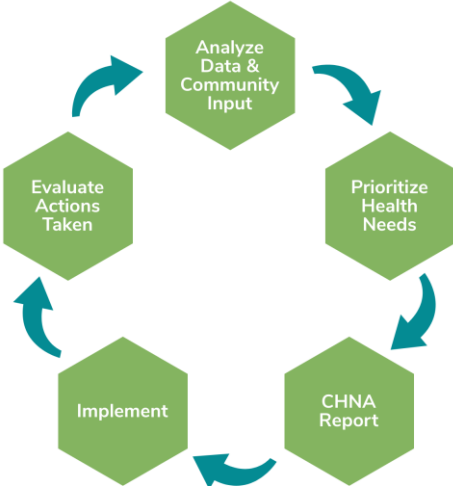
the Calvert County Sheriff's office, peer recovery specialists and the Mobile Health Unit Crisis Team. There is close collaboration with Calvert County Health Department to assist patients once they are discharged from the hospital with needed resources to address their opioid addiction. The Mobile Health Unit assisted with education and outreach in the community.

Community Feedback from Preceding CHNA & Implementation Plan

CalvertHealth's 2017-2019 CHNA and Implementation Plan were made available to the public and open for public comment via the website: www.CalvertHealthMedicine.org/Community-Health-Needs-Assessment. No comments were received on either document at the time this report was written.

Methodology

Overview

Two types of data were analyzed for this CHNA: primary and secondary data. Each type of data was analyzed using a unique methodology. Findings were organized by health topics. These findings were then synthesized for a comprehensive overview of the health needs in CalvertHealth's service area.

Secondary Data Sources & Analysis

Secondary data used for this assessment were collected and analyzed with the Healthy Communities Institute (HCI) Community Dashboard — a web-based community health platform developed by Conduent Community Health Solutions. The Community Dashboard brings non-biased data, local resources, and a wealth of information to one accessible, user-friendly location. It includes over 240 community indicators covering over 20 topics in the areas of health, determinants of health, and quality of life. The data are primarily derived from state and national public secondary data sources. The value for each of these indicators is compared to other communities, nationally or locally set targets, and to previous time periods.

HCI's Data Scoring Tool® was used to systematically summarize multiple comparisons across the Community Dashboard in order to rank indicators based on highest need. For each indicator, the Calvert County value was compared to a distribution of Maryland and US counties, state and national values, Healthy People 2020, and significant trends. Each indicator was then given a score based on the available comparisons. These comparison scores range from 0 to 3, where 0 indicates the best outcome and 3 the worst. Availability of each type of comparison varies by indicator and is dependent upon the data source, comparability with data collected from other communities, and changes in methodology over time. These indicators were grouped into topic areas for a higher-level ranking of community health needs.

FIGURE 4. SECONDARY DATA SCORING

| Maryland Counties |
| US Counties |
| Maryland State Value |
| US Value |
| HP2020 |
| Trend |

Indicator Score → Topic Score

TABLE 1. SECONDARY DATA TOPIC SCORING RESULTS

Women's Health	1.90
Transportation	1.79
Cancer	1.70
Oral Health	1.60
Heart Disease & Stroke	1.54
Environment	1.53
Older Adults & Aging	1.53
Mental Health & Mental Disorders	1.52
Education	1.51
Substance Abuse	1.47
Exercise, Nutrition, & Weight	1.44

Table 1 shows the health and quality of life topic scoring results for Calvert County, with Women's Health as the poorest performing topic area for the CalvertHealth service area, followed by Transportation and Cancer. The top nine topic areas were those that scored over the 1.50 threshold in data scoring. Substance Abuse and Exercise, Nutrition, & Weight were indicated as health needs via
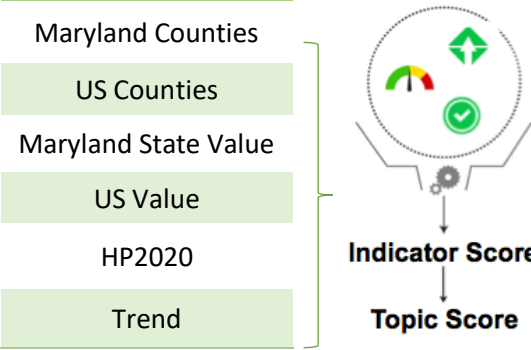
community input during the primary data collection process. Due to these community insights, they were included on this list even though they did not meet the 1.50 secondary score threshold. Health topic areas with fewer than three indicators were considered a data gap. Data gaps were specifically assessed as a part of the key informant interviews to ensure that, where the secondary data fell short, primary data could provide a more accurate picture of that particular health topic area.

Please see Appendix B for further details on the quantitative data scoring methodology.

Primary Data Collection & Analysis

To expand upon the information gathered from the secondary data, HCI collected community input. Primary data used in this assessment consisted of key informant interviews and an English-language, online community survey.

Given this CHNA was conducted during the COVID-19 pandemic, primary data collection methods were conducted in a way to maintain social distancing and protect the safety of participants by eliminating in-person data collection.

As a critical aspect of the primary data collection, community input participants were asked to list and describe resources available in the community. Although not reflective of every resource available in the community, the list can help CalvertHealth build partnerships so as not to duplicate, but rather support existing programs and resources. This resource list is available in Appendix E.

Key Informant Interviews

HCI conducted key informant interviews via phone in order to collect community input. Interviewees invited to participate were recognized as having expertise in public health, special knowledge of community health needs, representing the broad interests of the community served by the hospital, and/or being able to speak to the needs of medically underserved or vulnerable populations. Ten individuals agreed to participate as key informants. Table 2 lists the represented organizations that participated in the interviews and the populations these organizations serve:

TABLE 2. KEY INFORMANT ORGANIZATIONS & POPULATION SERVED

Key Informant Organization	Population Served
Calvert County Health Department	Medically underserved populations for clinical services and Calvert County residents for other services including infectious disease surveillance
Calvert County Government	Calvert County residents
Calvert County Department of Social Services	Public assistance customers, vulnerable children and adults, foster care children, high-risk families

Calvert County Public Schools	Children and young adults (pre-K-12th grade & career and college-ready high school graduates)
CalvertHealth	Southern Maryland/Calvert County residents
Calvert County Office on Aging	Adults age 50+ and disabled adults age 18+ (the majority of whom are medically underserved and have low to moderate income)
Community Faith-Based Representative	All of Southern Maryland
Calvert County Sheriff's Department	Calvert County residents
Calvert Community Dental	Low income, medically underserved populations

The ten key informant interviews took place between May 18, 2020 and June 11, 2020 via phone. The questions focused on the interviewee's background and organization, biggest perceived health needs and barriers of concern in the community, and the impact of health issues on the populations they serve and other vulnerable populations. Interviewees were also asked about their knowledge around health topics where there were data gaps in the secondary data. Additionally, questions were included to get feedback about the impact of COVID-19 on their community. See the "COVID-19 Impact Snapshot" section of the report for more information. A list of the questions asked in the key informant interviews can be found in Appendix C.

Key Informant Analysis Results

Notes captured from the key informant interviews were uploaded to the web-based qualitative data analysis tool, Dedoose®[1].The transcripts were coded according to common themes in health and social determinants of health. The following are the themes that emerged from the analysis of the transcripts.

Top Health Concerns/Issues	Social Determinants of Health	Most Negatively Impacted Populations
• Mental Health • Substance Abuse • Exercise, Nutrition & Weight (including Obesity) • Cancer • Older Adults & Aging	• Transportation • Environmental (Food Security) • Access (Uninsured) • Economy (Poverty)	• Low Income/Underserved • Minorities • Elderly

[1]Dedoose Version 8.0.35, web application for managing, analyzing and presenting qualitative and mixed method research data (2018). Los Angles, CA: SocioCultural Research Consultants, LLC www.dedoose.com

Community Survey

Another form of community input collected was via an online English-language community survey. SurveyMonkey was the tool used to distribute and collect responses for the community survey. Paper surveys were made available to members of the Hispanic community who completed them with the help of an interpreter. Answers to the paper survey were entered into the SurveyMonkey tool by CalvertHealth staff.

The community survey was promoted across CalvertHealth's entire service area from May 14, 2020 to June 22, 2020. A total of 797 responses were collected. The following charts and graphs illustrate the demographics of community survey respondents.

FIGURE 5. RACE/ETHNICITY OF COMMUNITY SURVEY RESPONDENTS

Asian (0.5%) Black or African American (6.9%)
Native Hawaiian or other Pacific Islander (0.3%)
White (88.4%) Hispanic or Latino (2.3%)
Multi-Racial (1%) Other (0.6%)
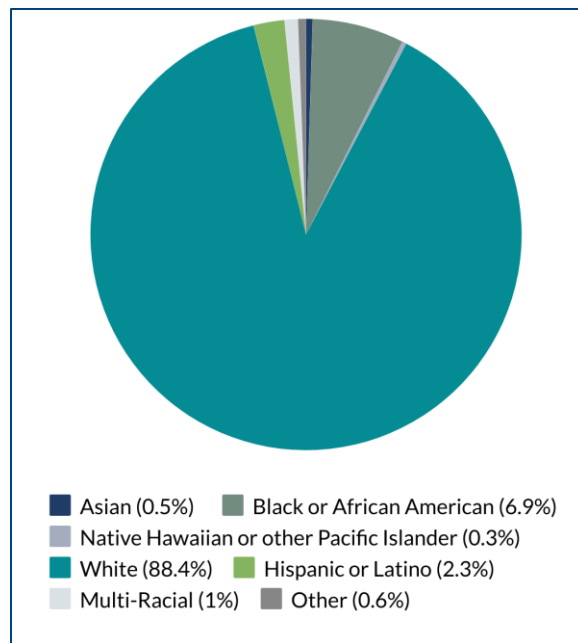
FIGURE 6. AGE OF COMMUNITY SURVEY RESPONDENTS

Age	Percentage
18-24	3.7%
25-34	12.6%
35-44	20.9%
45-54	22.8%
55-64	22.3%
65-74	13.2%
75+	4.5%
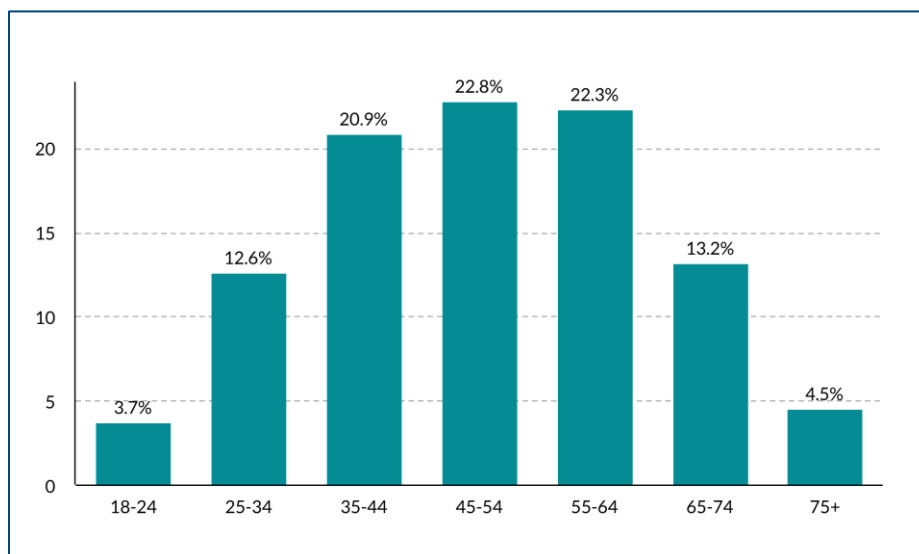
FIGURE 7. EDUCATION OF COMMUNITY SURVEY RESPONDENTS
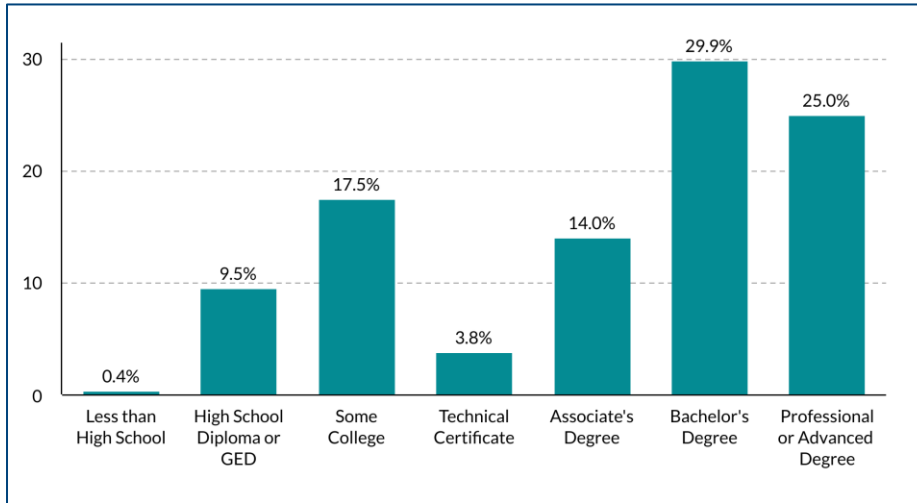
Community Survey Analysis Results

Survey participants were asked about their personal health challenges, important health issues in the community, and which resources are most needed in the community. The results for these questions are shown in Figures 8- 10. Additionally, questions were included to get feedback about the impact of COVID-19 on the community, which is included in the "COVID-19 Impact Snapshot" section of this report.

FIGURE 8. PERSONAL HEALTH CHALLENGES
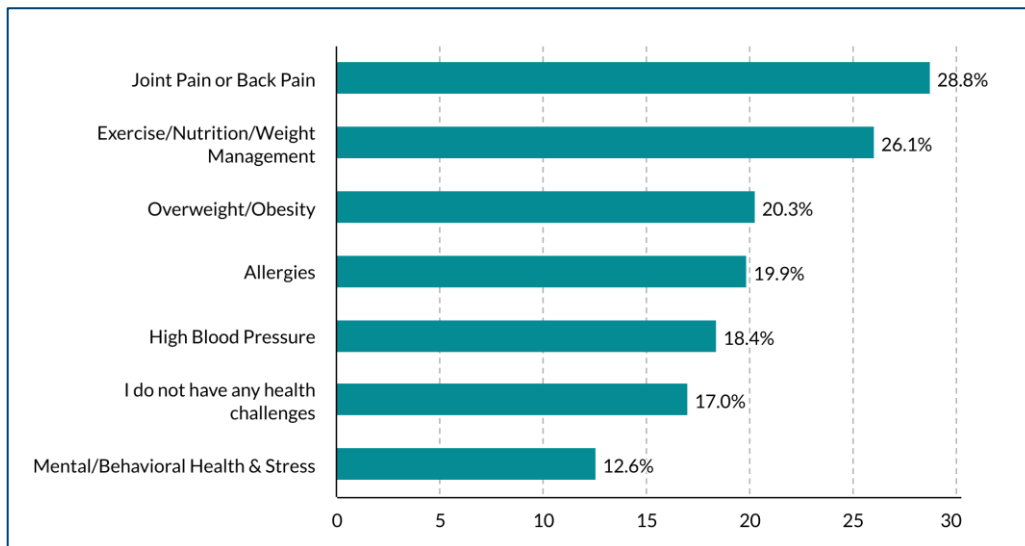
FIGURE 9. MOST IMPORTANT COMMUNITY HEALTH ISSUES

Issue	Percent
Behavioral/Mental Health Services	44.7%
Services for Older Adults	41.1%
Services for Teens/Adolescents	39.6%
Fitness and Physical Activity	38.8%
Transportation Options	35.5%
Substance Abuse Treatment	33.2%
Access to Healthy Food	32.2%
Healthy Eating Programs	31.0%
Emotional Wellness Services	28.9%
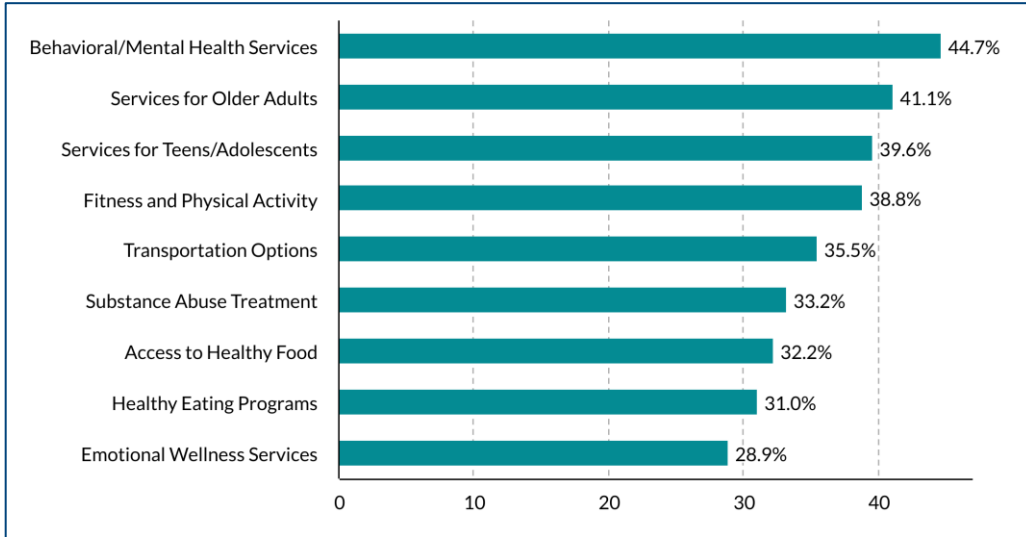
FIGURE 10. RESOURCES NEEDED IN CALVERT COUNTY

Resource	Percent
Substance (or Drug) Abuse or Overuse	41.0%
Mental/Behavioral Health & Stress	29.1%
Alcohol Abuse or Overuse	29.0%
Overweight/Obesity	25.4%
Cancer	24.5%
Diabetes	22.2%
Exercise/Nutrition/Weight Management	21.5%
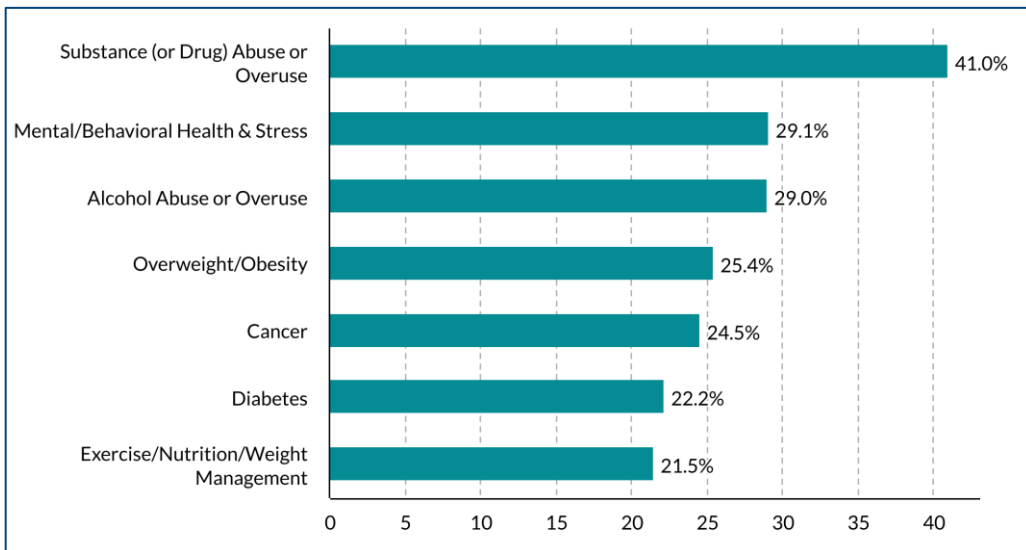
Data Considerations

Several limitations of the data should be considered when reviewing the findings presented in this report. Although the topics by which data are organized cover a wide range of health and health-related areas, within each topic there is a varying scope and depth of secondary data indicators and primary data findings.

Regarding the secondary data, some health topic areas have a robust set of indicators, but for others there may be a limited number of indicators for which data is available. The Index of Disparity[2], used to analyze the secondary data, is also limited by data availability. In some instances, there are no subpopulation data for some indicators, and for others there are only values for a select number of race/ethnic groups.

For the primary data, the breadth of findings is dependent upon who was selected to be a key informant. Additionally, the community survey was a convenience sample, which means results may be vulnerable to selection bias and make the findings less generalizable. However, findings did show that the community survey participant sample was representative of the overall demographics of Calvert County. A limitation to the survey is that it was conducted only in English.

For all data, efforts were made to include a wide a range of secondary data indicators and community member expertise areas.

Prioritization

In order to better target activities to address the most pressing health needs in the community, CalvertHealth and community leaders participated in a presentation of data on significant health needs facilitated by HCI. Following the presentation and question session, participants were given access to an online link to complete a scoring exercise to rank the significant health needs based on a set of criteria. The process was conducted virtually in order to maintain social distancing and safety guidelines related to the COVID-19 pandemic.

CalvertHealth brought together a decision-making team to review the scoring results of the significant community needs and determine prioritized health needs based on the same set of criteria used in the scoring exercise.

Participants

Those involved in the process were chosen to represent people with community and clinical knowledge, those who manage services to the underserved, and those who are knowledgeable about the needs assessment process. Prioritization participants included:

- Dean Teague, President and CEO, CalvertHealth
- Tony Bladen, Chief Operating Officer, CalvertHealth
- Lisa Broome, VP Human Resources, CalvertHealth
- Lisa Caudle, Long Term Care Manager, Calvert County Office on Aging
- Diane Couchman, VP Clinical Services, CalvertHealth

[2]Pearcy, J. & Keppel, K. (2002). A Summary Measure of Health Disparity. Public Health Reports, 117, 273-280

- Erin Farley, Community Wellness Manager, CalvertHealth
- Mary Golway, Director of Education & Training and Community Wellness, CalvertHealth
- Kasia Sweeney, VP Strategy and Marketing, CalvertHealth
- Champ Thomaskutty, Deputy Health Officer, Calvert County Health Department
- Rev. Alice Thompson, Chaplain, CalvertHealth

Process

On July 22, 2020, eight of the participants convened in a large conference room at CalvertHealth where they could maintain social distance as required by safety protocols related to the pandemic, and two joined via an online meeting platform. The group reviewed the results of HCI's primary and secondary data analyses leading to the preliminary significant health needs discussed in detail in the data synthesis portion of this report. From there, participants utilized a health needs note sheet (Appendix F) and accessed an online link to score each of the significant health needs by how well they met the criteria set forth by CalvertHealth (Appendix F).

The criteria for prioritization are included here:

- Alignment with CalvertHealth's mission, strengths, priorities
- Alignment with national, state or other local priorities
- Disparities impact
- Feasibility of intervening
- Consequences of not intervening

Participants scored each health area against each criterion on a scale from 1-3 with 1 meaning it did not meet the given criterion, 2 meaning it met the criterion and 3 meaning it strongly met the criterion. In addition to considering the data presented by HCI in the presentation and on the health topic note sheet, participants were encouraged to use their own judgment and knowledge of the community in considering how well a health topic met the criteria.

Completion of the online exercise resulted in a numerical score for each health need that correlated with how well each health need met the criteria for prioritization. HCI downloaded the online results, calculated the scores, and then ranked the significant health needs according to their topic scores, with the highest scoring health need receiving the highest priority ranking.

The aggregate ranking can be seen in the Figure 11. After reviewing the results, CalvertHealth's leadership decision-making team participated in a group discussion on July 28, 2020 to narrow the list to four priority health areas that will be considered for subsequent implementation planning. The four top health priorities for CalvertHealth are:

CalvertHealth's Prioritized Health Needs
Cancer
Heart Disease & Stroke
Mental Health & Mental Disorders
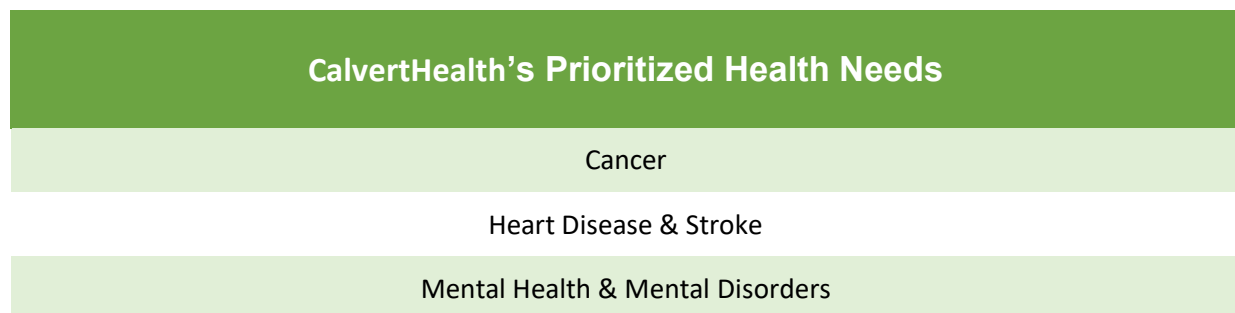
A deeper dive into the primary data and secondary data indicators for each of these four priority health topic areas is provided later in this report. This information highlights how each issue became a high priority health need for CalvertHealth. These health topic areas are consistent with the four priority areas that emerged from the 2017 CHNA process. CalvertHealth plans to build upon the efforts to address these health needs in its upcoming Implementation Strategy.

It was discussed at length how the remaining health topics, which were not identified as priorities, are related with the four prioritized needs. This is especially true of Women's Health. The secondary warning indicators pointed to breast cancer rates being higher than both Maryland and the U.S. values, and cervical cancer rates were higher than the Maryland value. Primary data revealed women's personal struggles with exercise and weight management. Therefore, in identifying Cancer and Exercise, Nutritution & Weight as priority areas, interventions and outreach will include considerations to address women's health issues identified in this CHNA.

This is also true of the health needs related to Older Adults & Aging, where secondary indicators show that the Medicare population is disproportionately affected by heart disease and stroke. When possible, the remaining health topics will be integrated into the implementation strategies of the four priority health areas.

FIGURE 11. SIGNIFICANT HEALTH NEEDS

1. Cancer
2. Heart Disease & Stroke
3. Women's Health
4. Mental Health & Mental Disorders
5. Exercise, Nutrition & Weight
6. Substance Abuse
7. Oral Health
8. Older Adults & Aging
9. Education
10. Transportation
11. Environment
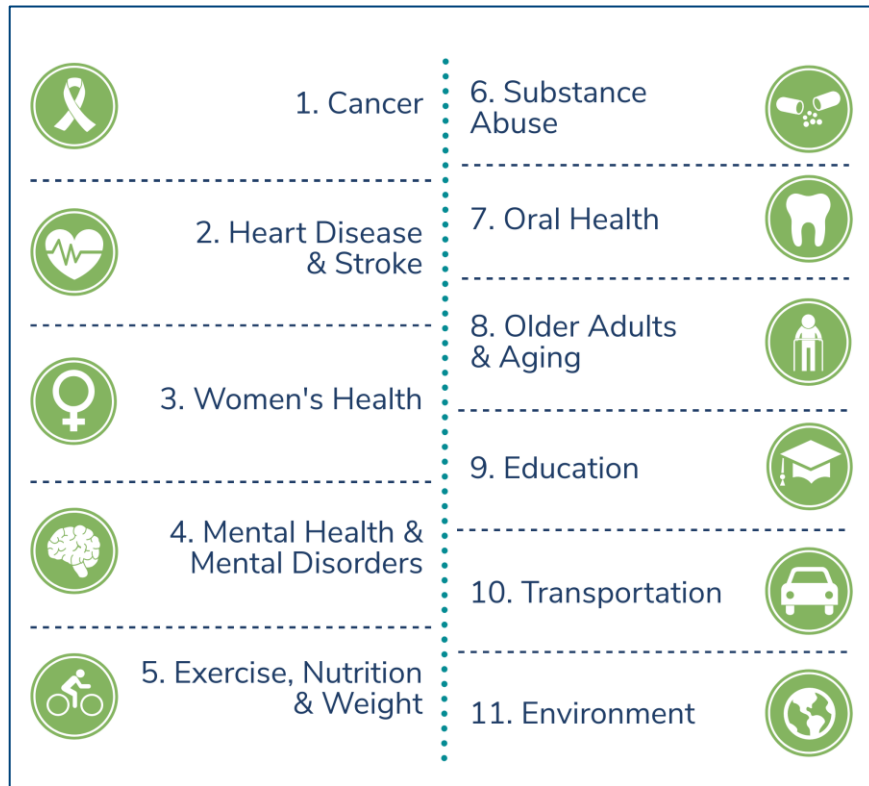
Demographics

The following section explores the demographic profile of CalvertHealth's service area. The demographics of a community significantly impact its health profile. Different race/ethnic, age and socioeconomic groups may have unique needs and require varied approaches to health improvement efforts. All demographic estimates are sourced from Nielsen Claritas 2020 Population Estimates, unless otherwise indicated.

Population

According to the Nielsen Claritas 2020 Population Estimates, Calvert County has a population of approximately 92,633 persons. Figure 12 shows the population size by each zip code within Calvert County, with the darkest blue representing the zip code with the largest population.

FIGURE 12. POPULATION SIZE BY ZIP CODE
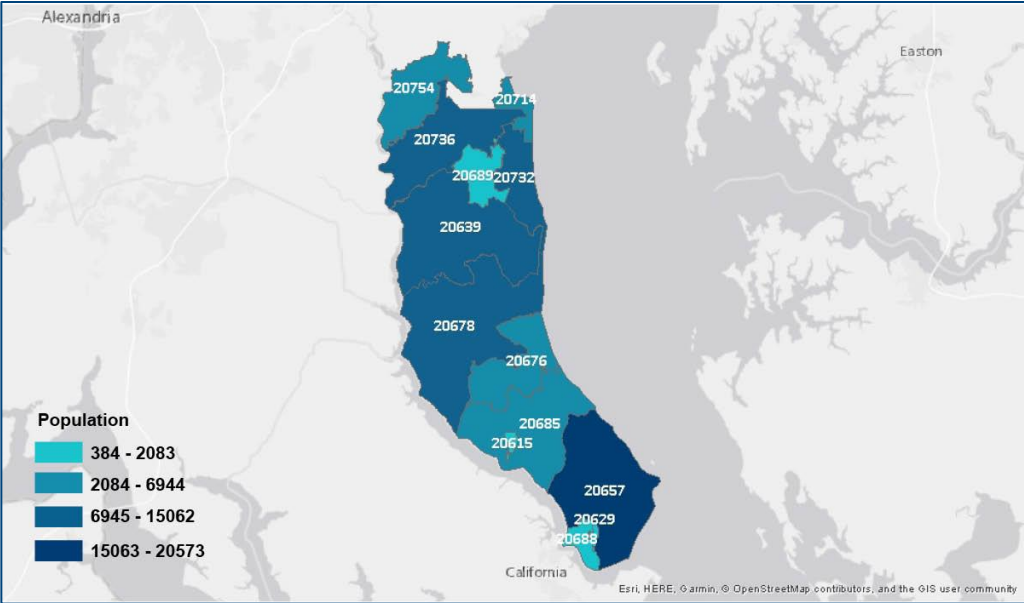
Social & Economic Determinants of Health

Age

Figure 13 shows the Calvert County population by age group. The 45-54 and 55-64 age groups represent a high proportion of the population. Overall, the population of Calvert County skews older.

FIGURE 13. POPULATION BY AGE GROUP
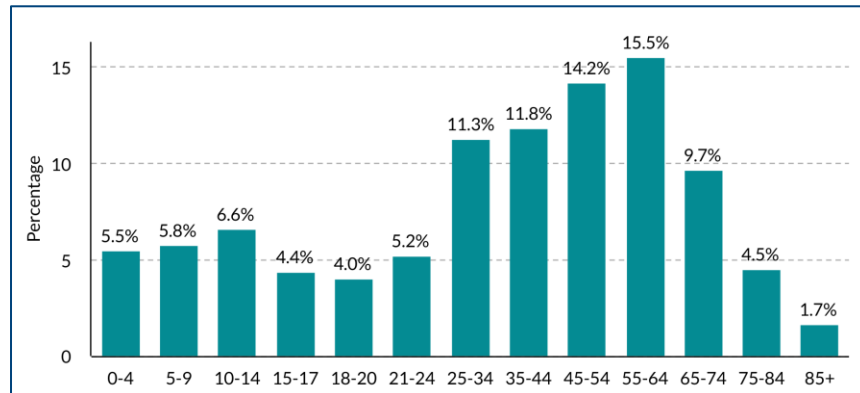
Race

The racial makeup of Calvert County is somewhat homogenous, with 80.3% of the population identifying as White, as indicated in Figure 14. The proportion of Black/African American community members is the second largest of all races in Calvert County at 12.8% and is the only other race that makes up more than 10% of the population.

FIGURE 14. POPULATION BY RACE
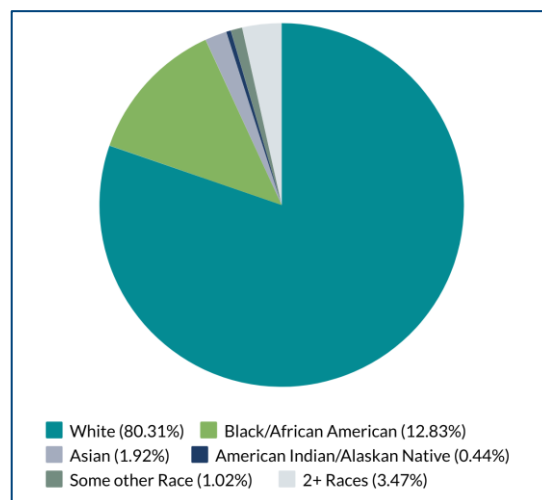
Ethnicity

As shown by Figure 15, 4.6% of the population of Calvert County identifies as Hispanic or Latino.

FIGURE 15. POPULATION BY ETHNICITY

Legend:
- Hispanic/Latino (4.6%)
- Non-Hispanic Latino (95.4%)
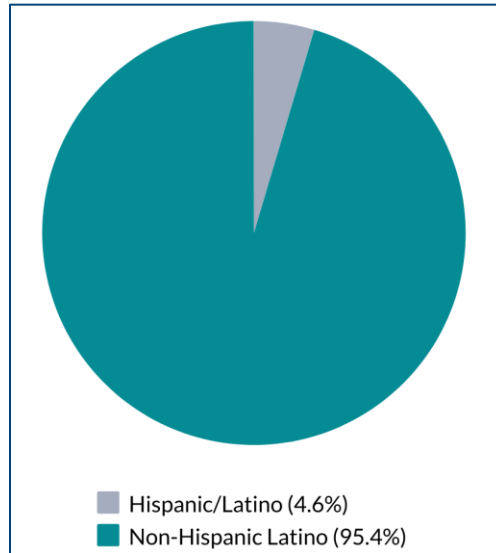
Income

Figure 16 compares the median household income values for each race in Calvert County. The overall median household income for the county is $112,150. Two races – White and Asian – have median household incomes that fall above the overall median value. All other races are below the overall value with American Indian/Alaskan Native having the lowest value at $14,999. In this case, it is important to consider that the American Indian/Alaskan Native and Native Hawaiian/Pacific Islander subgroups make up only 0.44% and 0.13%, respectively, of the community's population.

FIGURE 16. MEDIAN HOUSEHOLD INCOME BY RACE
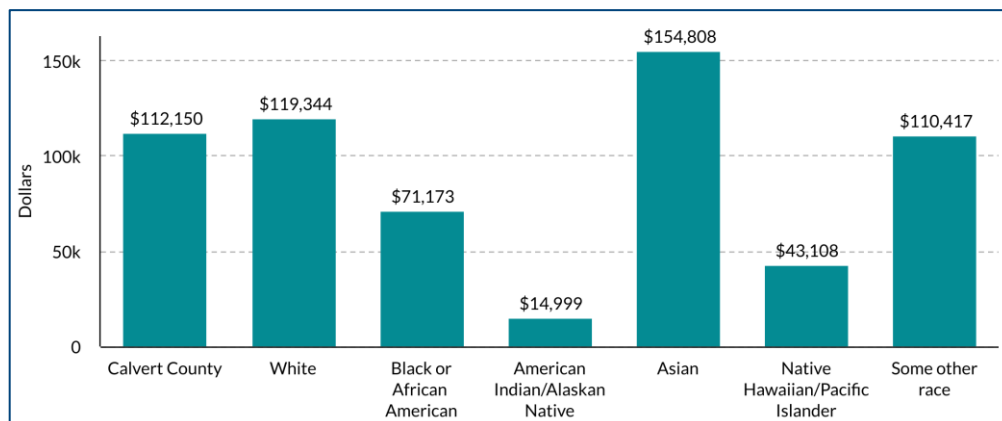
Poverty

Figure 17 shows the percentage of families living below the poverty level by zip code. The darker blue colors represent a higher percentage of families living below the poverty level, with zip codes 20714 (North Beach), 20678 (Prince Frederick), 20732 (Chesapeake Beach), 20689 (Sunderland), and 20657 (Lusby) having the highest percentages.

FIGURE 17. FAMILIES LIVING BELOW POVERTY LEVEL BY ZIP CODE
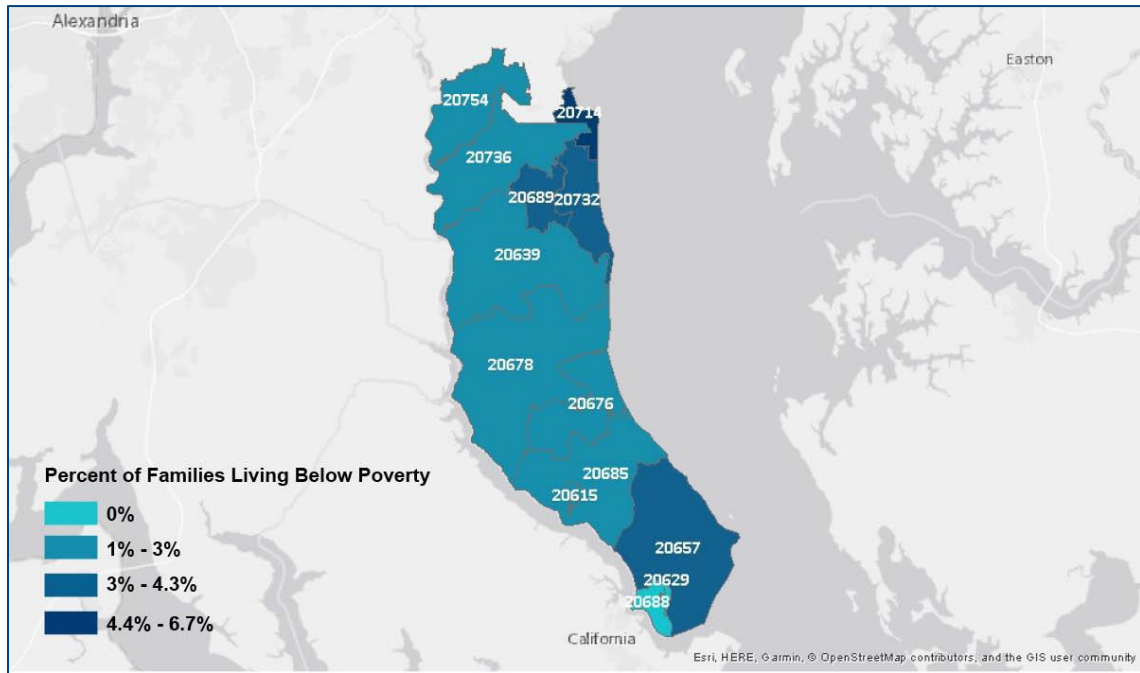
SocioNeeds Index

Conduent Healthy Communities Institute developed the SocioNeeds Index® to easily identify areas of high socioeconomic need. This index incorporates estimates for six different social and economic determinants of health that are associated with poor health outcomes. The data, which cover income, poverty, unemployment, occupation, educational attainment, and linguistic barriers, are then standardized and averaged to create one composite index value for every zip code in the United States with a population of at least 200. Zip codes have index values ranging from zero to 100, where higher values are estimated to have the highest socioeconomic need and are correlated with poor health outcomes including preventable hospitalizations and premature death.

Within CalvertHealth's service area, zip codes are ranked based on their index value to identify the relative levels of need, as illustrated by the map in Figure 18. The following zip codes had the highest level of socioeconomic need (as indicated by the darkest shade of blue): 20714 (North Beach), 20678 (Prince Frederick), and 20657 (Lusby). Understanding where there are communities with high socioeconomic need, and associated poor health outcomes, is critical to targeting prevention and outreach activities. The three communities (North Beach, Prince Frederick, and Lusby) were previously identified in CalvertHealth's 2017 CHNA as having the highest socioeconomic need, thus targeted health improvement efforts in these communities should be continued.

FIGURE 18. SOCIONEEDS INDEX
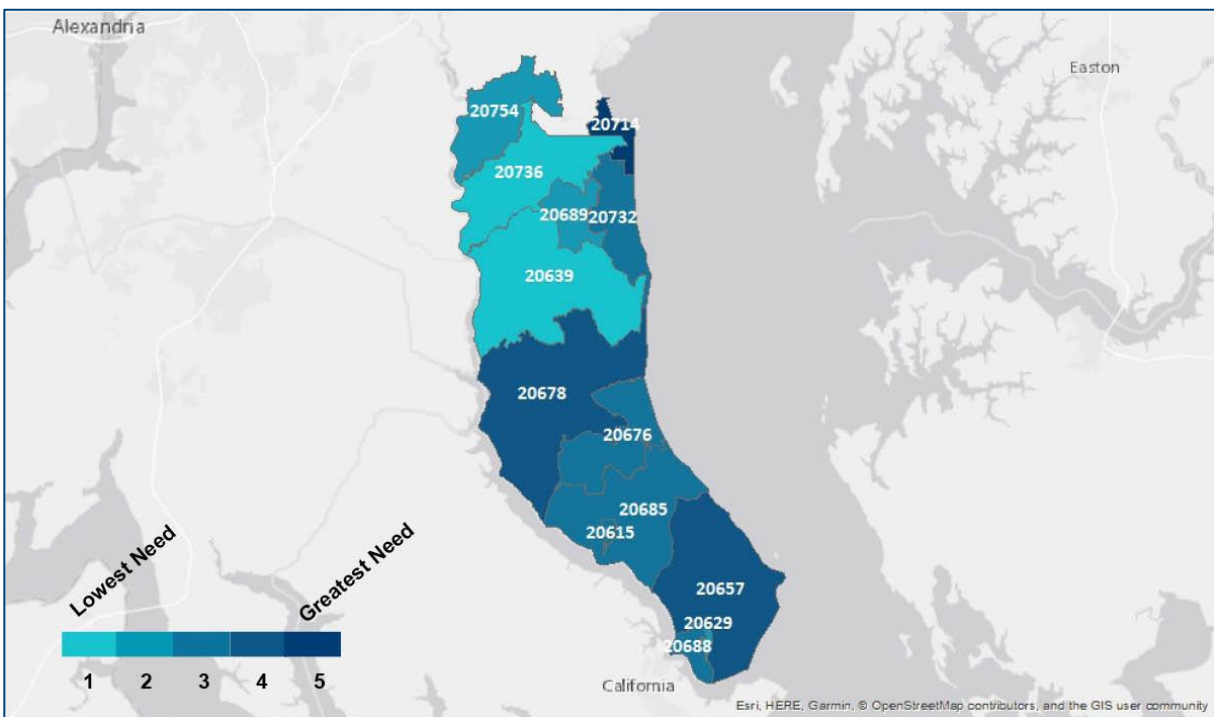
Data Synthesis

Primary and secondary data were collected, analyzed and synthesized to identify the significant community health needs in Calvert County as shown in the Venn diagram (Figure 19).

For the purpose of analysis, secondary data were treated as one data source, while primary data included both key informant interviews and online survey results.

The 11 top health needs identified from the data sources were analyzed for areas of overlap. Primary data from key informant interviews and community survey results show the five most discussed or selected topic areas demonstrating strong evidence of need. Secondary data indicators identified nine topic areas of greater need based on based on the topic score calculated using the HCI data scoring tool. Figure 19 shows the data synthesis results via a Venn diagram that illustrates overlapping top health needs from the two data sets.

FIGURE 19. DATA SYNTHESIS RESULTS
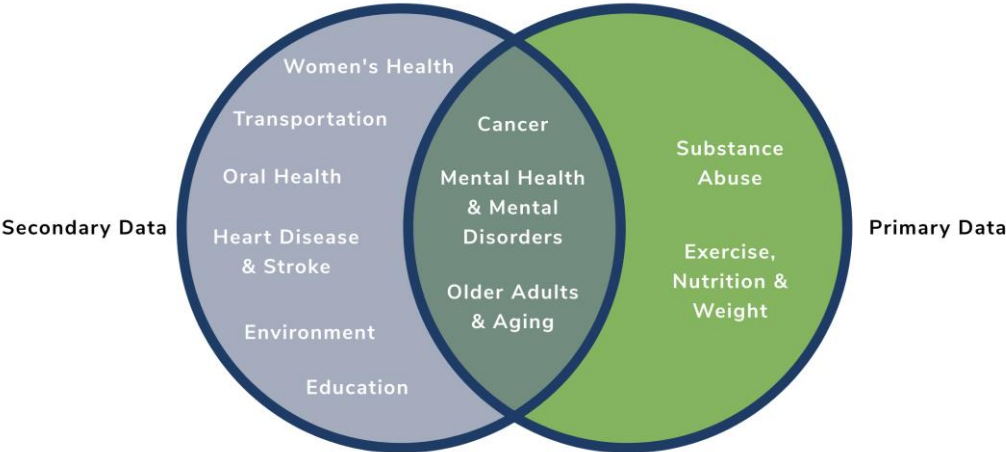
Table 3 shows the final 11 significant health needs, listed in alphabetical order, that were included for prioritization based on the synthesis of all forms of data collected for CalvertHealth's CHNA.

TABLE 3. HEALTH TOPIC AND DATA COLLECTION

Health Topic	Data Set
Cancer	Secondary Data, Key Informants, Survey
Education	Secondary Data
Environment	Secondary Data
Exercise, Nutrition & Weight	Key Informants, Survey
Heart Disease & Stroke	Secondary Data
Mental Health & Mental Disorders	Secondary Data, Key Informants, Survey
Older Adults & Aging	Secondary Data, Key Informants, Survey
Oral Health	Secondary Data
Substance Abuse	Key Informants, Survey
Transportation	Secondary Data
Women's Health	Secondary Data

Prioritized Significant Health Needs

The following section dives deeper into each of the prioritized health needs in order to understand how findings from secondary and primary data led to the health topic becoming a priority health issue for CalvertHealth. The four health needs are presented in the order of how they ranked in the prioritization process.

Prioritizied Health Topic #1: Cancer

Cancer ———————————————— Secondary Data Score: **1.70**

Key Themes from Community Input

- Lack of knowledge of available screenings

- Nearly 25% of survey respondents think cancer is a prevalent health issue

Warning Indicators

- Age-Adjusted Death Rate due to Breast Cancer
- Age-Adjusted Death Rate due to Prostate Cancer
- Melanoma Incidence Rate
- Cervical Cancer Incidence Rate
- Breast Cancer Incidence Rate

Secondary Data

From the secondary data scoring results, Cancer was identified to be a top health need in Calvert County. It has the third highest data score of all health topic areas using the data scoring technique, with a score of 1.70. Further analysis was done to identify specific indicators of concern across the county. Individual indicators with high data scores within a topic area were categorized as indicators of concern and are listed below.

TABLE 4. DATA SCORING RESULTS FOR CANCER

SCORE	CANCER	Calvert County	Maryland	US	Maryland Counties	US Counties	Trend
2.55	Age-Adjusted Death Rate due to Breast Cancer (2012-2016) *deaths/100,000 females*	26.2	22.1	20.6 HP2020* 20.7			

		Calvert	Maryland	U.S. / HP2020	Calvert Gauge	MD/US Gauge	Trend
2.45	Age-Adjusted Death Rate due to Prostate Cancer (2012-2016) *deaths/100,000 males*	27.7	20.2	19.2 HP2020* 21.8			↗
2.25	Melanoma Incidence Rate (2012-2016) *cases/100,000 population*	30.3	23	21.8			↘
2.18	Cervical Cancer Incidence Rate (2003-2007) *cases/100,000 females*	9	7.6	HP2020* 7.3		—	—
2.15	Breast Cancer Incidence Rate (2012-2016) *cases/100,000 females*	141.1	131.5	125.2			↗
1.80	Oral Cavity and Pharynx Cancer Incidence Rate (2012-2016) *cases/100,000 population*	13.6	10.9	11.7			↗
1.75	Cancer: Medicare Population (2017) %	8.9	9.1	8.2			↘
1.75	Colorectal Cancer Incidence Rate (2012-2016) *Cases/100,000 population*	39	36.4	38.7 HP2020* 39.9			↘

*HP2020 - Healthy People provides science-based, 10-year national objectives for improving the health of all Americans. HP2020 represents a Healthy People target to be met by 2020.

From the secondary data results, there are many cancer indicators that raise concern for Calvert County. Calvert County has a higher rate of Breast Cancer Deaths, Prostate Cancer Deaths, Melanoma Incidence, Cervical Cancer Incidence, Breast Cancer Incidence, Oral Cavity and Pharynx Cancer Incidence, Cancer in the Medicare Population, and Colorectal Cancer Incidence than both the overall state of Maryland and the U.S. Further, Calvert County is failing to meet the Healthy People 2020 targets for Age-Adjusted Death Rate due to Breast Cancer, Age-Adjusted Death Rate due to Prostate Cancer, and Cervical Cancer Incidence Rate.

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Primary Data

Approximately 25% of survey respondents selected Cancer as a prevalent issue in the community, while 3% of respondents selected Cancer as a personal health issue. Key informant interviews noted a lack of knowledge about available screenings in the community, which they believed is contributing to the higher cancer incidence and rates reported in the secondary data. Lack of health insurance coverage for preventative screenings, such as mammography for women younger than 40, was noted as a barrier to catching breast cancer at an earlier stage. Additionally, key informants mentioned historically high levels of tobacco use in the county, especially with older community members, which could contribute to the higher cancer rates.

> " Lack of education and the fact that cancer is scary are barriers to screening.
> - Key Informant Quote

Prioritized Health Topic #2: Heart Disease & Stroke

Heart Disease & Stroke

Secondary Data Score: **1.54**

Key Themes from Community Input

- Nearly 15% of survey respondents noted high blood pressure as a personal health issue

- For survey respondents representing communities of color, high blood pressure was the top personal health issue they noted

Warning Indicators

- Ischemic Heart Disease: Medicare Population
- Age-Adjusted Death Rate due to Heart Disease
- Age-Adjusted ER Rate due to Hypertension
- High Blood Pressure Prevalence
- Hyperlipidemia: Medicare Population

Secondary Data

From the secondary data scoring results, Heart Disease & Stroke was identified to be a top health need in Calvert County. It had the fifth highest data score of all health topic areas using the data scoring technique, with a score of 1.54. Further analysis was done to identify specific indicators of concern across the county. Individual indicators with high data scores within a topic area were categorized as indicators of concern and are listed in Table 5.

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TABLE 5. DATA SCORING RESULTS FOR HEART DISEASE & STROKE

SCORE	HEART DISEASE & STROKE	Calvert County	Maryland	US	Maryland Counties	US Counties	Trend
2.35	Ischemic Heart Disease: Medicare Population (2017) *%*	29.7	26.6	26.9			
2.05	Age-Adjusted Death Rate due to Heart Disease (2016-2018) *deaths/100,000 population*	186.3	163.8			—	
1.95	Age-Adjusted ER Rate due to Hypertension (2017) *ER Visits/ 100,000 population*	359.2	351.2			—	
1.88	High Blood Pressure Prevalence (2017) *%*	32.9	30.6	32.3 HP2020* 26.9		—	
1.80	Hyperlipidemia: Medicare Population (2017) *%*	45.2	42.8	40.7			
1.75	Atrial Fibrillation: Medicare Population (2017) *%*	8.9	8.2	8.4			
1.70	Stroke: Medicare Population (2017) *%*	4.3	4.4	3.8			

*HP2020 - Healthy People provides science-based, 10-year national objectives for improving the health of all Americans. HP2020 represents a Healthy People target to be met by 2020

Looking at the secondary data, the Medicare population is disproportionately affected by Heart Disease & Stroke in Calvert County. Ischemic Heart Disease, Atrial Fibrillation, Hyperlipidemia, and Stroke are all indicators of concern for the Medicare population. The county has higher percentages for all of these

indicators than both the state of Maryland and the entire U.S., except for Stroke, which has a slightly lower percentage than the state of Maryland, but higher than the U.S. Given that Older Adults & Aging was one of the top five identified significant health needs for Calvert County based on the data synthesis, and that the population of Calvert County skews slightly older as well, these factors will be integrated into the implementation strategy for the prioritized Heart Disease & Stroke topic area.

Primary Data

Survey respondents noted Heart Disease & Stroke as a need to address both personally and in the community. High blood pressure was selected by 14.93% of respondents as a personal health issue. When broken down by race, survey respondents representing communities of color selected high blood pressure as the top health concern for themselves and the community. Heart Disease & Stroke was selected by 16.84% of survey respondents as a community health issue. Additionally, survey respondents chose "chronic disease management services" as a resource needed in the community. Key informants stated chronic disease management would help those living with heart disease. Key informants cited transportation issues, especially among older adults as a barrier to accessing chronic disease management services.

> " When I get a request for medication assistance, it's usually for blood pressure medications.
> - Key Informant Quote "

Prioritized Health Topic #3: Mental Health & Mental Disorders

Mental Health & Mental Disorders

Secondary Data Score: **1.52**

Key Themes from Community Input

- Mental health and behavioral health services was the most commonly selected resource needed in the community

- Key Informants believe there is a need for mental/behavioral health interventions in school

Warning Indicators

- Age-Adjusted Hospitalization Rate due to Adolescent Suicide and Intentional Self-inflicted Injury
- Age-Adjusted Hospitalization Rate due to Pediatric Mental Health
- Age-Adjusted Hospitalization Rate due to Adolescent Suicide and Intentional Self-inflicted Injury

Secondary Data

From the secondary data scoring results, Mental Health & Mental Disorders was identified to be a top health need in Calvert County. It had the eighth highest data score of all health topic areas using the

data scoring technique, with a score of 1.52. Further analysis was done to identify specific indicators of concern across the county. Individual indicators with high data scores within a topic area were categorized as indicators of concern and are listed in Table 6.

TABLE 6. DATA SCORING RESULTS FOR MENTAL HEALTH & MENTAL DISORDERS

SCORE	MENTAL HEALTH & MENTAL DISORDERS	Calvert County	Maryland	US	Maryland Counties	US Counties	Trend
2.58	Age-Adjusted Death Rate due to Suicide (2012-2014) deaths/100,000 population	16.5	9.2	12.7 HP2020* 10.2	—	—	⬈
1.95	Age-Adjusted Hospitalization Rate due to Adolescent Suicide and Intentional Self-inflicted Injury (2013-2015) hospitalizations/10,000 population aged 12-17	76.7	23.3	—	—	—	—
1.95	Age-Adjusted Hospitalization Rate due to Pediatric Mental Health (2016-2018) hospitalizations/10,000 population under 18 years	32.5	10.8	—	—	—	—

*HP2020 - Healthy People provides science-based, 10-year national objectives for improving the health of all Americans. HP2020 represents a Healthy People target to be met by 2020

The secondary data reveal that Mental Health & Mental Disorders affect children and adolescents in Calvert County. The Rates of Hospitalizations due to Adolescent Suicide and Intentional Self-Inflicted Injury as well as Pediatric Mental Health are more than double the overall Maryland state values. Furthermore, the Death Rate Due to Suicide in Calvert County is not only higher than both Maryland and the U.S., but also has 16.5 deaths per 100,000 population, which is higher than the CDC Healthy People 2020 target of 10.2 deaths per 100,000 population.

Primary Data

Mental Health, including Behavioral Health and Stress, was selected by 29.12% of survey respondents as a health issue in the community. All key informants spoke of mental health issues in the community, the need for more services including inpatient and outpatient programs, and specifically expressed concern for school-aged children. Key informants stated that fear and anxiety among children and their parents was high when schools were closed due to the stay-at-home orders related to the COVID-19 pandemic.

"Services for Adolescents", including smoking and vaping education/cessation, healthy lifestyle and mental health support, was chosen by 39.55% of survey respondents as services the community would

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benefit from. "More Mental Health and Behavioral Health Services" was noted as the most needed resource for the community (as selected by 44.66% of survey respondents). Additionally, the need for "Emotional Wellness and Stress Reduction Services" was selected by 28.97% of survey respondents. Key informants expressed concern about the long waits to access mental health services.

> Mental health is the number one driver of so many issues in the community.
> - Key Informant Quote

Prioritized Health Topic #4: Exercise, Nutrition & Weight

Exercise, Nutrition & Weight

Secondary Data Score: **1.44**

Key Themes from Community Input

- Over 25% of survey respondents noted this as a personal health issue

- Key Informants focused on the need for more places to exercise

Warning Indicators

- Adults Who Are Obese
- Food Insecure Children Likely Ineligible for Assistance
- Access to Exercise Opportunities
- People with Low Access to a Grocery Store
- SNAP Certified Stores
- Recreation and Fitness Facilities

Secondary Data

From the secondary data scoring results, Exercise, Nutrition, & Weight (including Obesity) was identified to be a top health need in Calvert County. It had the twelfth highest data score of all health topic areas using the data scoring technique, with a score of 1.44. Further analysis was done to identify specific indicators of concern across the county. Individual indicators with high data scores within a topic area were categorized as indicators of concern and are listed in Table 7.

TABLE 7. DATA SCORING RESULTS FOR EXERCISE, NUTRITION, & WEIGHT (INCLUDING OBESITY)

SCORE	EXERCISE, NUTRITION & WEIGHT (OBESITY)	Calvert County	Maryland	US	Maryland Counties	US Counties	Trend
2.48	Adults Who Are Obese (2018) %	37.2	31.5	30.9 HP2020* 30.5		—	

Score	Indicator	Calvert	Maryland	Nation			Trend
2.30	Food Insecure Children Likely Ineligible for Assistance (2017) *%*	54	39	21	(gauge)	—	↘
2.25	Access to Exercise Opportunities (2020) *%*	61.4	92.6	84	(gauge)	(gauge)	—
1.95	People with Low Access to a Grocery Store (2015) *%*	36.1			(gauge)	(gauge)	—
1.95	SNAP Certified Stores (2018) *stores/ 1,000 population*	0.4			(gauge)	(gauge)	—
1.90	Recreation and Fitness Facilities (2014) *facilities/ 1,000 population*	0.04			—	—	↘
1.88	Adults with a Healthy Weight (2014) *%*	32.9	35.1	35.2	(gauge)	—	=
1.75	Grocery Store Density (2014) *stores/ 1,000 population*	0.1	31.5	30.9	(gauge)	(gauge)	↘
1.50	Households with No Car and Low Access to a Grocery Store (2015) *%*	2.1	39	21	(gauge)	(gauge)	—
1.50	Low-Income and Low Access to a Grocery Store (2015) *%*	5.2	92.6		(gauge)	(gauge)	—

*HP2020 - Healthy People provides science-based, 10-year national objectives for improving the health of all Americans. HP2020 represents a Healthy People target to be met by 2020

Overweight and obesity are areas of overwhelming concern for Calvert County, as the percent of adults who are obese is trending upward. The percent is higher in Calvert County (37.2%) than in both Maryland as a whole (31.5%) and the nation overall (30.9%). Calvert County fails to meet the Healthy People 2020 Target value (30.5%) in regard to adults either overweight or obese. Additionally, Food Insecure Children Likely Ineligible for Assistance also scored highly in the secondary data scoring of indicators, as the Calvert County value (54%) was much higher than the Maryland state value (39%) and the national value (21%). Furthermore, Access to Exercise Opportunities in Calvert County (61.4%) is trailing behind both the state of Maryland (92.6%) and the nation (84%).

Primary Data

Results from the community survey and key informant interviews support the secondary warning indicator of Adults who are Obese in the community. The survey results show Exercise, Nutrition & Weight as the second top health challenge survey respondents personally experience. When broken down by gender, 29.41% of women selected this as the top personal health issue. Key informants noted lack of healthy lifestyle opportunities as contributors to the higher obesity rates in their community. They emphasized the need for more spaces to exercise in the community and specifically requested more sidewalks for people to walk safely. Concern was noted about adolescents' high level of "screen time" versus time spent on healthier lifestyle choices like exercising.

> Kids spend a lot of time on their screens, eating junk food and not getting enough sleep.
> - Key Informant Quote

Non-Prioritized Significant Health Needs

The following significant health needs, presented in alphabetical order, emerged from a review of the primary and secondary data. CalvertHealth did not elect to explicitly prioritize these topics. However, they are related to the selected priority areas and will be interwoven in the forthcoming Implementation Strategy and in future work addressing health needs through strategic partnerships with community partners.

Key themes from community input are included for each non-prioritized health need along with the secondary data warning indicators, which reveal where Calvert County performs worse than the state of Maryland.

Non-Prioritized Health Need #1: Education

Education ──────────────────── Secondary Data Score: **1.51**

Key Themes from Community Input

- Over 39% of survey respondents believe more services are needed for teen and adolescents

Warning Indicators

- School Readiness at Kindergarten Entry
- Student-to-Teacher Ratio

> Parents use the school as a one stop shop for social and emotional support, and dietary needs.
> - Key Informant Quote

Non-Prioritized Health Need #2: Environment

Environment

Secondary Data Score: **1.53**

Key Themes from Community Input

- Lack of good sidewalks for walking safely is a concern with 57% of survey respondents

- The community needs more fitness and physical activity resources

Warning Indicators

- Access to Exercise Opportunities
- Daily Dose of UV Irradiance
- People with Low Access to a Grocery Store
- SNAP Certified Stores
- Recreation and Fitness Facilities
- Grocery Store Density

> " We really have a special community here. I am just one of a lot of people that wants to do right and see change in our community.
> - Key Informant Quote

Non-Prioritized Health Need #3: Older Adults & Aging

Older Adults & Aging

Secondary Data Score: **1.53**

Key Themes from Community Input

- Services for Seniors was noted as the second highest need in the community from the survey

- 49% of survey respondents and several of the key informants noted transportation issues for seniors

Warning Indicators

- Ischemic Heart Disease: Medicare Population
- Rheumatoid Arthritis or Osteoarthritis: Medicare Population
- Chronic Kidney Disease: Medicare Population
- Hyperlipidemia: Medicare Population
- Adults 65+ with Pneumonia Vaccination

> " Isolation and loneliness is always a big issue with seniors.
> - Key Informant Quote

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Non-Prioritized Health Need #4: Oral Health

Oral Health ———————— Secondary Data Score: **1.60**

Key Themes from Community Input

- Lack of insurance is a major barrier to accessing dental services

- Underserved/Medicaid populations experience excessive wait times for care

Warning Indicators

- Age-Adjusted ER Visit Rate due to Dental Problems
- Oral Cavity and Pharynx Cancer Incidence Rate
- Children who Visited a Dentist

" Because of the lack of access to dental care, people are coming in when an issue has really progressed. "
- Key Informant Quote

Non-Prioritized Health Need #5: Substance Abuse

Substance Abuse ———————— Secondary Data Score: **1.47**

Key Themes from Community Input

- 41% of survey respondents point to substance abuse as a health need impacting the community

- Substance abuse, including alcohol, crosses socioeconomic lines

Warning Indicators

- Adults who Binge Drink
- Alcohol-Impaired Driving Deaths
- Adults who Smoke

" Everyone is vulnerable to drug issues. "
- Key Informant Quote

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Non-Prioritized Health Need #6: Transportation

Transportation

Secondary Data Score: **1.79**

Key Themes from Community Input

- Public transportation is not easily accessible and is limited in scope

- 35% of survey respondents think the community needs more transportation options

Warning Indicators

- Mean Travel Time to Work
- Solo Drivers with a Long Commute
- Workers who Drive Alone to Work

> "Some families have no access to cars to get to services.
> - Key Informant Quote

Non-Prioritized Health Need #7: Women's Health

Women's Health

Secondary Data Score: **1.90**

Key Themes from Community Input

- Nearly 30% of female survey respondents point to exercise, nutrition and weight management as personal issues they struggle with

- Additionally, female respondents believe a lack of sidewalks for walking safety was a barrier to better health

Warning Indicators

- Age-Adjusted Death Rate due to Breast Cancer
- Cervical Cancer Incidence Rate
- Breast Cancer Incidence Rate

> "There does not seem to be a lot of free screening for low income women.
> - Key Informant Quote

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Other Findings

Critical components in assessing the needs of a community are identifying barriers to and disparities in health care. Additionally, the identification of barriers and disparities will help inform and focus strategies for addressing the prioritized health needs for CalvertHealth's service area. The following section identifies barriers and disparities as they pertain to Calvert County.

Barriers to Care

Community health barriers for CalvertHealth's service area were identified as part of the primary data collection. Key informants and community survey respondents were asked to identify any barriers to healthcare observed or experienced in the community.

Transportation

The geography of Calvert County, with its long, narrow peninsula and one main thoroughfare running north to south, results in increased transportation issues. The limited number of large roads or highways and the spread of the population throughout the rural county create difficulties for many of those in need of care. From the secondary data scoring results, Transportation was the second most pressing need in Calvert County with a data score of 1.79. Using a Likert Scale, a five-point scale used to allow the individual to express how much they agree or disagree with a particular statement, 43% of survey respondents disagreed or strongly disagreed that public transportation is affordable and easy to access. Furthermore, key informants reported public transportation as the biggest barrier to accessing services for those needing assistance such as older adults and families with children. They further explained that limited existing public transportation is exacerbated by the size and spread of the county across its long and narrow peninsula.

Cost, Wait Times, Literacy

For the community survey respondents that did not receive the care they needed, 24% noted wait time for services as an issue, while 31% selected cost as a barrier to seeking the care they needed. Key informants were concerned that low-income community members do not have access to affordable healthcare providers. Key informants added that even when health insurance is available, health literacy issues make seeking or renewing healthcare coverage difficult, especially for older adults and immigrant populations.

The economic secondary data further support the primary data findings around cost and access. The median household income of Calvert County is $112,150, which is about $20,000 higher than the Maryland state value. However, there is a disparity in median household income for Black/African American residents ($71,173).

Disparities

Race/Ethnic & Age Disparities

Community health disparities were assessed in both the primary and secondary data collection processes. Table 8 below identifies secondary data health indicators with a statistically significant race or ethnic disparity for Calvert County.

TABLE 8. INDICATORS WITH SIGNIFICANT RACE/ETHNIC & AGE DISPARITIES

Health Indicator	Group Negatively Impacted (highest rates)
Children with Asthma	Black/African American, Other, Hispanic
Children Living Below Poverty Level	White, Asian, Multiple Races
People Living Below Poverty Level	Black/African American, Asian, American Indian / Alaska Native, Multiple Races, Other, Hispanic
Families Living Below Poverty Level	Black/African American, Multiple Races
People 65+ Living Below Poverty Level	Black/African American, Hispanic
People 25+ with a Bachelor's Degree or Higher	Black/African Amerian, American Indian / Alaska Native
Babies with Low Birth Weight	Black/African American
Teens with Smoke Cigarettes: High School Students	Hispanic
Workers Commuting by Public Transportation	White, Hispanic

The indicators listed in Table 8 show a statistically significant difference in race or ethnicity according to the Index of Disparity analysis. Secondary data reveal that different race groups are disparately impacted for many poverty-related indicators, which are often associated with poorer health outcomes. Additionally, the Black/African American and Hispanic populations are the most negatively impacted race groups in Calvert County, experiencing six and five significant disparities, of indicators listed in Table 8. These important gaps in data should be recognized and considered for implementation planning to mitigate the disparities often faced along racial, ethnic, or cultural lines in Calvert County.

Key informant interviews did not specifically call out a particular race or ethnic group in the community as struggling more with social determinants of health but stated that minorities seem to be more negatively impacted by issues like poverty which contributes to poor health outcomes. Additionally, older adults were the age group that key informants brought up the most as having more barriers to accessing healthcare and services compared to younger populations. They also mentioned low-income families struggling to access services.

Geographic Disparities

Geographic disparities were also identified using the SocioNeeds Index®. Zip codes 20714 (North Beach), 20678 (Prince Frederick), and 20657 (Lusby) were identified as zip codes with the highest socioeconomic need, potentially indicating poorer health outcomes for residents in those areas. Because these areas were identified as having the highest socioeconomic need, understanding the population demographics of these communities is equally as important. Key informants mentioned North Beach and Prince Frederick as being areas experiencing lower income.

FIGURE 20. SOCIONEEDS INDEX

COVID-19 Impact Snapshot

COVID-19 Calvert County Community Impact Timeline

COVID - 19

December 2019

First reported case of a new novel coronavirus reported in the Wuhan Provence of China and relayed to the World Health Organization (WHO)

March 5th, 2020

State of Emergency and Catastrophic Health Emergency declared by Maryland's governor

March 15th, 2020

First positive culture at CalvertHealth

March 16th, 2020

To encourage people to stay home and reduce the spread of COVID-19, Maryland Governor issues an executive order prohibiting large gatherings, implementing social distancing and closing all businesses except those deemed essential

March 16th, 2020

CalvertHealth suspends elective surgeries, procedures and ancillary outpatient services due to stay at home orders

March 21st, 2020

CalvertHealth hosts the first drive thru testing for Calvert County residents

April 28th, 2020

CalvertHealth, in collaboration with the Calvert County Public Health Department, expands testing capabilities and opens testing to Calvert County residents at Vehicle Emissions Stations

May 15th, 2020

Calvert County begins Stage One of the Maryland Strong: Roadmap to Recovery Plan, which includes moving from a Stay at Home order to a Safer at Home public health advisory and the gradual reopening of retail, manufacturing, houses of worship, and some personal services

May, 2020

CalvertHealth begins to reinstate elective surgeries and procedures and reopen ancillary outpatient services

June 5th, 2020

Stage 2 reopening begins including opening of "nonessential business" (e.g. retail stores, manufacturing, offices) with safety precautions

Sources
https://www.who.int/
https://www.calvertcountycovid19.com/
https://governor.maryland.gov/
https://www.businessinsider.com/coronavirus-pandemic-timeline-history-major-events-2020-3

Introduction

At the time that CalvertHealth began its tri-annual CHNA process, Calvert County and the state of Maryland were in the midst of dealing with the novel coronavirus (COVID-19) pandemic.

The process for conducting the assessment remained fundamentally the same. However, there were some adjustments made during the primary data collection to ensure the health and safety of those participating.

Pandemic Overview[1]

On March 13, 2020, a U.S. national emergency was declared over the novel coronavirus outbreak first reported in the Wuhan Provence of China in December 2019. Officially named COVID-19 by the World Health Organization (WHO) in February, WHO declared COVID-19 a pandemic on March 11, 2020. Upon completion of this report in September 2020, the pandemic was still very much a health crisis across the United States and in most countries.

Community Insights

The CHNA project team looked for additional sources of secondary data and gathered primary data to provide a snapshot of the impact of COVID-19 on Calvert County between March 2020 and July 2020. Findings are reported below.

COVID-19 Cases and Deaths in Maryland and Calvert County

For current cases and deaths due to COVID-19 visit: https://www.calverthealthmedicine.org/the-latest-information-on-coronavirus-covid-19

Vulnerability Index[2]

Beyond looking at what we know about COVID-19 cases and deaths, the Conduent Vulnerability Index is a measure of potential severe illness burden due to COVID-19 by county. Counties are given an index value from 1 (low vulnerability) to 10 (high vulnerability). A county with a high vulnerability score can be described as a location where a higher percentage of COVID-19 cases would result in severe outcomes such as hospitalization or death as comparted a county with a low vulnerability score.

Calvert County Index Score: 1   (as of July 12, 2020)
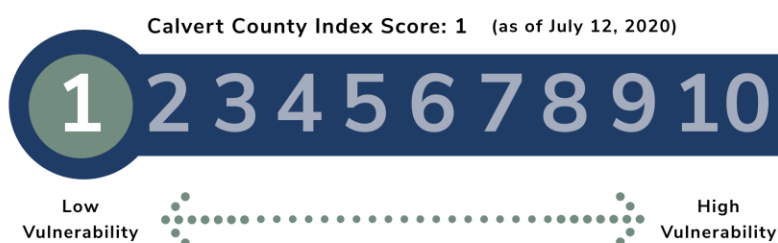
What does this score mean?

Calvert County's Index Score of 1 means that county residents generally have low death rates due to chronic conditions, lower socio-economic needs, and adequate access to healthcare and services to protect themselves from more severe COVID-19 cases and more death than a county with higher rates of chronic disease, risky behavior, and/or low access to health services.

The median Vulnerability Index value in Maryland is 4, therefore, Calvert County - with a value of 1 - is in the top 25% of MD counties. Twenty-three counties, in addition to Baltimore City, in Maryland meet the inclusion criteria for the model and have daily-calculated Vulnerability Index values (Kent County, MD does not meet the model's inclusion criteria).

Calvert County Unemployment Rates[3]

As expected, Calvert County's unemployment rates rose in April 2020 when stay at home orders were in place. As Calvert and surrounding counties began slowing reopening some businesses in May, the unemployment rate went down. The county can expect to see variation in unemployment rates based on government response to the pandemic. When unemployment rates rise, there is potential impact on health insurance coverage if jobs lost include employer-sponsored healthcare.

- December 2019: 2.5%
- April 2020: 8.3%
- May 2020: 7.7%
- June 2020: 6.3%

Calvert County Community Feedback

Key Informant interviews and a communitywide online survey were used to capture insights and perspectives of the health needs of Calvert County. Included in both the key informant interview guide and survey tool were questions specific to COVID-19.

Table 9 is a summary of the insights from community survey respondents and community experts gathered in May and early June 2020 regarding the impact of COVID-19 on the community.

TABLE 9. COVID-19 PRIMARY DATA INSIGHTS

Community Survey Insights	Key Informant Insights
90% of respondents felt "very" or "somewhat" informed about COVID-19	More isolation and loneliness were felt, especially with older adults
47% of respondents experienced "moderate" to "major" impact in feeling alone/isolated during the stay at home orders	There was heightened fear and anxiety in school children and their parents when schools closed
49% felt "moderate" or "major" impact of not knowing when the pandemic will end and having a lack of control	Food insecurity rose at the start of the stay at home orders and then diminished when services resumed
	Organizations were innovative and worked together to keep serving the community

2020 CalvertHealth Significant Health Needs and COVID-19 Impact

Of the 11 significant health needs identified through primary and secondary data, three appeared to worsen during the stay at home orders in the early stages of the pandemic according to information gathered through key informant interviews and survey responses.

Environment (Food Insecurity)

- 35% of survey respondents noted "minor" to "moderate" impact when asked about food shortages due to COVID-19, while 47.5% selected "no impact."
- Food insecurity for seniors was noted as an issue related to COVID-19 by key informants because many of the community food programs had volunteers in the high-risk age range. Therefore, when the stay-at-home orders were in place, there was a shortage of people to help. However, it was reported community organizations came together quickly to address the issue and figure out food distribution for seniors.
- According to End Hunger in Calvert County, when schools closed 3,000 children in Calvert County lost access to free breakfast and lunch. Key informants reported that local school and government officials created a plan to make meals available to families with school-aged children.

Mental Health and Mental Health Disorders

- 47% of survey respondents reported experiencing "moderate" to "major" impact in feeling alone/isolated during the COVID-19 stay at home orders.
- When asked what services the community needs more of, "behavioral/mental health services" was selected the most by survey respondents.
- According to a key informant, Senior Center closures exacerbated feelings of isolation and loneliness among the older adult population. While the centers were closed, senior community members lost access to socialization activities including exercise classes, educational programs, support groups, and meal services.
- Fear and anxiety were experienced by students and their parents when schools closed and the uncertainty of when they would reopen.

Older Adults & Aging

- Services for older adults were the second most commonly selected need in the community by survey respondents.
- Key informants reported that concern for older adults dealing with feelings of isolation and challenges meeting their physical needs (groceries shopping, picking up prescriptions etc.) led to telephone outreach to connect those in need with resources as they became available.

Community experts who participated in the interviews also highlighted that local government officials, school administration, senior services leaders, and religious organizations came together to leverage resources, address disruptions and meet needs as quickly and efficiently as possible.

Recommended Data Sources

As local, state, and national data are updated and become available, these data can continue to help inform approaches to meeting existing and developing needs related to the pandemic. Recommended data sources for Calvert County are included here:

National Data Sources

- **Center for Disease Control:** https://www.cdc.gov/coronavirus/2019-ncov/php/open-america/surveillance-data-analytics.html
- **Johns Hopkins Coronavirus Resource Center:** https://coronavirus.jhu.edu/us-map
- **Conduent COVID At Risk – Vulnerability Index:** https://www.covid19atrisk.org/
- **NACCHO Coronavirus Resources for Health:** https://covid19-naccho.hub.arcgis.com/
- **Feeding America (The Impact of the Coronavirus on Local Food Insecurity):** https://www.feedingamerica.org/sites/default/files/2020-05/Brief_Local%20Impact_5.19.2020.pdf

Maryland Data Sources

Data from the following websites are updated regularly and may provide additional information into the impact of COVID-19 in Calvert County:

- **CalvertHealth:** https://www.calverthealthmedicine.org/the-latest-information-on-coronavirus-covid-19
- **Calvert County Public Health Department:** https://www.calvertcountycovid19.com/
- **Calvert County Public Health Department COVID-19 Resource Center:** https://www.calvertcountymd.gov/2630/COVID-19-Virtual-Resource-Center
- **Maryland Department of Public Health:** https://coronavirus.maryland.gov/
- **Healthy Calvert:** http://www.healthycalvert.org/

COVID-19 Impact Snapshot Data Sources

1. **Pandemic Overview:** https://coronavirus.maryland.gov/
2. **Vulnerability Index:** https://www.covid19atrisk.org/vulnerability.html
3. **Calvert County Unemployment Rates:** https://fred.stlouisfed.org/series/MDCALV9URN

Conclusion

This Community Health Needs Assessment (CHNA), conducted for CalvertHealth, used a comprehensive set of secondary and primary data to determine the 11 significant health needs in Calvert County. The prioritization process identified four top health needs: Cancer; Heart Disease & Stroke; Mental Health & Mental Disorders; and Exercise, Nutrition & Weight (including Obesity).

The findings in this report will be used to guide the development of CalvertHealth's Implementation Strategy, which will outline strategies to address identified priorities and improve the health of the community.

Please send any feedback and comments about this CHNA to:
community.wellness@calverthealthmed.org with "CHNA Comments" in the subject line.
Feedback received will be incorporated into the next CHNA process.