CalvertHealth Medical Center

2017 Community Health Needs Assessment

ONE NAME. ONE VISION.

We stand for community. For families and neighbors, for reaching out and being there when it counts.

We believe in moving more and eating right, in taking the stairs and exploring new paths. We celebrate fevers going down and babies growing up. We believe in the power of possibility and embrace opportunities for change through innovation.

We hold dear the traditions of watermen and farmers and we never forget where we came from. We come to work each day with a dedicated spirit of service and drive to make a difference in every life we touch.

We are CalvertHealth and we stand for health, for care and for doing our best every day.

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Executive Summary

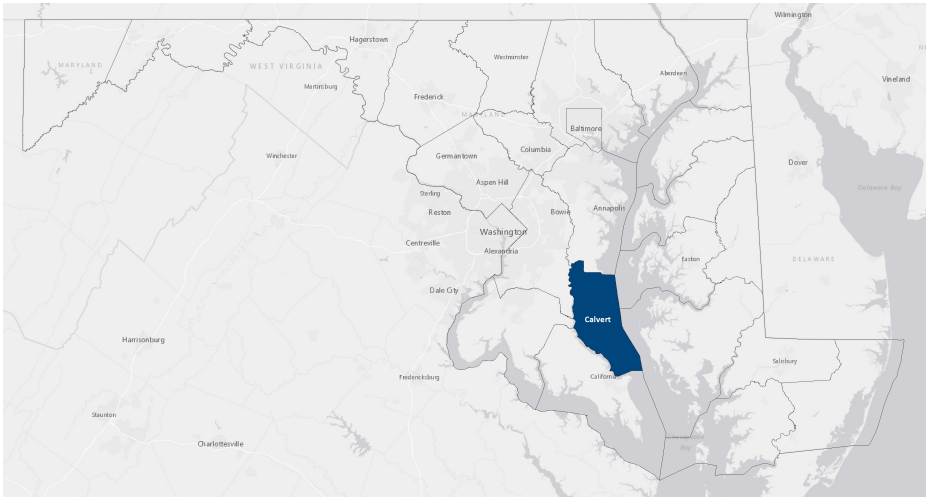
CalvertHealth is pleased to present its 2017 Community Health Needs Assessment (CHNA). As federally required by the Affordable Care Act, this report provides an overview of the methods and process used to identify and prioritize significant health needs in CalvertHealth's service area. CalvertHealth partnered with Conduent Healthy Communities Institute (HCI) to conduct the 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.

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 their 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, lends itself to increased transportation issues.



Demographics

Calvert County has a population of approximately 90,940. The age distribution of Calvert County skews slightly older. The racial makeup of Calvert County is somewhat homogenous, with 81% of the population identifying as White. Black or African American is the second highest of all races in Calvert County, and 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 was obtained and analyzed from CalvertHealth's Community Dashboard http://www.calverthealthmedicine.org/Community-Health-Needs-Assessment. This includes a comprehensive set of over 100 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, Maryland State Health Improvement Process (SHIP) 2017 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, (2) a community survey distributed throughout Calvert County, (3) and three community conversations that took place at locations across the county.

Summary of Findings

The CHNA findings are drawn from an analysis of an extensive set of secondary data (over 100 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:

CalvertHealth's Significant Health Needs	
Access to Health Services	Mental Health & Mental Disorders
Cancer	Older Adults & Aging
Children's Health	Substance Abuse
Exercise, Nutrition, & Weight (includes Obesity)	Transportation
Heart Disease & Stroke	

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 along racial lines, with Black and Hispanic populations more negatively impacted in Calvert County. Further, the data shows that older adults face increased health issues, while populations in certain geographic areas were identified as having higher socioeconomic need and potentially poorer health outcomes.

Prioritized Areas

On October 4, 2017, members from various departments within CalvertHealth and representative members of the community came together to prioritize the significant health needs in a session led by consultants from HCI. While considering several criteria for prioritization, the following four health areas were identified as priorities to address:

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

Conclusion

This report describes the process and findings of a comprehensive health needs assessment for the residents of Calvert County, Maryland. The prioritization of the identified significant health needs will guide the community health improvement efforts of CalvertHealth. Following this process, CalvertHealth will outline how they plan to address the top four prioritized health needs in their 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

The 2010 Patient Protection and Affordable Care Act, commonly known as the Affordable Care Act (ACA), requires non-profit, tax-exempt hospitals to conduct a Community Health Needs Assessment (CHNA) every three years. To meet requirements, hospitals must analyze and identify the health needs of their communities, then develop and adopt an implementation strategy to meet the identified needs.

As a not-for-profit, tax-exempt hospital, CalvertHealth is pleased to present the 2017 CHNA report, which provides an overview of the significant community health needs identified in CalvertHealth's service area, Calvert County, Maryland.

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 these 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 90 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 267 active and consulting physicians representing over 40 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 CalvertHealth. You can find more information about the hospital at CalvertHealth's website (http://www.calverthealthmedicine.org/).

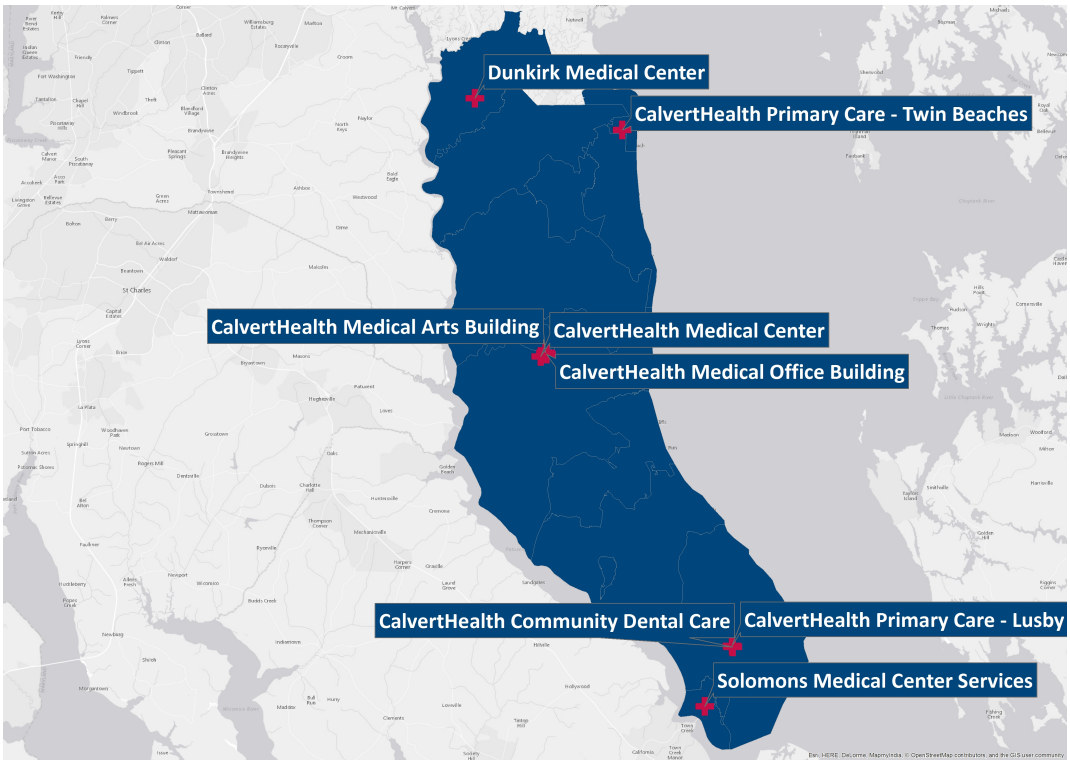
In addition to the main hospital campus, satellite medical office buildings in Dunkirk, Solomons, Twin Beaches and Prince Frederick ensure that quality care is no more than 15 minutes from anywhere in Calvert County. CalvertHealth is dedicated to the seamless delivery of high quality medical services for

each patient. This means supplying everything from acute, critical care to rehabilitation and home health 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 1. CalvertHealthLocations



Consultants

CalvertHealth commissioned Conduent Healthy Communities Institute (HCI) to assist with the 2017 Community Health Needs Assessment for CalvertHealth and author this report.

Conduent Healthy Communities Institute's mission is to improve the health and environmental sustainability of cities, counties and communities through services and technology. HCI supports hospitals in meeting IRS 990 CHNA requirements. In addition, HCI provides customizable, web-based information systems that offer a full range of tools and content to improve community health. HCI is composed of public health professionals and health IT experts committed to meeting clients' health improvement goals.

To learn more about Conduent Healthy Communities Institute, please visit our website (https://www.conduent.com/community-population-health/).

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.

Figure 2. The CHNA Cycle

Priority Health Needs from Preceding CHNA

CalvertHealth's priority health areas for years 2014-2016 were:

- Access to Health Services
- Cancer
- Substance Abuse

Cancer has continued to be a priority area for CalvertHealth in the 2017 CHNA. Access to Health Services was frequently brought up during prioritization and it has been decided that focusing on improving access will be a strategy for each 2017-2019 priority area, as it touches all aspects of health improvement implementation. While Substance Abuse hasn't been prioritized, CalvertHealth continues to collaborate with the Calvert County Health Department on their tobacco initiatives as a part of their cancer priority area. Additionally, health factors that contribute to substance abuse issues will be addressed by prioritizing and focusing on mental health. A detailed table describing the strategies/action steps and indicators of improvement for each of the preceding priority health topics can be found in Appendix A.

Community Feedback from Preceding CHNA & Implementation Plan

CalvertHealth's 2014 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 have been received on either document at the time this report was written.

Methodology

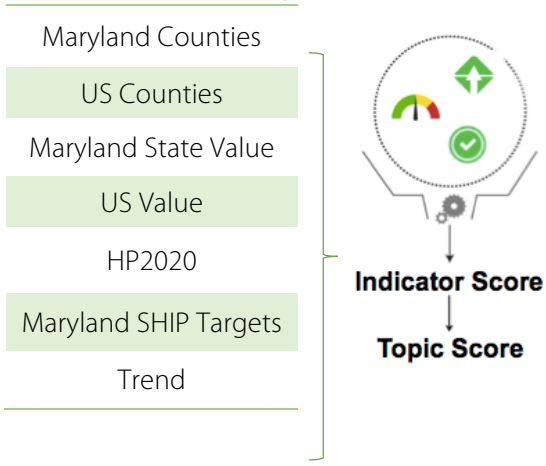
Overview

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 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 100 community indicators covering over 20 topics in the areas of health, determinants of health, and quality of life. The data is 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.

Figure 3. Secondary Data Scoring



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 Maryland State Health Improvement Process (SHIP) 2017 targets, 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.

Table 1. Secondary Data Topic Scoring Results

Transportation	1.82
Women's Health	1.80
Oral Health	1.70
Cancer	1.68
Men's Health	1.65
Substance Abuse	1.59
Other Chronic Diseases	1.55
Heart Disease & Stroke	1.53
Exercise, Nutrition, & Weight	1.51

The table to the right shows the health and quality of life topic scoring results for Calvert County, with Transportation as the poorest performing topic area for

the CalvertHealth service area, followed by Women's Health and Oral Health. These nine topic areas were those that scored over the 1.50 threshold in data scoring. Health topic areas where we had less than three indicators were considered to be a data gap. Data gaps were specifically assessed as a part of the key informant interviews to ensure that where the secondary fell short, primary data could give us an 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, Conduent Healthy Communities Institute collected community input. Primary data used in this assessment consists of key informant interviews, community conversations, and an English-language community survey. All community input tools are available in Appendices C-E.

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

Key Informant Interviews

HCI consultants conducted key informant interviews via a questionnaire in order to collect community input. Interviewees who were asked to participate were recognized as having expertise in public health, special knowledge of community health needs and/or represented the broad interests of the community served by the hospital, and/or could speak to the needs of medically underserved or vulnerable populations. Ten individuals agreed to participate as key informants. The following table lists the represented organizations who 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 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	Seniors age 50+ and disabled adults age 18+ (majority are medically underserved and low to moderate income)

Community Faith-based Representative	All of southern Maryland
Arc of Southern Maryland	Individuals with intellectual & developmental disabilities
Community Physicians Representative	All patients
Community Pharmacy Representative (Cares Team)	Rural, migrant workers, low-income persons, homeless

The ten key informant interviews took place between August 3, 2017 and September 8, 2017 via an emailed questionnaire. The questionnaire focused on the interviewee's background and organization, biggest health needs and barriers of concern in the community, and the impact of health issues on rhw 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. A list of the questions asked in the questionnaire can be found in Appendix C.

Community Conversations

Another form of community input was collected through three community conversations. Community conversations are carefully constructed problem-solving dialogues that invite diverse groups of people to discuss important and pressing issues. Community conversations provide community leaders an opportunity to engage a broad cross section of a community in productive, action-oriented deliberation. Community conversation discussions focused on community strengths, opportunities for improvement, existing resources, health needs, and possible solutions for improving the health of Calvert County. A list of questions asked at the community conversations is available in Appendix D.

The purpose of the community conversations for CalvertHealth's 2017 CHNA was to engage with populations identified as high need in the 2014 CHNA. Community conversations took place in towns identified in the 2014 CHNA as being the most socioeconomically disadvantaged communities in Calvert County. The community conversations were open to the public and advertised through the use of CalvertHealth's website and by posting informational flyers throughout each community at community centers and libraries. The following list shows the date, location, and number of participants for each community conversation.

- Saturday, August 5, 2017: Lusby, Maryland [1 person]
- Sunday August 27, 2017: Chesapeake Beach/North Beach, Maryland [4 people]
- Thursday, August 31, 2017: Prince Frederick, Maryland [3 people]

Community conversations were communicated and advertised through flyers shared across Calvert County in churches, community centers, and on CalvertHealth's website. Although turnout for the community conversations was low, results of the community conversations further support the results from other forms of primary data collected (key informant interviews and the community survey) and reinforces the findings from the secondary data scoring. By synthesizing the discussions that took place at the community conversations in tandem with the responses from key informants and the community survey; the primary data collection process for CalvertHealth's 2017 CHNA is one that is rich with involvement by a representative cross section of the community.

Key Informant & Community Conversation Analysis Results

The key informant interview questionnaires, along with the community conversation notes, were uploaded to the web-based qualitative data analysis tool, Dedoose®. The transcripts were coded according to common themes in health and social determinants of health.

Results from both the key informant interviews and community conversations were uploaded to a summary qualitative data analysis tool, Wordle.net, which creates a Word Cloud. Word Clouds help to identify the words or phrases mentioned most often in the interviews and community conversations, indicated by larger and bolder font. The image below shows the results from the analysis of key informant questionnaires and community conversation notes.

Figure 4. Primary Data Word Cloud

Community Survey

Another form of community input collected was via an online English-language community survey. Survey Monkey was the tool used to distribute and collect responses for the community survey. Paper surveys were also made available. Answers to the paper survey were entered into the Survey Monkey tool.

The community survey was distributed across CalvertHealth's entire service area from July 14, 2017 to October 2, 2017. A total of 57 responses were collected.

The following charts and graphs illustrate the demographics of community survey respondents.

Community Survey Analysis Results

Survey participants were asked what populations are most negatively affected by poor health outcomes in Calvert County, what their personal health challenges are, and what the most critical health needs are for Calvert County. The results are shown in the charts below.

Figure 5. Race of Community Survey Respondents

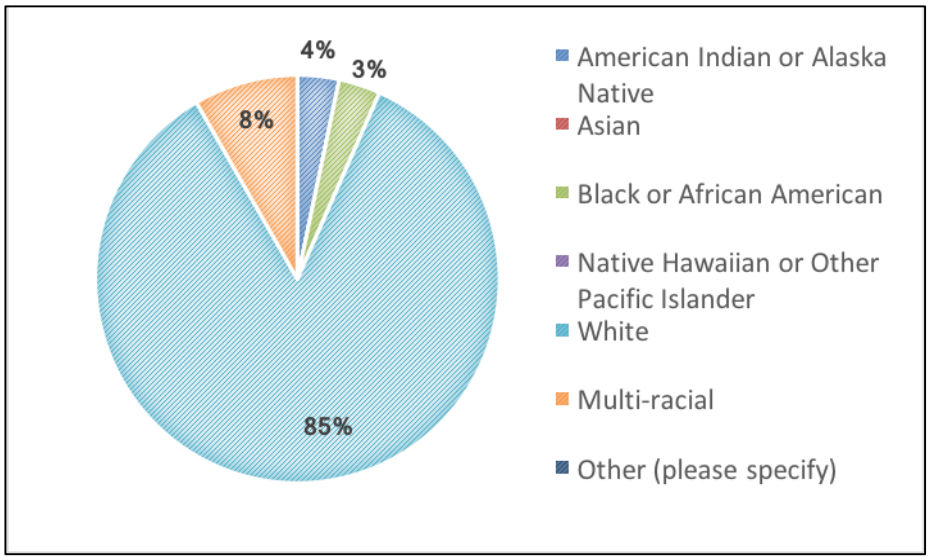


Figure 6. Education of Community Survey Respondents

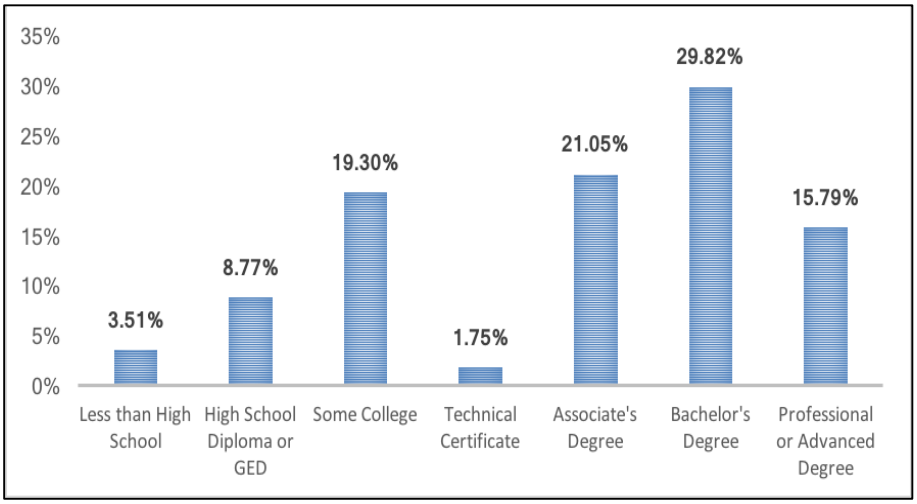


Figure 7. Populations Most Negatively Affected by Poor Health Outcomes in Calvert County, as Cited by Community Survey Participants

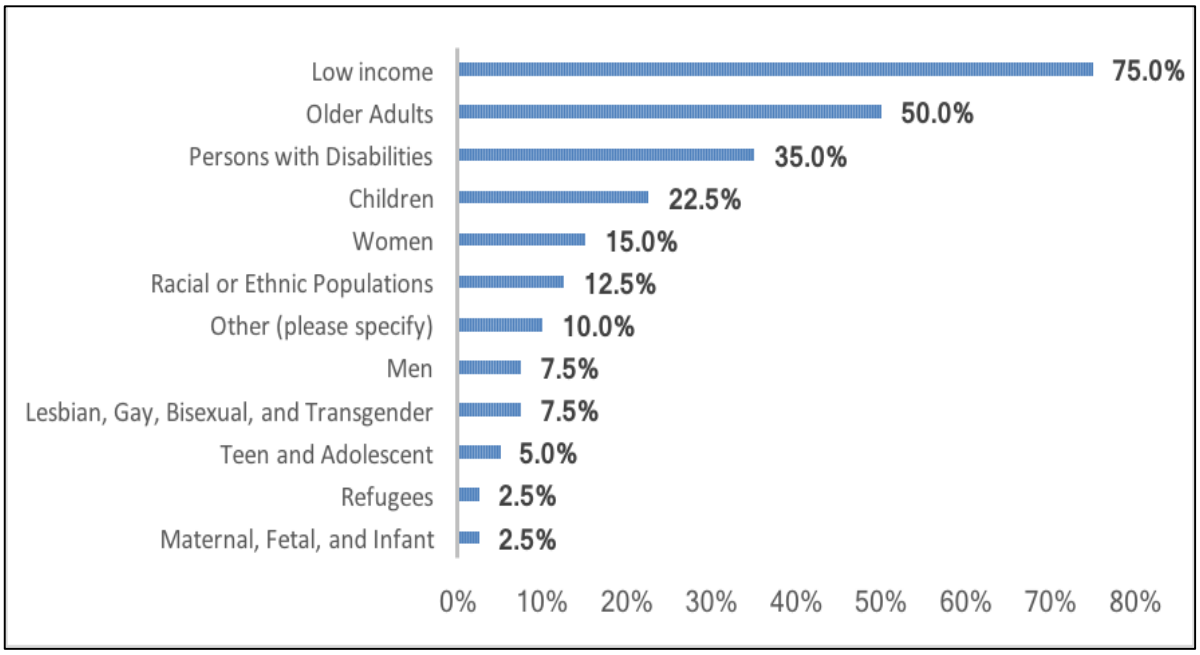


Figure 8. Personal Health Challenges of Community Survey Participants

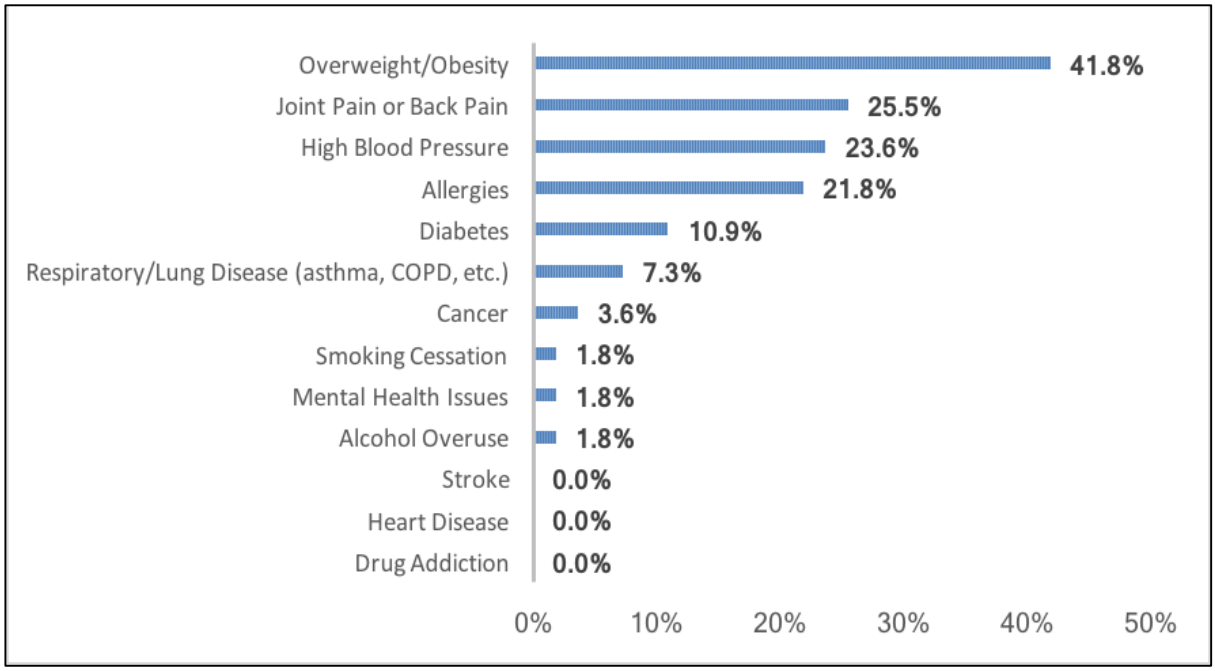
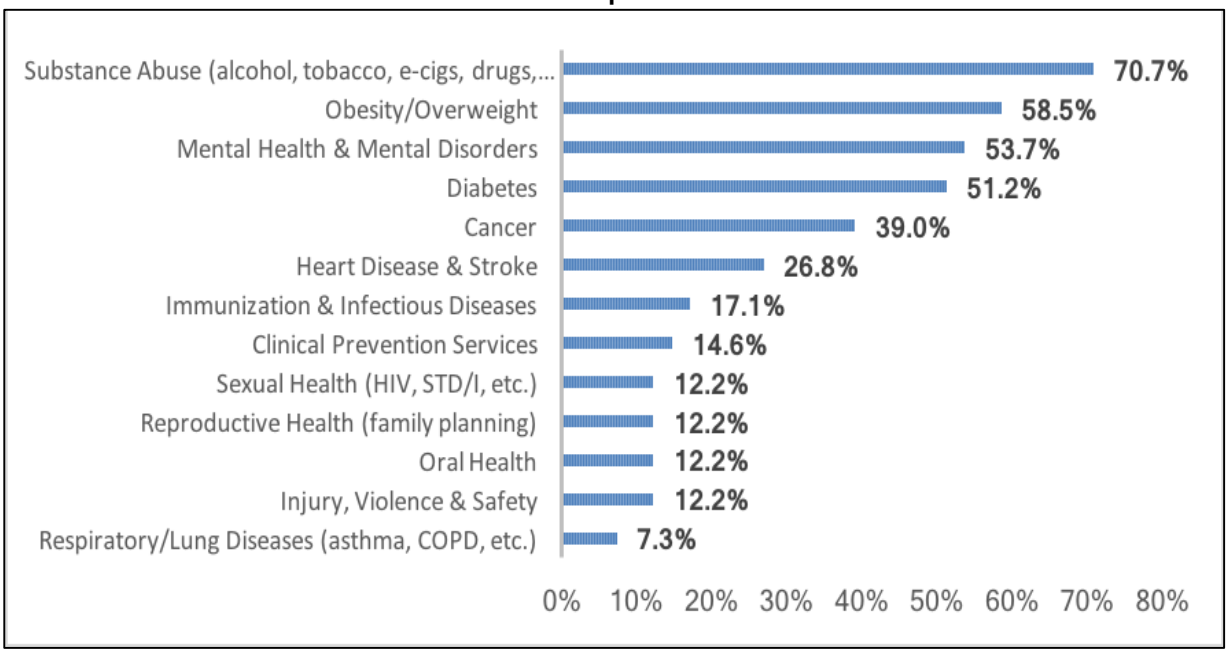


Figure 9. Most Important Health Issues in Calvert County, as Cited by Community Survey Participants



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 quantitative data indicators (secondary data) and qualitative findings (primary data).

Regarding the secondary data, some health topic areas have a robust set of quantitative data indicators, but for others there may be a limited number of indicators for which data is available. The Index of Disparity, used to analyze the secondary data, is also limited by data availability. In some instances, there is 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 qualitative data findings is dependent upon who was selected to be a key informant, as well as where the community conversations took place. 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 both quantitative and qualitative data, efforts were made to include a wide a range of secondary data indicators and community member expertise areas as possible.

Prioritization

In order to better target community issues with regards to the most pressing health needs, 15 members participated in a group discussion facilitated by HCI to prioritize significant health needs presented.

CalvertHealth brought together a decision-making team to rank the significant community needs based on a set of criteria.

Participants

The team was chosen to represent people with community and clinical knowledge, those that manage services to the underserved and those that are knowledgeable about the needs assessment process. This included:

- Donna Culbreth, RN – Keep Well Center, CalvertHealth
- Morgan Brissette, CRNP – Keep Well Center, CalvertHealth
- Joe Cook – Assistant Director – Calvert County Department of Social Services
- Candice D'Agostino – Coordinator – Calvert Alliance Against Substance Abuse (CAASA)
- Terry Long – Chief Executive Officer – The Arc of Southern Maryland
- David Gale – Director, Core Service Agency – Calvert County Health Department
- Alice Thompson – Director, Pastoral Care – CalvertHealth
- Margaret Fowler – Director, Community Wellness – CalvertHealth
- Chris Knode – Supervisor of Student Services, School Health – Calvert County Public Schools
- Susan Dohony – Vice President Quality & Risk Management / CQO – CalvertHealth
- Karen Twigg, BSN, RN, CMCN – Director, Care Coordination and Integration – CalvertHealth
- Jean Fleming – Executive Director – Calvert Hospice
- Tammy Halterman – Health Promotions Supervisor – Calvert County Health Department
- Kasia Sweeney - Vice President Strategy & Marketing – CalvertHealth
- Dean Teague, FACHE – President & CEO – CalvertHealth

Process

On October 4, 2017, the above participants convened at CalvertHealth to review and discuss the results of HCI's primary and secondary data analysis leading to the preliminary significant health needs discussed in detail in the synthesis portion of this report. From there, participants utilized a prioritization toolkit (Appendix G) to examine how well each of the significant health needs met the criteria set forth by CalvertHealth. CalvertHealth used the same criteria for their 2017 CHNA as was used in their 2014 CHNA. They scored each health area against each criterion on a scale from 1-3 with 1 meaning it did not meet the criteria to 3 meaning it strongly meets the criteria. The criteria for prioritization can be seen below:

- Alignment with CalvertHealth's mission, strengths, priorities
- Alignment with Maryland SHIP 2017 objectives
- Existing programs and resources at CalvertHealth
- Opportunities for partnership
- Solution could impact multiple problems

Completion of the prioritization toolkit, found in Appendix G, allowed participants to arrive at numerical scores for each health need that correlated with how well each health need met the criteria for prioritization. Participants then ranked the significant health needs according to their topic scores, with the highest scoring health need receiving the highest priority ranking. Participants were encouraged to use their own judgment and knowledge of their community in the event of a tied score. After completing their individual ranking of the significant health needs, participants' rankings were submitted into an online polling platform, Poll Everywhere, that collates the responses, resulting in an aggregate ranking of the health topics. The aggregate ranking can be seen in the figure below. After reviewing the results,

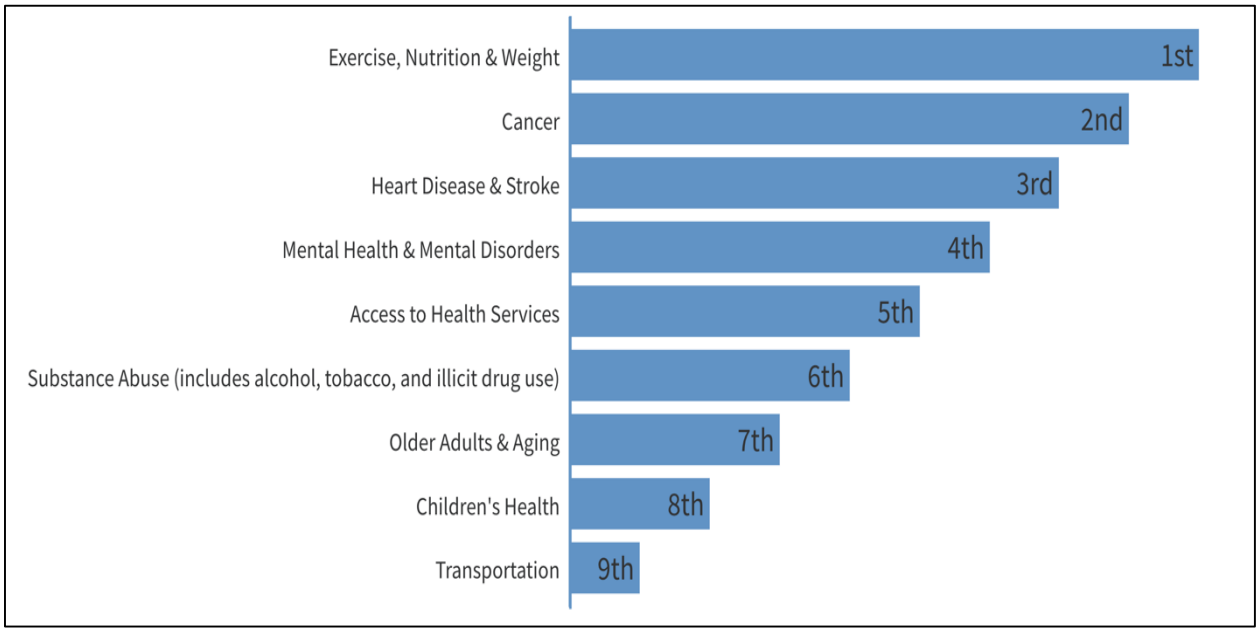
participants engaged in a group discussion to narrow the list to four priority health areas that will be considered for subsequent implementation planning. The four top health priorities for CalvertHealth are:

- Exercise, Nutrition & Weight (includes Obesity)
- 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 will highlight how each issue became a high priority health need for CalvertHealth.

While it was determined that CalvertHealth would focus on the above four health topic areas, it was discussed at length how the remaining health topics, which were not chosen as priorities, are interrelated to the four chosen priorities. The remaining health topics will be integrated into the implementation strategies of the four priority health areas.

Figure 10. Prioritization Results for CalvertHealth



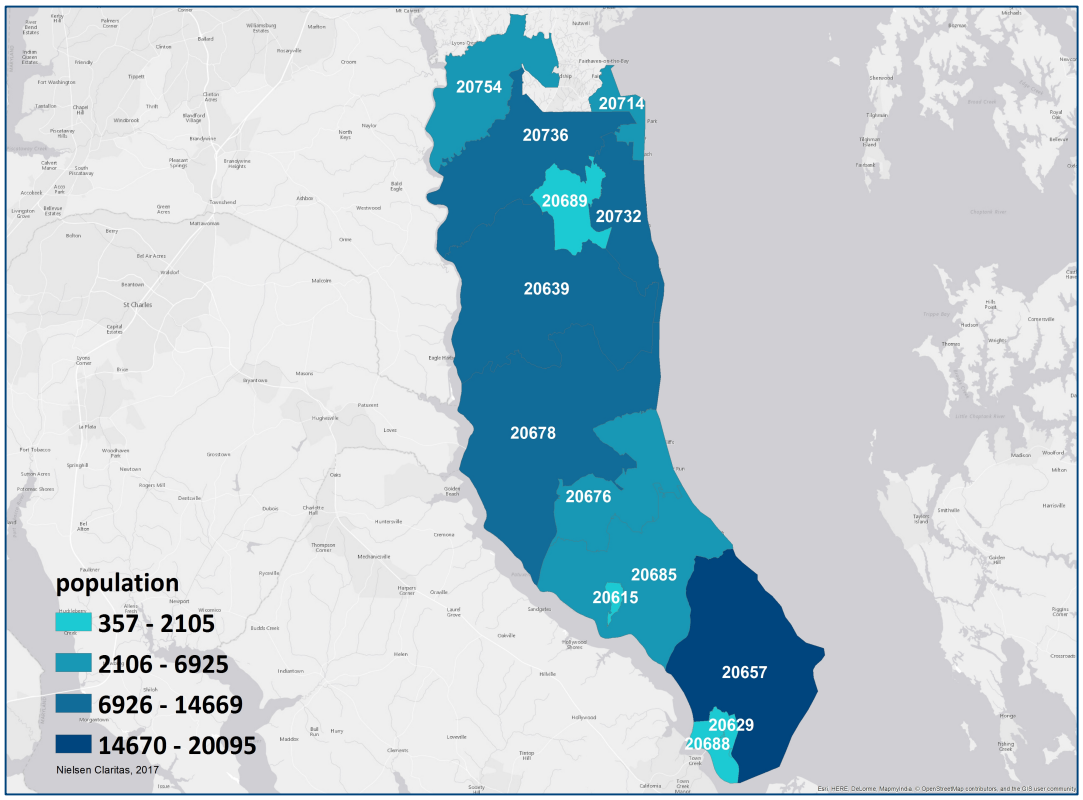
Demographics

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 2017 Population Estimates, unless otherwise indicated.

Population

According to the Nielsen Claritas 2017 Population Estimates, Calvert County has a population of approximately 90,940. Figure 11 shows the population size by each zip code within Calvert County, with the darkest blue representing the zipcode with the largest population. Zip code 20657, Lusby, has the highest population of any zip code with 20,095 people. Zip code 20615, Broome's Island, has the lowest population of any zip code in the county with 357 residents.

Figure 11. Calvert County Population by Zip Code

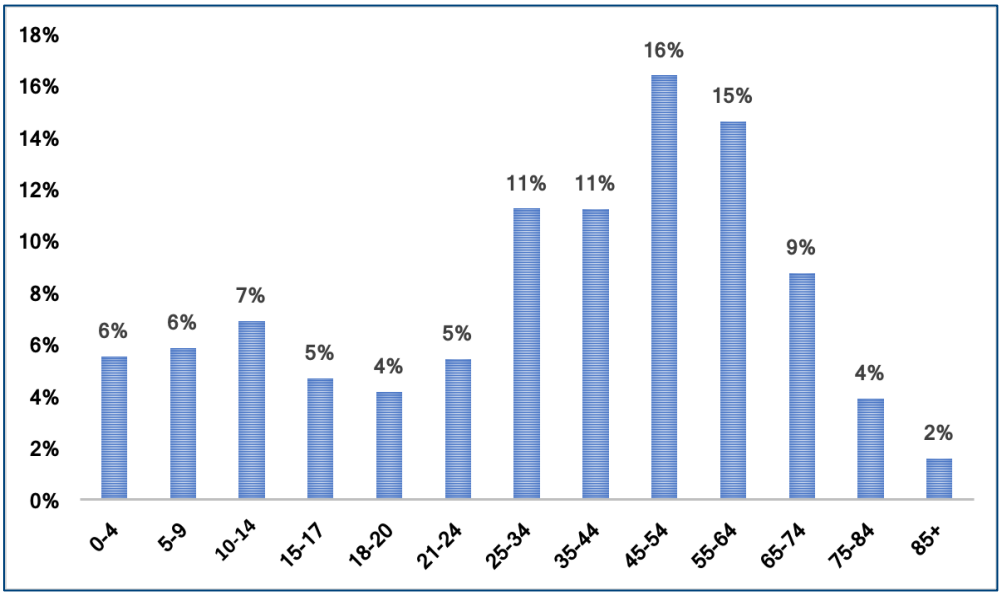


Social & Economic Determinants of Health

Age

Figure 12 shows the Calvert County population by age group. The 45-54 age group contains the highest percentage of the population at over 36%, with the 55-64 age group and those aged 25 to 44 having the next highest proportion of the population. The population of Calvert County skews older.

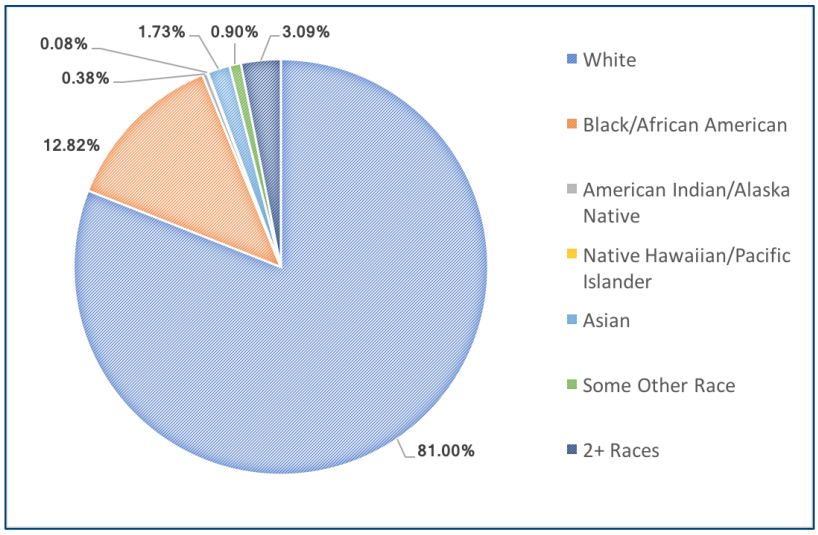
Figure 12. Calvert County Population by Age



Race

The racial makeup of Calvert County is somewhat homogenous, with 81% of the population identifying as White, as indicated in figure 13 The proportion of Black or African American is the second highest of all races in Calvert County, and is the only other race that makes up more than 10% of the population.

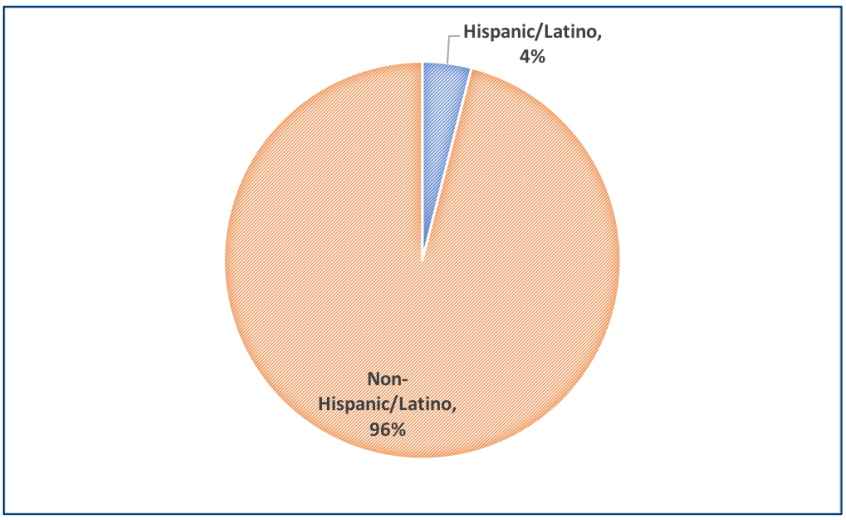
Figure 13. Calvert County Population by Race



Ethnicity

As shown by figure 14, 4% of the population of Calvert County identifies as Hispanic or Latino.

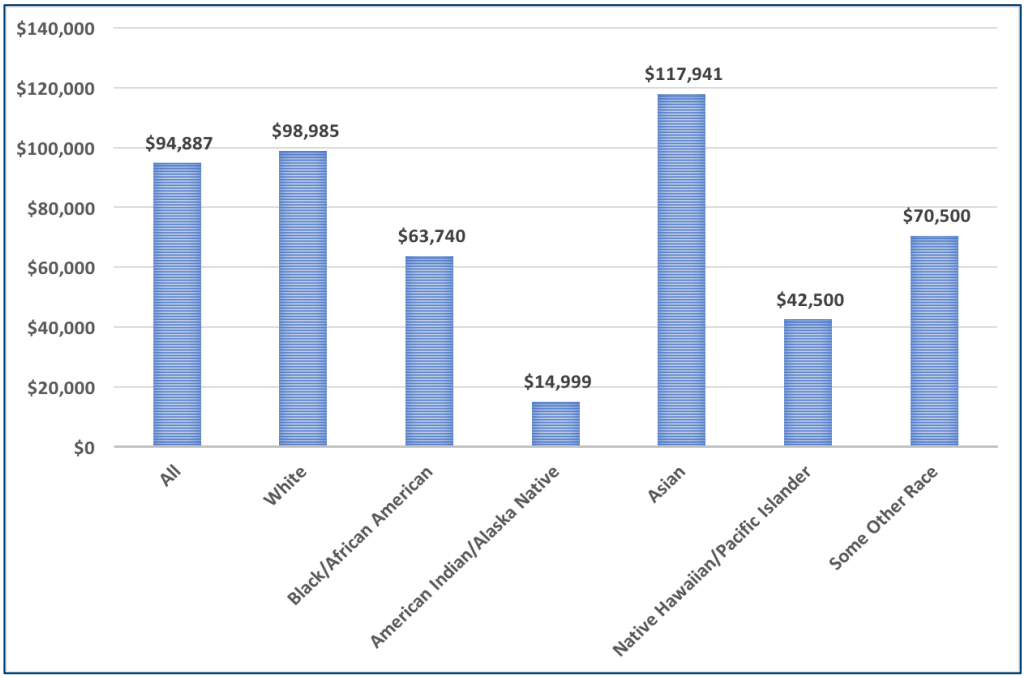
Figure 14. Calvert County Population by Ethnicity



Income

The figure below compares the median household income values for each race in Calvert County. The overall median household income for the county is $94,887, but only 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 only $14,999.

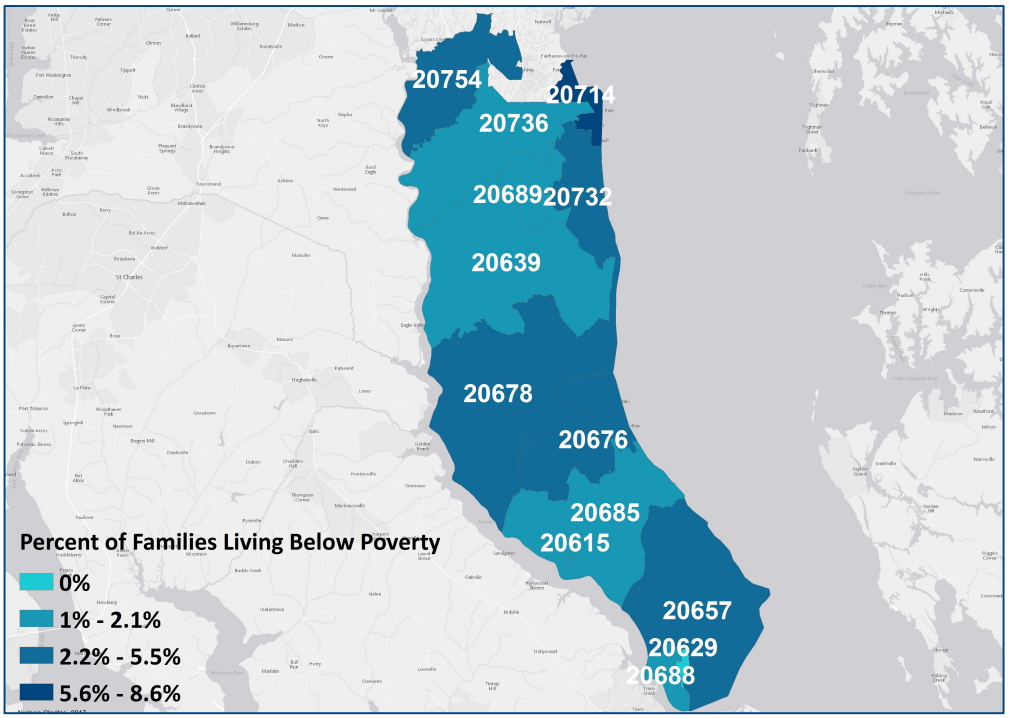
Figure 15. Calvert County Median Household Income by Race



Poverty

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

Figure 16. Calvert County, Percent of Families Living Below Poverty by Zip Code

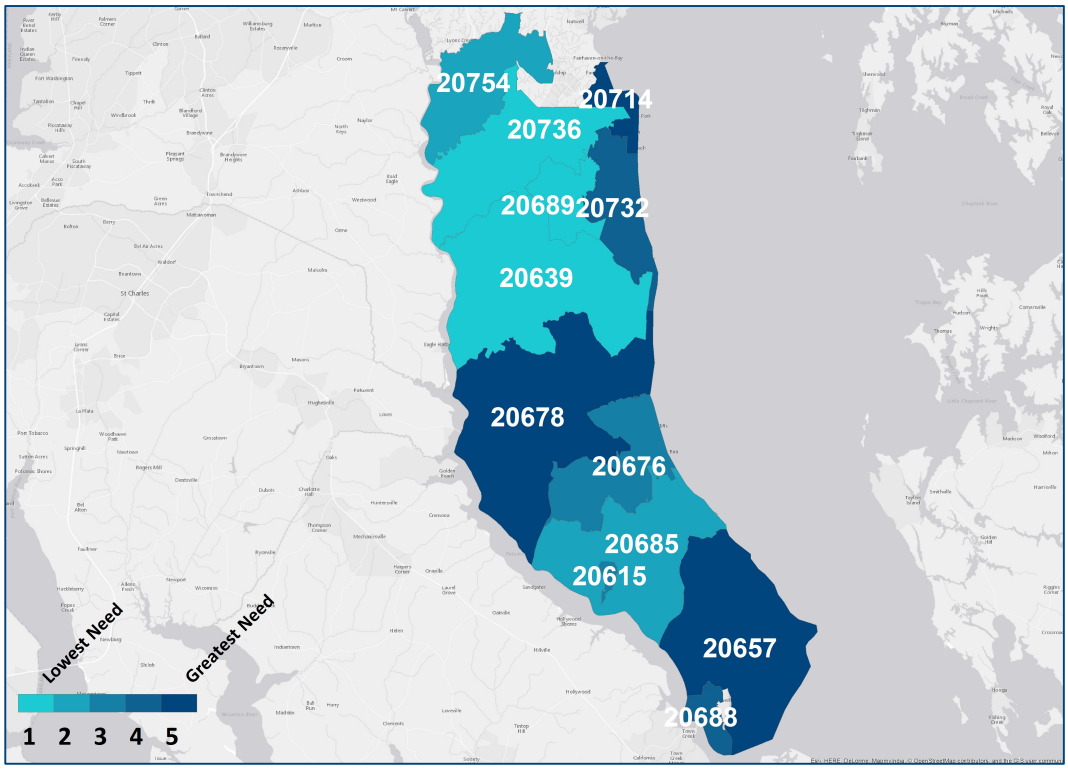


SocioNeeds Index

Conduent Healthy Communities Institute developed the SocioNeeds Index® to easily compare multiple socioeconomic factors across geographies. This index incorporates estimates for six different social and economic determinants of health – income, poverty, unemployment, occupation, educational attainment, and linguistic barriers – that are associated 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 17 (on the next page). The following zip codes had the highest level of socioeconomic need (as indicated by the darkest shade 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 forming prevention and outreach activities. The three communities (North Beach, Prince Frederick, and Lusby) were previously identified in CalvertHealth's 2014 CHNA as having the highest socioeconomic need, thus targeted health improvement efforts in these communities should be continued.

Figure 17. Calvert County SocioNeeds Index®



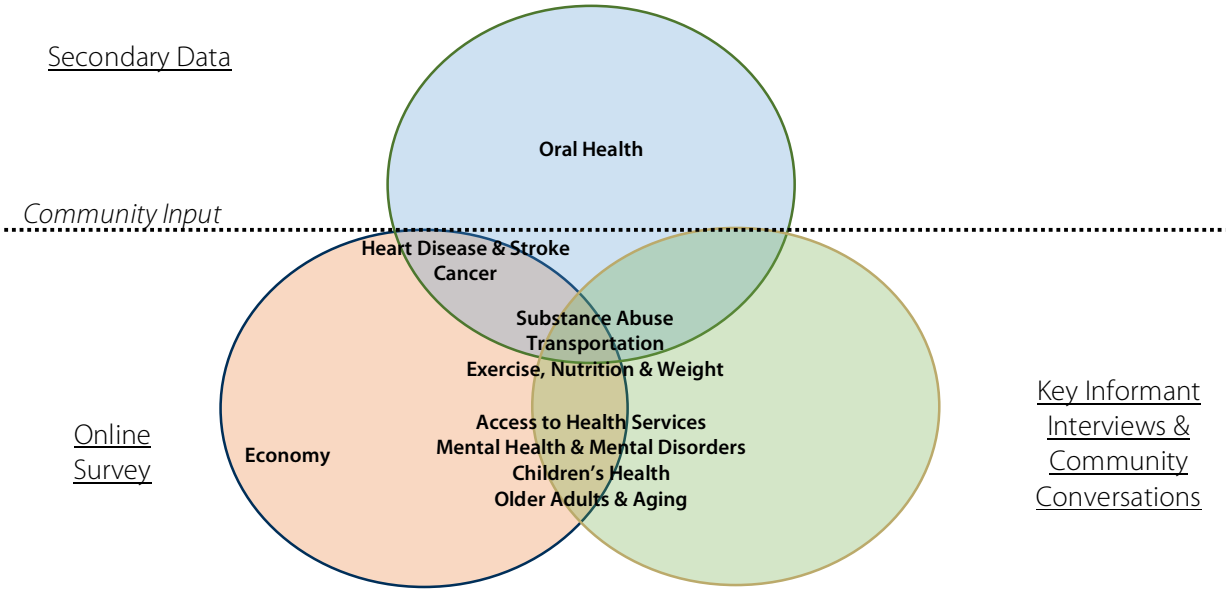
Data Synthesis

All forms of data have their own strengths and limitations. In order to gain a comprehensive understanding of the significant health needs for CalvertHealth's service area, the findings from all three data sets (secondary data, community survey, key informant interviews, and community conversations) were compared and studied together using a Venn diagram.

The secondary data scores, online community survey, and key informant interviews and community conversations were treated as three separate sources of data. Key informant interviews and community conversation results have been combined because of their similarity in question topics and in method used for analysis.

The top health needs identified from each data source were analyzed for areas of overlap with the other two data sources. Health needs were determined to be significant if they were cited as a top need in at least two of the three data sources. The identified significant health needs were further used for prioritization. Figure 18 shows the data synthesis results in the Venn diagram of overlapping top health needs from the three data sets that were analyzed.

Figure 18. Secondary & Primary Data Synthesis



Heart Disease & Stroke and Cancer were health topic areas where the secondary data scoring and the online community survey results were in agreement. Access to Health Services, Mental Health & Mental Disorders, Children's Health, and Older Adults & Aging were health topics where results from the online community survey and the key informant interviews and community conversations were in agreement. Finally, health needs where there was agreement among all three forms of data gathered (secondary data scoring, community online survey, and key informant interviews & community conversations) include Substance Abuse, Transportation, and Exercise, Nutrition, & Weight. Oral Health and the Economy have been added into the Venn Diagram because they rose to be significant health issues, but were only supported by one form of data. Economic issues will be considered when CalvertHealth works on their implementation strategy. Oral Health secondary data indicators of concern are interrelated to indicators within the Cancer and Children's Health topic area.

The table below shows the final nine significant health needs included in prioritization for CalvertHealth based on the synthesis of all forms of data collected for CalvertHealth's CHNA.

Table 3. CalvertHealth's Significant Health Needs

Access to Health Services	Mental Health & Mental Disorders
Cancer	Older Adults & Aging
Children's Health	Substance Abuse
Exercise, Nutrition, & Weight	Transportation
Heart Disease & Stroke	

Prioritized Significant Health Needs

Upon completion of the group prioritization session, four health needs were identified for subsequent implementation planning by CalvertHealth. These four health needs are: Exercise, Nutrition, & Weight (including Obesity), Cancer, Heart Disease & Stroke, and Mental Health & Mental Disorders.

The following section will dive deeper into each of these health topics in order to understand how findings from the secondary and primary data led to each health topic becoming a priority health issue for CalvertHealth.

Exercise, Nutrition, & Weight (including Obesity)

Key Issues

- Lack of knowledge about healthy lifestyle behaviors, especially around proper nutrition, leads to obesity as well as diabetes
- Unavailability of low-cost and accessible healthy recreation for all ages is an underlying issue
- Lifestyle behaviors are contributing factors to chronic diseases such as cancer, diabetes, and heart disease

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 ninth highest data score of all health topic areas using the data scoring technique, with a score of 1.51. 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 Exercise, Nutrition, & Weight (includes Obesity)

SCORE	EXERCISE, NUTRITION & WEIGHT (OBESITY)	Calvert County	Maryland	US	Maryland Counties	US Counties	Trend
2.28	Adults who are Overweight or Obese (2015) %	77.2	65	65.3		—	
2.08	Food Insecure Children Likely Ineligible for Assistance (2015) %	61	41	34.1		—	

1.95	People with Low Access to a Grocery Store (2010) %	33.6	—	—			–
1.88	Adults Engaging in Regular Physical Activity (2013) %	41.4	48	20.5 HP 2020** 47.9			–
1.88	Adults with a Healthy Weight (2014) %	32.9	35.1 MD SHIP* 36.6	35.2			

*MD SHIP 2017 – Maryland State Health Improvement Process (SHIP) targets for 2017; these targets are aligned with national targets set by Healthy People 2020

**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 is an area of overwhelming concern for Calvert County, as the percent of adults either overweight or obese is around 12% higher in Calvert County than in both Maryland as a whole and the nation overall. Over three quarters of the adult population of Calvert is overweight or obese. Additionally, Adults Engaging in Regular Physical Activity also scored highly in the secondary data scoring of indicators, as the Calvert County value (41.4%) was much lower than the Maryland state value of 48% and is falling well short of the Healthy People 2020 target goal of 47.9%. Further, Calvert County is failing to meet the Maryland SHIP 2017 target of 36.6% of Adults with a Healthy Weight. The Calvert value is only 32.9%.

It is also clear from looking at indicators of concern in the topic area of Exercise, Nutrition, & Weight (includes Obesity) that proper nutrition is an area of need for Calvert County. People with Low Access to a Grocery Store and Adult Fruit and Vegetable Consumption both had data scores over 1.80, signifying a level of concern for healthy eating and nutrition.

Primary Data

The obesity trend continues to worsten

Results from the community survey indicated that Exercise, Nutrition, and Weight was ranked as the second most critical health need for Calvert County. The most pressing area within Exercise, Nutrition, & Weight (includes Obesity), as mentioned by key informants and community conversation participants was overweight and obesity.

Key informants reinforced the finding in the secondary data that eating habits and lack of knowledge about healthy lifestyles is a problem in Calvert County. Not only does a higher percentage of the population have lower access to a grocery store than the average percentage in the state of Maryland overall, but the lack of knowledge of what it means to eat healthy exacerbates this lack of resources, per key informants.

Additionally, while Calvert County scored poorly in the percentage of Adults Engaging in Regular Physical Activity, data from key informant interviews and community conversations revealed that the lack of affordable and accessible recreation options is at least partly to blame. Due to the rural nature of the

county, the infrastructure does not have sidewalks except in the town centers. This limits the ability for residents to create a walkable community, however, there are many walking and bike trails available in Calvert County parks.

Cancer

Key Issues

- High incidence of cancer, with added financial challenges for cancer patients
- Social norms of the county include smoking and tobacco use
- Lifestyle behaviors, i.e. lack of exercise, poor nutrition, and smoking, are contributing factors to cancer incidence in Calvert County

Secondary Data

From the secondary data scoring results, Cancer was identified to be a top health need in Calvert County. It had the fourth highest data score of all health topic areas using the data scoring technique, with a score of 1.68. 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 5. Data Scoring Results for Cancer

SCORE	CANCER	Calvert County	Maryland	US	Maryland Counties	US Counties	Trend
2.70	Breast Cancer Incidence Rate (2009-2013) Cases/100,000 females	143.3	130.2	123.3			
2.65	Age-Adjusted Death Rate due to Prostate Cancer (2009-2013) Deaths/100,000 males	28.1	21.3	20.7 HP2020 21.8			
2.50	Oral Cavity and Pharynx Cancer Incidence Rate (2009-2013) Cases/100,000 population	15.1	10.7	11.3			

2.40	Age-Adjusted Death Rate due to Breast Cancer (2009-2013) Deaths/100,000 females	25.1	23	21.5 HP2020** 20.7			
2.30	Melanoma Incidence Rate (2009-2013) Cases/100,000 population	30.8	21	20.3			
2.18	Cervical Cancer Incidence Rate (2003-2007) Cases/100,000 females	9	7.6	HP2020** 7.2	–		–
2.00	Cancer: Medicare Population (2015) %	8.8	8.6	7.8			

**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

From the secondary data results, almost every cancer indicator for which there is a measurement is a concern for Calvert County. Calvert County has a higher rate of breast cancer incidence, prostate cancer deaths, oral cavity and pharynx cancer incidence, breast cancer deaths, melanoma incidence, cervical cancer incidence, and lung and bronchus 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 Prostate Cancer, Age-Adjusted Death Rate due to Breast Cancer, and Cervical Cancer Incidence Rate. Looking closesly at disparity data for Calvert County Cancer indicators, incidence rates for prostate cancer, colorectal cancer, and breast cancer are highest amongst Black and African American residents of Calvert County. Lung and bronchus cancer incidence is highest within the White population. Screenings for colon cancer is lowest amongst Hispanic residents in Calvert County. Lastly, the secondary data shows that Calvert County fails to meet the Maryland SHIP 2017 Age-Adjusted Death Rate due to Overall Cancer target of 147.4 deaths per 100,000 population. Calvert County's rate is 175.2 deaths per 100,000 population.

Primary Data

According to survey results, Cancer ranked as the fifth most important health issue in Calvert County. Data collected from key informants and community conversation participants specifically noted that social norms of the area, including tobacco use and smoking, cause many of the cancer issues that can be seen in the secondary data.

There are racial disparities in cancer incidence and in care

Data from key informants also noted the frequent financial disparities often exist for cancer patients. Many cancer patients in the county

already face economic issues, including poverty, and the added financial challenges of being a cancer patient create even more challenges.

Additionally, data from key informants and community conversation participants both discussed the disparities in cancer incidence rates by race. As mentioned by key informants, it appears disparities exist in the quality of care received by cancer patients depending on the patient's race.

Heart Disease & Stroke

Key Issues:

- Growth of the aging population with multiple health issues, particularly chronic health conditions such as heart disease
- Isolation of the aging population is exacerbating such health issues
- Overweight, obesity, and limited physical activity lead to chronic disease such as Heart Disease & Stroke

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 eighth highest data score of all health topic areas using the data scoring technique, with a score of 1.53. 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 the next table.

Table 6. Data Scoring Results for Heart Disease & Stroke

SCORE	HEART DISEASE & STROKE	Calvert County	Maryland	US	Maryland Counties	US Counties	Trend
2.18	High Cholesterol Prevalence (2015) %	41.2	35.9	36.3		—	—
2.15	Ischemic Heart Disease: Medicare Population (2015) %	29.8	26	26.5			—
2.10	Age-Adjusted ER Rate due to Hypertension (2014) %	261.7	252.2 MD SHIP* 234	—		—	

*MD SHIP 2017 – Maryland State Health Improvmement Process (SHIP) targets for 2017; these targets are aligned with national targets set by Healthy People 2020

Looking at the secondary data, it is seen foremost that the Medicare population is disproportionately affected by heart disease and stroke in Calvert County. Ischemic heart disease, atrial fibrillation, and hyperlipidemia are all seen as indicators of concern for the Medicare population. The county has higher percentages for all three of these indicators than both the state of Maryland and the entire U.S. Given that Older Adults & Aging was one of the top nine 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

Community survey participants were asked to rank the most pressing health issues in their community, and according to that data, Heart Disease & Stroke ranked as the sixth most important health issue in Calvert County. Key informants and community conversation participants specifically noted the growth of the aging population with chronic health issues, which reflects what is seen in the secondary data regarding the Medicare population.

Primary data also further revealed that transportation can add to, if not cause, some of the issues related to Heart Disease & Stroke in Calvert County. Older adults, who are often most afflicted by heart disease, stroke, and related issues, often need assisted transportation in order to be able to attend appointments, according to key informants. Community conversations also discussed that more services and support are needed for these older adults so that they can get the care needed to combat these chronic heart-related diseases.

The aging population needs more home- and community-based services and support

Mental Health & Mental Disorders

Key Issues:

- Need community inpatient and outpatient care for mental health and substance abuse
- Increasing number of pregnant women and parents with substance abuse issues leading to mental health issues for children
- Mental health issues as they relate to substance abuse is increasingly critical for communities to engage and implement on as the opioid epidemic in the United States continues

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 thirteenth highest data score of all health topic areas using the data scoring technique, with a score of 1.41. 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. Some Calvert County indicators within the Mental Health & Mental Disorder topic area performed well compared to Maryland's value, the US value, and any SHIP targets in the secondary data scoring results (data score <1.5). A list of all secondary data indicators within this health topic area is available in appendix B.

Table 7. 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 MD SHIP 9	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 (2013-2015) hospitalizations/10,000 population under 18 years	35.3	14.8	—	—	—	—
1.60	Self Reported Good Mental Health (2015) percent	70	76.2		—	—	

*MD SHIP 2017 – Maryland State Health Improvmement Process (SHIP) targets for 2017; these targets are aligned with national targets set by Healthy People 2020

The secondary data reveals that Mental Health and Mental Disorders in children and adolescents are significant problems in Calvert County. The rate of hospitalizations due to suicide and self-inflicted injury, as well as mental health, for adolescents and children in Calvert County, more than double the overall Maryland state value. Further, the death rate due to suicide in Calvert County is not only higher than both Maryland and the U.S., but falls significantly short of the Healthy People 2020 target and the Maryland SHIP 2017 target.

Primary Data

Community survey participants were asked to rank the most pressing health issues in their community, and according to those findings, Mental Health & Mental Disorders ranked as the third most important health issue in Calvert County. Key informants and community conversation participants specifically noted the role of substance abuse in mental health, and particularly noted the need for adults and parents to focus more attention on children's mental health issues and the issues that adult substance abuse can have on the mental health of children and adolescents in the community.

Mental health issues are becoming more prevalent and increasingly interfering with classroom success

The primary data revealed a need for community inpatient and outpatient care for both mental health and substance abuse. Key informants noted that mental health further contributes to many of the health needs they see in the community. Key informants and community conversation participants noted an increasing number of pregnant women with substance abuse issues in the community, which many key informants associated with an increase in mental health issues in children. Lastly, multiple key informants discussed the role that mental health plays in preventing those in the community from accessing needed care for other health issues and related diseases.

Non-Prioritized Significant Health Needs

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

Access to Health Services

While not prioritized during the group prioritization session, Access to Health Services was discussed by those involved to be something that needed to be considered alongside the prioritized health needs. Access both impacts the prioritized health needs and is impacted by the prioritized health needs.

Access to Health Services received a data score of 1.41, which was twelfth highest among all topic areas. Calvert County has lower percentages of Adolescents who have had a Routine Checkup in the past year, Children who have Visited a Dentist, and Children with Health Insurance than the overall Maryland state values. Secondary data shows that Access to Health Services is negatively impacting children and adolescents, and should be considered when looking into implementing strategies to target prioritized health areas.

There is often an inability to get an appointment from the healthcare providers or facilities in a timely and helpful manner

Access to Health Services was ranked by community survey respondents as the third most critical determinant of health in the community. Key informants and community conversation participants noted many reasons why those in the community often have difficulty accessing care and services, including time, cost, and transportation. Further, it was discussed that there is a lack of providers, especially specialists for low-income or uninsured community members, which leads to health issues not being addressed.

Children's Health

Secondary Data

From the secondary data scoring results, Children's Health was the eleventh most pressing health need in Calvert County. Top related indicators include: Food Insecure Children Likely Ineligible for Assistance, Children who Visited a Dentist, and Age-Adjusted Hospitalizations due to Pediatric Mental Health.

Primary Data

Substance use by adults interferes with the appropriate care for children

Community survey participants were asked to rank the most negatively affected populations in their community. According to the data, children were ranked as the fourth most negatively affected population in CalvertHealth's service area in terms of health. As mentioned by key informants and community conversation participants, there are contributing factors to children being at risk for health issues, most notably that substance abuse by adults in the community is a serious problem that greatly interferes with the appropriate care of children. Key informants also mentioned boredom, lack of supervision, and lack of direction as contributing factors to unhealthy behaviors in youth. Data collected from community members indicate that there is an increasing number of children with behavioral health issues at younger ages. They suggested that efforts should be focused on increasing the behavioral health services for children, and improving education for parents and other adults on ways to identify and such health needs.

Older Adults & Aging

Secondary Data

From the secondary data scoring results, Older Adults & Aging was the tenth most pressing health need in Calvert County. Top related indicators include: Rheumatoid Arthritis or Osteoarthritis: Medicare Population, Diabetes: Medicare Population, and Ischemic Heart Disease: Medicare Population.

Primary Data

There is a need for seniors to have more case management… as well as assisted transportation so that they are able to make their appointments

Community survey participants were asked to rank the most negatively affected populations in their community. Findings of the survey indicate that older adults are the second most negatively affected population in CalvertHealth's service area in terms of health. Likewise, key informants and community conversation data indicates that the population of older adults who have multiple health issues is growing within the community; furthermore, chronic conditions, dementia, and behavioral health issues are combining to cause further problems in the growing aging population. Key informant data also discussed a concern that the aging population is becoming increasing isolated in the community due to lack of transportation options, which exacerbates health issues.

Substance Abuse

Secondary Data

From the secondary data scoring results, Substance Abuse was the sixth most pressing health need in Calvert County with a data score of 1.59. Top related indicators include: Age-Adjusted Deaths due to Drug Use, Alcohol-Impaired Driving Deaths, and Adolescents Who Use Tobacco.

Primary Data

Community survey participants were asked to rank the most pressing health issues in their community. According to the data, Substance Abuse ranked as the number one most pressing health issue in CalvertHealth's service area. Key informant interviews and community conversation participant data further noted the effect that substance abuse has on children and older adults. They discussed the need to target young parents regarding their smoking and drinking, particularly focusing on the increasing issue of pregnant women with substance abuse issues. Lastly, the primary data revealed that one of the main culprits of increased substance abuse in the community is the over-prescription of opioid pain medications, and that the opioid epidemic is a problem that needs to be addressed in Calvert County.

Substance use as a means of recreation is represented [by] underage drinking, easy availability [of substances] at home, and the increased presence of alcohol and vaping vendors

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 these barriers and disparities as they pertain to the Calvert County and CalvertHealth service area.

Barriers to Care

Significant community health barriers for CalvertHealth's service area were identified as part of the primary data collection. Key informants, community conversation participants, and community survey respondents were asked to identify any barriers to health care that they see or experience in the community.

Transportation

The geography of Calvert County, with its long, narrow peninsula and one main thoroughfare running north to south, particularly lends itself to increased transportation issues. The lack of multiple 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 top most pressing

need in Calvert County with a data score of 1.82. 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, for evaluation, less than half of community survey respondents strongly agreed or agreed that public transportation and other transit opportunities make accessing health care services manageable. This finding is corroborated by both the primary and secondary data. Further, key informants discussed how transportation is the biggest barrier for those that are unable to use public transit and are in need of some form of assistance, such as the elderly, particularly exacerbated by the size and spread of the county across it's long and narrow peninsula.

Cost and Limited Availability

According to 67% of community survey respondents strongly agreed or agreed that they, or someone they know, have delayed seeking health care due to cost in the last 12 months, while over 52% strongly agreed or agreed that they, or someone they know have delayed seeking health care due to wait time or limited appointment opportunity. Key informants supported these notions by citing that it is difficult to access services due to time constraints, cost, and lack of transportation, and that there is often an inability to get an appointment in a timely manner, especially for those who are uninsured and in need of a specialist.

The primary data findings around cost and access are further supported by looking at the economic secondary data. While the median household income of Calvert County is $95,828; about $20,000 higher than the Maryland state value. There is a significant disparity in median household income for Black and African American residents ($63,878) and residents of two or more races ($66,296). Approximately 8.4% of Calvert County residents reported being unable to afford to see a doctor. These particular populations and economic concerns will be taken into account when strategizing how to improve access to care for the prioritized health topics.

Disparities

Race/Ethnic, Gender & Age Disparities

Significant community health disparities are assessed in both the primary and secondary data collection processes. The table below identifies secondary data health indicators with a statistically significant race or ethnic disparity for Calvert County.

Table 8. Indicators with Significant Race/Ethnic & Gender Disparities

Health Indicator	Group Disparately Impacted (highest rates)
Adults Unable to Afford to See a Doctor	Black, Hispanic
Children with Asthma	Black, Other Race, Hispanic
Children Living Below Poverty Level	Black, Multiple Races, Hispanic
Families Living Below Poverty Level	Black, Multiple Races
People Living Below Poverty Level	Black, American Indian/Alaska Native, Multiple Races, other Race, Hispanic

People 65+ Living Below Poverty Level	Black, American Indian/Alaska Native, Multiple Races, Hispanic
Workers Commuting by Public Transportation	Black, Asian, Multiple Races, other Race
Oral Cavity and Pharynx Cancer Incidence	Males

The indicators listed in the chart show a statistically significant difference in race/ethnicity according to our index of disparity analysis. However, when we look closely at the Cancer health topic area, there are important disparities that should be recognized and considered for implementation planning. Incidence rates for prostate cancer, colorectal cancer, and breast cancer are highest amongst Black and African American residents of Calvert County. Lung and bronchus cancer incidence is highest within the White population. Screenings for colon cancer is lowest amongst Hispanic residents in Calvert County.

As seen in the secondary data with non-White race groups being disparately impacted for many poverty-related indicators, the primary data also revealed that economic barriers to health are often faced along racial, ethnic, or cultural lines in Calvert County. Key informants and community conversation participants discussed how those of Hispanic ethnicity are more likely to go without regular preventive care because health is not their top priority until they are really sick. They have greater concerns around daily issues, such as working, food security, and having a proper place to live. Meanwhile, more than half of community survey data indicated that the Black or African American racial group is the most disproportionally affected by health problems in the community. Other disparities noted by key informant data are that the Black population is more affected by obesity while White members of the community are disproportionally affected by substance abuse overdoses.

The primary data results also indicated that key informants see males as being disproportionately affected by substance abuse. Key informants mentioned the higher unemployment rates of males age 16 to 24 as compared to females, which often leads to despair, boredom, and eventually drug use. Lastly, both key informants and community conversation participants discussed in depth the health disparities seen for older adults, as previously noted in this report. They called out the increasing percentage of the population that is over 65 years of age, and the lack of institutional and structural care for that group who cannot care as easily for itself. The community survey data also indicated that respondents think that older adults are the second most negatively affected population by poor health outcomes.

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. The figures on the next two pages show the age and racial breakdown for each of these communities.

Figure 19. Race Breakdown for Zip Code 20714 (North Beach)

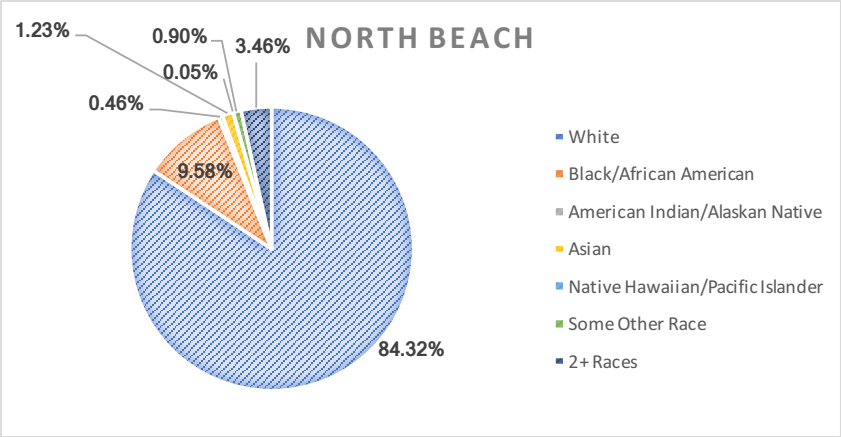


Figure 20. Race Breakdown for Zip Code 20678 (Prince Frederick)

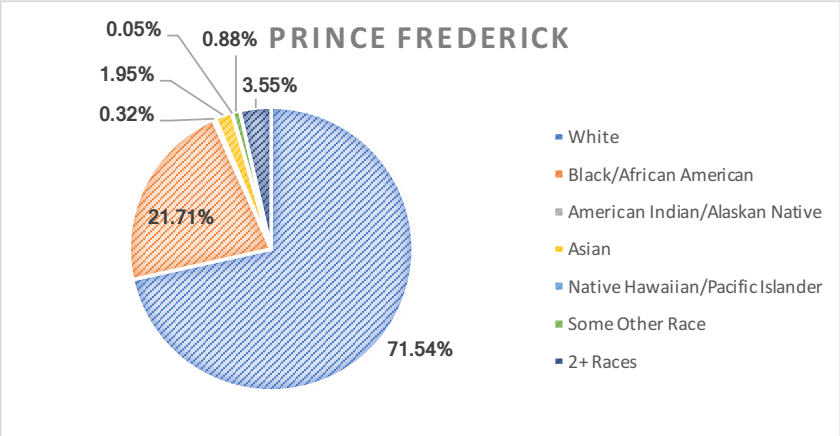


Figure 21. Race Breakdown for Zip Code 20657 (Lusby)

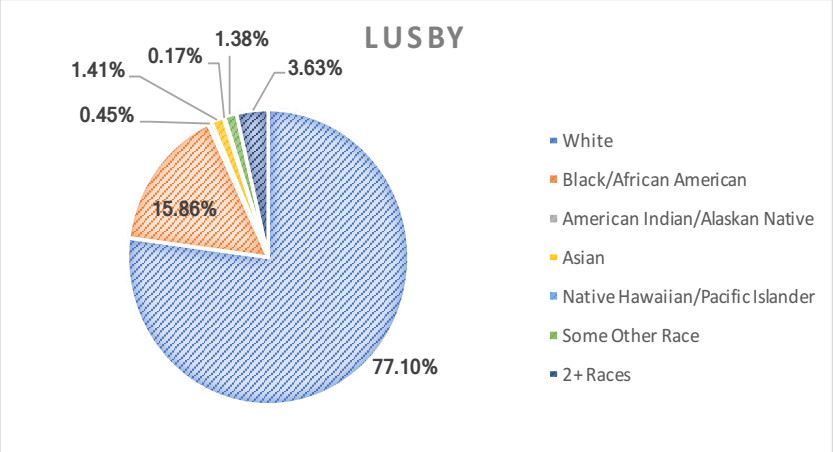
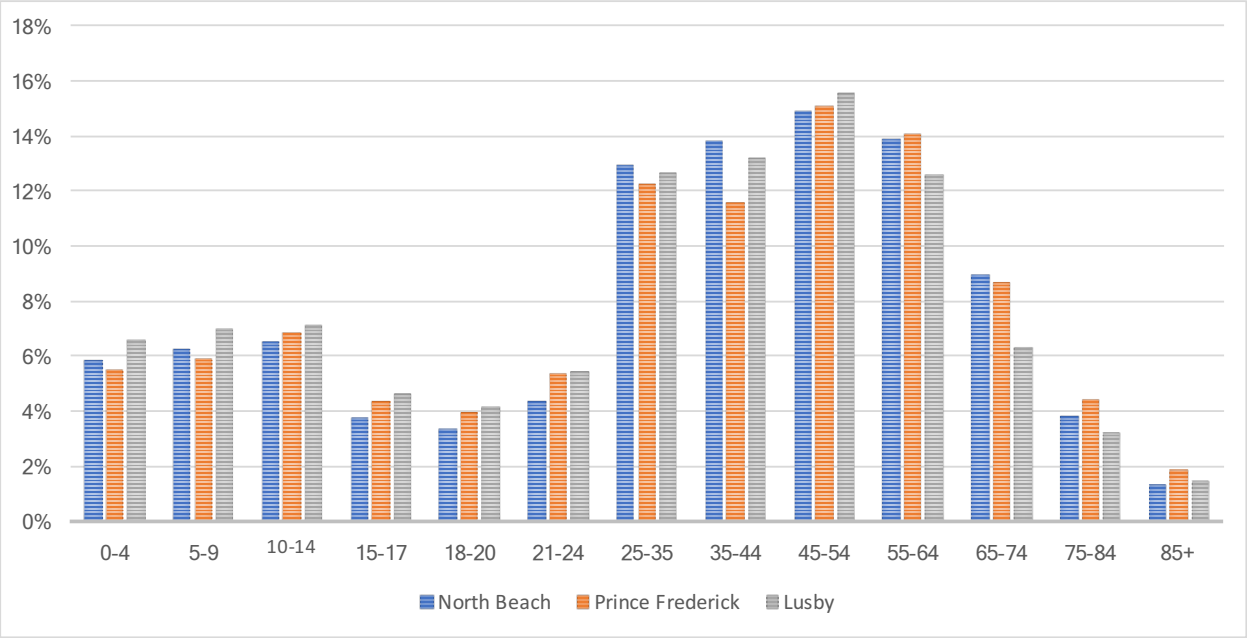


Figure 22. Age Breakdown for Zip Codes 20714, 20678, and 20657



Conclusion

The Community Health Needs Assessment for CalvertHealth utilized a comprehensive set of secondary data indicators measuring the health and quality of life needs for CalvertHealth's service area. The assessment was further informed with community input from knowledgeable persons representing the broad interests of the community. The prioritization process identified four focus areas: Exercise, Nutrition and Weight; Cancer; Heart Disease and Stroke; and Mental Health and Mental Disorders. From this process, CalvertHealth will outline how they plan to address these prioritized health needs in their Implementation Strategy.

In addition, we hope to incorporate any feedback on this report into the next Community Health Needs Assessment process. Please send your feedback and/or comments to mfowler@cmhlink.org.

CalvertHealth is dedicated to serving Southern Maryland residents by providing exceptional care, promoting wellness and making a difference in every life we touch.

Appendix A. CalvertHealth Impact Report

<table>
<tr><th colspan="4">Access to Care – Calvert Cares</th></tr>
<tr><td colspan="4">Hospital Initiative
Post-acute discharge clinic for high risk patients with Diabetes, Hypertension, CHF and COPD. Partners in Accountable Care Coordination and Transitions (PACCT)</td></tr>
<tr><td>Identified Need</td><td>ER Visits Due to Diabetes
8.6% Current Calvert
10.2% MD Value
17.0% 45-64 yrs -- Age Disparity</td><td>ER Visits Due to Hypertension
261.7 Current Calvert
225.3 Prior Calvert
202.4 MD SHIP 2017
TREND: Up</td><td>Primary Care Provider Rates
55 Current Calvert
49 Prior Calvert
89 MD Value
TREND: Up</td></tr>
<tr><td colspan="4">Total Number of People within Target Population
63,000 resident of Calvert County</td></tr>
<tr><td colspan="4">Total Number of People Reached by Initiative within Target Population
273 Visits</td></tr>
<tr><td colspan="4">Primary Objective of the Initiative
Goal 1: Less than 9% of patients admitted inpatient will be readmitted to any hospital within 30 days of their initial discharge.

Goal 2: Reduce emergency department visits through patient access/referral to Urgent Care Centers and Calvert CARES</td></tr>
<tr><td colspan="4">Single or Multi-Year Initiative (time period)
Multi Year</td></tr>
<tr><td colspan="4">Key Collaborators in Delivery of the Initiative
Calvert Memorial Hospital Staff, Calvert County Health Department Health Department, Calvert County Department of Social Services, Calvert Physicians Associates, Charlotte Hall Veterans Home, Chesapeake Potomac Health, Office on Aging, Calvert County Nursing Home, Calvert Hospice, Asbury;</td></tr>
<tr><td colspan="4">Impact/Outcome of Hospital Initiative
Improve the transformation of healthcare delivery system through care coordination and clinical integration.</td></tr>
<tr><td colspan="4">Evaluation Outcomes
Reduction in 30-day readmissions. This population impact indicates a lower readmission rate than the non-CARES population</td></tr>
<tr><td colspan="4">Continuation of Initiative - Yes</td></tr>
<tr><td>Total Cost for Current Fiscal Year and What Amount is Restricted to Grants/Direct Offsetting Revenue</td><td>• Calvert CARES/Clinic $543,825
• Transitions to Home $17,363</td><td>Total Cost: $565,188</td><td>Direct offsetting revenue from restricted grants - none</td></tr>
</table>

Access to Care – Oral Health – ER Dental			
Hospital Initiative Navigate patients to the appropriate level of care to improve outcome for patients. Right Care, Right Place, Right Time			
Identified Need	ER Visits Due to Dental Problem 897.9 Current Calvert 954.0 Prior Calvert 792.8 MD SHIP 2017 TREND: Down		
Total Number of People within Target Population 85,000 population			
Total Number of People Reached by Initiative within Target Population 108 of people referred to Dental Clinic			
Primary Objective of the Initiative Proper navigation of Emergency Room Dental visits to Calvert Community Dental Care to improve patient outcomes			
Single or Multi-Year Initiative (time period) Multi Year			
Key Collaborators in Delivery of the Initiative Calvert Memorial Hospital Emergency and Urgent Care Staff, KeepWell Staff , Calvert County Health Department Health Department, Calvert Physician Associates and Calvert Community Dental Care			
Impact/Outcome of Hospital Initiative Improve the transformation of healthcare delivery system through care coordination and clinical integration and have patient receive the right care at the right time at the right place.			
Evaluation Outcomes Reduction of ER utilization for non-trauma related dental visit. • 50% referral engagement rate • 83% of patients seen at dental clinic not returning to Emergency Room • 6% Reduction in ER Utilization			
Continuation of Initiative - Yes			
Total Cost for Current Fiscal Year and What Amount is Restricted to Grants/Direct Offsetting Revenue	• Educator/Navigators & Dental Office Coordinator for 108 patients @ 5 hours/ patients total of 324 Hours	*Total Cost:* $21,747	Direct offsetting revenue from restricted grants - none

Access to Care – Provider Shortage					
Hospital Initiative Increase access to Primary Care Providers, Non Primary Care providers and Dentist to meet the needs of Southern Maryland					
Identified Need	Adolescent who have had a routine check –up (Medicaid Pop) 47.3 % Current Calvert 44.7 % Prior (2011)Calvert 57.4% MD SHIP 2017 TREND: Up	ER Visits Due to Diabetes 8.6% Current Calvert 10.2% MD Value 17.0% 45-64 yrs -- Age Disparity	ER Visits Due to Hypertension 261.7 Current Calvert 225.3 Prior Calvert 202.4 MD SHIP 2017 TREND: Up	Primary Care Provider Rates 55 Current Calvert 49 Prior Calvert 89 MD Value TREND: Up	Non-Physician Primary Care Provider Rates 42 Current Calvert 34.6 Prior Calvert 75 MD Value TREND Up
Total Number of People within Target Population Entire community – 90,000					
Total Number of People Reached by Initiative within Target Population Unknown					
Primary Objective of the Initiative Increase access to Primary Care and Specialty Care services for Medical Assistance population by continuing efforts to recruit providers into health system					
Single or Multi-Year Initiative (time period) Multi Year					
Key Collaborators in Delivery of the Initiative Calvert Memorial Hospital Calvert Physician Associates and EMA, MDICS, independent provider offices					
Impact/Outcome of Hospital Initiative Expanding number of Primary Care Physicians and support independent providers in accessing electronic medical record and recruitment of new providers.					
Evaluation Outcomes • 4.3% increase in the number of adolescent able to see a provider (SHIP Tracker) • 87.1% of Adults who had a routine check up					
Continuation of Initiative - Yes					
Total Cost for Current Fiscal Year and What Amount is Restricted to Grants/Direct Offsetting Revenue	• Emergency Psychiatric Services $ 723,458 Mental	*Total Cost:* $9,693,534	Direct offsetting revenue from restricted grants - none		

	Health (Includes CMH & Civista) • Calvert Orthopedic Man Services $302,947 • Breast Care Center Subsidy $ 321,084 Specialist • Neurosurgery Center Subsidy $ 149,746 • EKG Professional Reads Subsidy $107,380 • Infusion Therapy Subsidy $ 26.205 Specialist • GYN/OB Oncology Practice Subsidy $179,105 Specialist • Chesapeake Anesthesia Call Coverage $3,145 • Infection Control Call Coverage $2,246 • Pain Management Call Coverage $3,594 • CHVH(CPA) Subsidy Hospitalist Program $1,357,665 • Primary Pediatric Hospitalist Program $1,123,591 Specialist • Primary Vascular Care Center Subsidy $16,187 • Specialist Spine Clinic for Med. Asst./Uninsured $103,263 Specialist ED Call Coverage Specialist $450,514 • Urgent Care Center$1,566,106 • Purchase of Mobile Health Unit $353,548		

Cancer – Cancer Prevention/Awareness/Education				
Hospital Initiative To increase awareness of early detection, healthy lifestyle behavior and access to low cost and free screenings				
Identified Need	Age-Adjusted Death Rate from Cancer 175.2 Current 176.6 Prior 147.4 MD SHIP 2017 TREND: Down	Age-Adjusted Death Rate from Breast Cancer 25.1 % Current 24.8% Prior 20.7% HP202 TREND Down	Cancer Medicare Population 8.7% Current 9.0% Prior 8.5 % MD Value	Adults at Healthy Weight 32.9% Current 31.6% Prior 36.6 % MD SHIP 2017 TREND: Down
Total Number of People within Target Population Entire Community (population of Calvert County)				
Total Number of People Reached by Initiative within Target Population • 863 of children and adults targeted by the Calvert Can healthy lifestyle Initiative • 611 women seen at Women's Wellness • 300 participated in Support Group • 90 people participating in screening programs (Oral & Skin)				
Primary Objective of the Initiative • Develop and Deploy an education and outreach plan to increase awareness of the importance of early detection • Offer Healthy Lifestyle Programs through low cost and free programs focus around Nutrition and Fitness				
Single or Multi-Year Initiative (time period) Multi Year				
Key Collaborators in Delivery of the Initiative Calvert Memorial Hospital, Calvert Physician Associates, Calvert County Health Department, Women's Wellness, Health Ministry Team Network				
Impact/Outcome of Hospital Initiative Over 1,860 residents from all ages and stage of life participated in one aspect or another of our community coordination care team cancer focused programs.				
Evaluation Outcomes • 1.4% reduction in Age Adjusted Death Rates Due to Cancer • 1.3% increase in the percentage of Adults at Healthy Weight. • 0.3% reduction/no increase in Age Adjusted Death Rates Due to Breast Cancer				
Continuation of Initiative - Yes				
Total Cost for Current Fiscal Year and What Amount is Restricted to Grants/Direct Offsetting Revenue	• Support Groups $2,187 Community Programs • Weightloss $4,350 • Fitness $1,508	*Total Cost:* $336,976	Direct offsetting revenue from restricted funding: $201,463 (women's wellness)	

	• Education: $2446 • Calvert Can: $3,008 • Screenings $3,117 • Women's Wellness $521,823		

Substance Abuse – Tobacco Road Show (TRS)			
Hospital Initiative Present education program to middle school and community youth on the dangers of smoking			
Identified Need	Adolescent Who Use Tobacco 23.0% Current Calvert 25.8 % Previous Calvert 15.2 MD SHIP 2017 TREND : Down	Teens Who Smoke 12.7% Current Calvert 18.3% Prior Calvert 16.0% HP2020 MET TREND: Down	Adults Who Smoke 19.2% Current Calvert 15.5% MD SHIP 2017
Total Number of People within Target Population 21,030 (teen population)			
Total Number of People Reached by Initiative within Target Population 1350 adolescents attended TRS			
Primary Objective of the Initiative Conduct TRS for public and private middle schools, summer camps, and youth groups			
Single or Multi-Year Initiative (time period) Multi Year			
Key Collaborators in Delivery of the Initiative Calvert Memorial Hospital, Calvert County Health Department, Calvert County Public Schools, Calverton Private School and Girl/Boy scouts			
Impact/Outcome of Hospital Initiative • Reduction in the number of adolescent using tobacco. • 2.8% reduction in the number of adolescent who use tobacco • 5.3% reduction in Teen Who use Tobacco			
Evaluation Outcomes SHIP Tracker indicates trending down			
Continuation of Initiative - Yes			
Total Cost for Current Fiscal Year and What Amount is Restricted to Grants/Direct Offsetting Revenue	Planning and implementing Tobacco Road Show at • 13 Middle Schools • 2 Community Groups	*Total Cost:* $9,965	Direct offsetting revenue from restricted grants $1,000

Appendix B. Secondary Data Methodology

Secondary Data Sources

The main source for the secondary data, or data that has been previously collected, is CalvertHealth Medicine – Community Health Needs Assessment, a publicly available data platform that is maintained by CalvertHealth and Conduent Healthy Communities Institute.

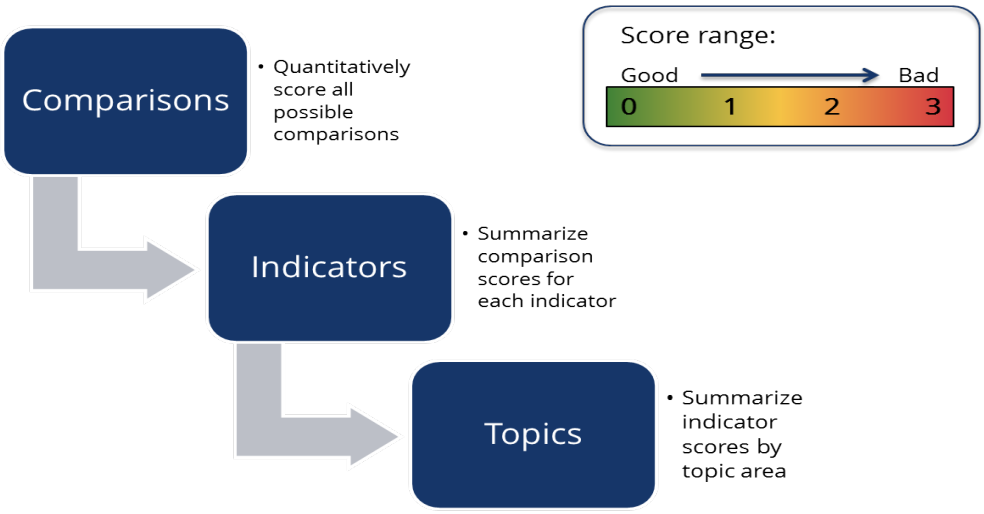
The following is a list of both local and national sources for which data is maintained for CalvertHealth's service area on CalvertHealth's community dashboard.

- American Community Survey
- American Lung Association
- Centers for Medicare & Medicaid Services
- County Health Rankings
- Fatality Analysis Reporting System
- Feeding America
- Institute for Health Metrics and Evaluation
- Maryland Behavioral Risk Factor Surveillance System
- Maryland Department of Health and Mental Hygiene
- Maryland Department of the Environment
- Maryland Governor's Office for Children
- Maryland Governor's Office of Crime Control & Prevention
- Maryland State Board of Elections
- Maryland State Department of Education
- Maryland Youth Tobacco Survey
- National Cancer Institute
- National Center for Education Statistics
- Small Area Health Insurance Estimates
- The Brookings Institution
- The Dartmouth Atlas of Health Care
- The Maryland Health Services Cost Review Commission (HCI)
- U.S. Bureau of Labor Statistics
- U.S. Census - County Business Patterns
- U.S. Department of Agriculture - Food Environment Atlas
- U.S. Environmental Protection Agency

Secondary Data Scoring

Secondary Data Scoring Detailed Methodology

Data Scoring is done in three stages:



For each indicator, Calvert County is assigned a score based on its comparison to other communities, whether health targets have been met, and the trend of the indicator value over time. These comparison scores range from 0-3, 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 for other communities, and changes in methodology over time.

Indicators are categorized into topic areas and each topic area receives a score. Indicators may be categorized in more than one topic area. Topic scores are determined by the comparisons of all indicators within the topic.

Comparison to a Distribution of County Values: Within State and Nation

For ease of interpretation and analysis, indicator data on the Community Dashboard is visually represented as a green-yellow-red gauge showing how the community is faring against a distribution of counties in the state or the United States. A distribution is created by taking all county values within the state or nation, ordering them from low to high, and dividing them into three groups (green, yellow, red) based on their order. Indicators with the poorest comparisons ("in the red") scored high, whereas indicators with good comparisons ("in the green") scored low.

Comparison to Values: State, National, and Targets

The county is compared to the state value, the national value, and target values. Targets values include the nation-wide Healthy People 2020 (HP2020) goals as well as Maryland State Health Improvement Process (SHIP) 2017 targets. Healthy People 2020 goals are national objectives for improving the health of the nation set by the Department of Health and Human Services' (DHHS) Healthy People Initiative. The goal of the Maryland State Health Improvement Process (SHIP) objectives is to advance the health of Maryland residents. The SHIP 2017 target objectives align with the Healthy People (HP) 2020 objectives. For all value comparisons, the scoring depends on whether the county value is better or worse than the comparison value, as well as how close the county value is to the target value.

Trend Over Time

The Mann-Kendall statistical test for trend was used to assess whether the county value is increasing over time or decreasing over time, and whether the trend is statistically significant. The trend comparison uses the four most recent comparable values for the county, and statistical significance is determined at the 90% confidence level. For each indicator with values available for four time periods, scoring was determined by direction of the trend and statistical significance.

Missing Values

Indicator scores are calculated using the comparison scores, availability of which depends on the data source. If the comparison type is possible for an adequate proportion of indicators on the community dashboard, it will be included in the indicator score. After exclusion of comparison types with inadequate availability, all missing comparisons are substituted with a neutral score for the purposes of calculating the indicator's weighted average. When information is unknown due to lack of comparable data, the neutral value assumes that the missing comparison score is neither good nor bad.

Indicator Scoring

Indicator scores are calculated as a weighted average of all included comparison scores. If none of the included comparison types are possible for an indicator, no score is calculated and the indicator is excluded from the data scoring results.

Topic Scoring

Indicator scores are averaged by topic area to calculate topic scores. Each indicator may be included in up to three topic areas if appropriate. Resulting scores range from 0-3, where a higher score indicates a greater level of need as evidenced by the data. A topic score is only calculated if it includes at least three indicators.

Data Scoring Results

SCORE	ACCESS TO HEALTH SERVICES		UNITS	CALVERT COUNTY	HP2020	MARYLAND SHIP 2017	MARYLAND	U.S.	MEASUREMENT PERIOD
2.00	Adolescents who have had a Routine Checkup: Medicaid Population		*percent*	47.3		57.4	54.7		*2013*
2.00	Children who Visited a Dentist		*percent*	56.4		64.6	63.3		*2013*
1.95	Children with Health Insurance		*percent*	95.2	100		96.1	95.2	*2015*
1.88	Adults who have had a Routine Checkup		*percent*	80.9			89.1	83.5	*2015*
1.55	Dentist Rate		*dentists/ 100,000 population*	44					*2015*
1.40	Primary Care Provider Rate		*providers/ 100,000 population*	55					*2014*
1.35	Adults who Visited a Dentist		*percent*	77.7			72.1		*2015*
1.35	Non-Physician Primary Care Provider Rate		*providers/ 100,000 population*	44					*2016*
1.25	People with a Usual Primary Care		*percent*	89.1		83.9	82.6		*2014*
1.00	Adults with Health Insurance		*percent*	93.9	100		91.2	86.9	*2015*
0.98	Adults Unable to Afford to See a Doctor		*percent*	8.4			10.1	13.1	*2014*
0.93	Persons with Health Insurance		*percent*	95.4	100		92.6		*2015*
0.80	Uninsured Emergency Department Visits		*percent*	6.2		14.7	11		*2014*
SCORE	**CANCER**		UNITS	CALVERT COUNTY	HP2020	MARYLAND SHIP 2017	MARYLAND	U.S.	MEASUREMENT PERIOD
2.70	Breast Cancer Incidence Rate		*cases/ 100,000 females*	143.3			130.2	123.3	*2009-2013*
2.65	Age-Adjusted Death Rate due to Prostate Cancer		*deaths/ 100,000 males*	28.1	21.8		21.3	20.7	*2009-2013*
2.50	Oral Cavity and Pharynx Cancer Incidence Rate		*cases/ 100,000 population*	15.1			10.7	11.3	*2009-2013*
2.40	Age-Adjusted Death Rate due to Breast Cancer		*deaths/ 100,000 females*	25.1	20.7		23	21.5	*2009-2013*

2.30	Melanoma Incidence Rate		*cases/ 100,000 population*	30.8			21	20.3	*2009-2013*
2.18	Cervical Cancer Incidence Rate		*cases/ 100,000 females*	9	7.2		7.6		*2003-2007*
2.00	Cancer: Medicare Population		*percent*	8.8			8.6	7.8	*2015*
1.50	Lung and Bronchus Cancer Incidence Rate		*cases/ 100,000 population*	64.7			59.2	62.4	*2009-2013*
1.43	Mammogram in Past 2 Years: 50+		*percent*	81.7			82	75.6	*2014*
1.40	Age-Adjusted Death Rate due to Cancer		*deaths/ 100,000 population*	175.2	161.4	147.4	168.2	168.5	*2009-2013*
1.40	Age-Adjusted Death Rate due to Lung Cancer		*deaths/ 100,000 population*	49.4	45.5		44.5	46	*2009-2013*
1.25	Age-Adjusted Death Rate due to Colorectal Cancer		*deaths/ 100,000 population*	15.8	14.5		14.9	15.1	*2009-2013*
1.20	Prostate Cancer Incidence Rate		*cases/ 100,000 males*	126.6			135	123.1	*2009-2013*
0.98	Colon Cancer Screening: Sigmoidoscopy or Colonoscopy		*percent*	76.4			73	69.3	*2014*
0.88	Pap Test in Past 3 Years		*percent*	92.1	93		79.8	75.2	*2014*
0.15	Colorectal Cancer Incidence Rate		*cases/ 100,000 population*	33.5	39.9		37.6	40.6	*2009-2013*
SCORE	**CHILDREN'S HEALTH**		UNITS	CALVERT COUNTY	HP2020	MARYLAND SHIP 2017	MARYLAND	U.S.	MEASUREMENT PERIOD
2.08	Food Insecure Children Likely Ineligible for Assistance		*percent*	61			41	34.1	*2015*
2.00	Children who Visited a Dentist		*percent*	56.4		64.6	63.3		*2013*
1.95	Age-Adjusted Hospitalization Rate due to Pediatric Mental Health		*hospitalizations/ 10,000 population under 18 years*	35.3			14.8		*2013-2015*
1.95	Children with Health Insurance		*percent*	95.2	100		96.1	95.2	*2015*

1.65	Low-Income Preschool Obesity		*percent*	13.6					*2009-2011*
1.35	Children with Asthma		*percent*	15.5			16.1		*2013*
1.20	Age-Adjusted Hospitalization Rate due to Pediatric Asthma		*hospitalizations/ 10,000 population under 18 years*	8.9			14.2		*2013-2015*
1.10	Child Abuse Rate		*cases/ 1,000 children*	4.2			7.3		*2015*
0.65	Child Food Insecurity Rate		*percent*	15.1			16.3	19.3	*2015*
0.58	Blood Lead Levels in Children		*percent*	0		0.28	0.3	0.5	*2015*
SCORE	**DIABETES**		UNITS	CALVERT COUNTY	HP2020	MARYLAND SHIP 2017	MARYLAND	U.S.	MEASUREMENT PERIOD
2.20	Diabetes: Medicare Population		*percent*	29.9			29.1	26.5	*2015*
1.98	Age-Adjusted Death Rate due to Diabetes		*deaths/ 100,000 population*	22			19	21.1	*2013-2015*
1.88	Adults with Diabetes		*percent*	11.4			10.4	9.9	*2015*
1.45	Age-Adjusted ER Rate due to Diabetes		*ER Visits/ 100,000 population*	169.2		186.3	204		*2014*
1.20	Age-Adjusted Hospitalization Rate due to Short-Term Complications of Diabetes		*hospitalizations/ 10,000 population 18+ years*	6.7			7.7		*2013-2015*
1.05	Age-Adjusted Hospitalization Rate due to Diabetes		*hospitalizations/ 10,000 population 18+ years*	14.1			20.9		*2013-2015*
1.05	Age-Adjusted Hospitalization Rate due to Long-Term Complications of Diabetes		*hospitalizations/ 10,000 population 18+ years*	6.7			11.8		*2013-2015*
1.05	Age-Adjusted Hospitalization Rate due to Uncontrolled Diabetes		*hospitalizations/ 10,000 population 18+ years*	0.7			1.3		*2012-2014*
0.60	Diabetic Monitoring: Medicare		*percent*	89.4			85	85.2	*2014*

SCORE	**ECONOMY**		UNITS	CALVERT COUNTY	HP2020	MARYLAND SHIP 2017	MARYLAND	U.S.	MEASUREMENT PERIOD
2.08	Food Insecure Children Likely Ineligible for Assistance		*percent*	61			41	34.1	*2015*
1.85	Renters Spending 30% or More of Household Income on Rent		*percent*	53.1			51.5	51.8	*2011-2015*
1.80	Affordable Housing		*percent*	45.6		54.4	46.1		*2014*
1.80	SNAP Certified Stores		*stores/ 1,000 population*	0.4					*2012*
1.65	Low-Income and Low Access to a Grocery Store		*percent*	4.6					*2010*
1.65	Low-Income Preschool Obesity		*percent*	13.6					*2009-2011*
1.30	Households with Cash Public Assistance Income		*percent*	2.5			2.6	2.8	*2011-2015*
1.18	Severe Housing Problems		*percent*	14.2				19	*2009-2013*
1.00	People 65+ Living Below Poverty Level		*percent*	6.8			7.5	9.4	*2011-2015*
0.93	Students Eligible for the Free Lunch		*percent*	19.5			38.8		*2014-2015*
0.83	People Living 300% Above Poverty Level		*percent*	77.9			60.5	46.8	*2015*
0.80	Unemployed Workers in Civilian Labor		*percent*	3.5			3.9	4.1	*May 2017*
0.73	Mortgaged Owners Spending 30% or More of Household Income on Housing		*percent*	23.6			29.4	29.4	*2015*
0.70	Families Living Below Poverty Level		*percent*	3.5			7	11.3	*2011-2015*
0.70	Homeownership		*percent*	74			60.1	56	*2011-2015*
0.70	People Living 200% Above Poverty Level		*percent*	86.5			76.7	65.7	*2011-2015*
0.70	People Living Below Poverty Level		*percent*	5.8			10	15.5	*2011-2015*
0.65	Child Food Insecurity Rate		*percent*	15.1			16.3	19.3	*2015*
0.50	Children Living Below Poverty Level		*percent*	6.3			13.3	21.7	*2011-2015*
0.50	Food Insecurity Rate		*percent*	7.2			11.4	13.7	*2015*
0.50	Median Household Income		*dollars*	95828			74551	53889	*2011-2015*
0.45	Per Capita Income		*dollars*	39011			36897	28930	*2011-2015*

SCORE	**EDUCATION**		UNITS	CALVERT COUNTY	HP2020	MARYLAND SHIP 2017	MARYLAND	U.S.	MEASUREMENT PERIOD
1.78	Student-to-Teacher Ratio		*students/ teacher*	16			15		*2014-2015*
1.75	People 25+ with a Bachelor's Degree or Higher		*percent*	29.1			37.9	29.8	*2011-2015*
1.65	School Readiness at Kindergarten Entry		*percent*	46		85.5	45		*2015-2016*
1.20	4th Grade Students Proficient in Reading		*percent*	92.3			86.3		*2014*
1.05	4th Grade Students Proficient in Math		*percent*	89.3			80.6		*2014*
1.05	8th Grade Students Proficient in Math		*percent*	80.6			58.7		*2014*
1.05	8th Grade Students Proficient in Reading		*percent*	87.3			76.9		*2014*
0.80	High School Graduation		*percent*	94.5	82.4	95	87.6		*2016*
SCORE	**ENVIRONMENT**		UNITS	CALVERT COUNTY	HP2020	MARYLAND SHIP 2017	MARYLAND	U.S.	MEASUREMENT PERIOD
1.95	People with Low Access to a Grocery		*percent*	33.6					*2010*
1.80	SNAP Certified Stores		*stores/ 1,000 population*	0.4					*2012*
1.73	Drinking Water Violations		*percent*	13.6			16.2		*FY 2013-14*
1.70	Liquor Store Density		*stores/ 100,000 population*	19.9			20	10.5	*2015*
1.65	Low-Income and Low Access to a Grocery Store		*percent*	4.6					*2010*
1.60	Fast Food Restaurant Density		*restaurants/ 1,000 population*	0.7					*2012*
1.60	Recreation and Fitness Facilities		*facilities/ 1,000 population*	0.09					*2012*
1.55	Grocery Store Density		*stores/ 1,000 population*	0.2					*2012*
1.50	Households with No Car and Low Access to a Grocery Store		*percent*	2.4					*2010*

1.20	Access to Exercise Opportunities		*percent*	87.5			93.4	84	*2016*
1.18	Severe Housing Problems		*percent*	14.2				19	*2009-2013*
1.13	Farmers Market Density		*markets/ 1,000 population*	0.04				0	*2013*
1.10	Annual Ozone Air Quality		*grade*	C					*2013-2015*
0.93	Food Environment Index			8.9				7.3	*2017*
0.58	Blood Lead Levels in Children		*percent*	0		0.28	0.3	0.5	*2015*
SCORE	**ENVIRONMENTAL & OCCUPATIONAL HEALTH**		UNITS	CALVERT COUNTY	HP2020	MARYLAND SHIP 2017	MARYLAND	U.S.	MEASUREMENT PERIOD
1.90	Asthma: Medicare Population		*percent*	8.6			7.9	8.2	*2015*
1.35	Children with Asthma		*percent*	15.5			16.1		*2013*
1.20	Age-Adjusted Hospitalization Rate due to Adult Asthma		*hospitalizations/ 10,000 population 18+ years*	7.6			11.3		*2013-2015*
1.20	Age-Adjusted Hospitalization Rate due to Asthma		*hospitalizations/ 10,000 population*	7.9			12		*2013-2015*
1.20	Age-Adjusted Hospitalization Rate due to Pediatric Asthma		*hospitalizations/ 10,000 population under 18 years*	8.9			14.2		*2013-2015*
1.05	Adults with Asthma		*percent*	7				14.3	*2015*
0.80	Age-Adjusted ER Rate due to Asthma		*ER visits/ 10,000 population*	43.6		62.5	68.3		*2014*
0.58	Blood Lead Levels in Children		*percent*	0		0.28	0.3	0.5	*2015*
SCORE	**EXERCISE, NUTRITION, & WEIGHT**		UNITS	CALVERT COUNTY	HP2020	MARYLAND SHIP 2017	MARYLAND	U.S.	MEASUREMENT PERIOD
2.28	Adults who are Overweight or Obese		*percent*	77.2			65	65.3	*2015*
2.08	Food Insecure Children Likely Ineligible for Assistance		*percent*	61			41	34.1	*2015*
1.95	People with Low Access to a Grocery		*percent*	33.6					*2010*

1.88	Adults Engaging in Regular Physical		*percent*	41.4	47.9		48	20.5	*2013*
1.88	Adults with a Healthy Weight		*percent*	32.9		36.6	35.1	35.2	*2014*
1.80	Adult Fruit and Vegetable Consumption		*percent*	22.6			27.1		*2010*
1.80	SNAP Certified Stores		*stores/ 1,000 population*	0.4					*2012*
1.65	Low-Income and Low Access to a Grocery Store		*percent*	4.6					*2010*
1.65	Low-Income Preschool Obesity		*percent*	13.6					*2009-2011*
1.63	Adults who are Obese		*percent*	30.7	30.5		28.9	29.8	*2015*
1.60	Fast Food Restaurant Density		*restaurants/ 1,000 population*	0.7					*2012*
1.60	Recreation and Fitness Facilities		*facilities/ 1,000 population*	0.09					*2012*
1.55	Grocery Store Density		*stores/ 1,000 population*	0.2					*2012*
1.50	Households with No Car and Low Access to a Grocery Store		*percent*	2.4					*2010*
1.20	Access to Exercise Opportunities		*percent*	87.5			93.4	84	*2016*
1.13	Farmers Market Density		*markets/ 1,000 population*	0.04				0.03	*2013*
0.93	Food Environment Index			8.9				7.3	*2017*
0.85	Adolescents who are Obese		*percent*	10.1	16.1	10.7	11.5		*2014*
0.65	Child Food Insecurity Rate		*percent*	15.1			16.3	19.3	*2015*
0.50	Food Insecurity Rate		*percent*	7.2			11.4	13.7	*2015*
SCORE	**HEART DISEASE & STROKE**		UNITS	CALVERT COUNTY	HP2020	MARYLAND SHIP 2017	MARYLAND	U.S.	MEASUREMENT PERIOD
2.18	High Cholesterol Prevalence		*percent*	41.2	13.5		35.9	36.3	*2015*
2.15	Ischemic Heart Disease: Medicare		*percent*	29.8			26	26.5	*2015*
2.10	Age-Adjusted ER Rate due to Hypertension		*ER Visits/ 100,000 population*	261.7		234	252.2		*2014*

1.75	Atrial Fibrillation: Medicare Population		*percent*	8.2			8	8.1	*2015*
1.70	Hyperlipidemia: Medicare Population		*percent*	49			48.9	44.6	*2015*
1.50	Age-Adjusted Hospitalization Rate due to Heart Failure		*hospitalizations/ 10,000 population 18+ years*	37.7			38.8		*2013-2015*
1.43	High Blood Pressure Prevalence		*percent*	31.5	26.9		33.1	30.9	*2015*
1.40	Heart Failure: Medicare Population		*percent*	12.5			12.4	13.5	*2015*
1.40	Stroke: Medicare Population		*percent*	4.3			4.5	4	*2015*
1.33	Age-Adjusted Death Rate due to Heart Disease		*deaths/ 100,000 population*	175.1		166.3	169.4	168.4	*2013-2015*
1.20	Age-Adjusted Hospitalization Rate due to Hypertension		*hospitalizations/ 10,000 population 18+ years*	3.1			5.2		*2013-2015*
1.20	Hypertension: Medicare Population		*percent*	59.1			59.2	55	*2015*
0.58	Age-Adjusted Death Rate due to Cerebrovascular Disease (Stroke)		*deaths/ 100,000 population*	31.3	34.8		37.1	36.8	*2013-2015*
SCORE	**IMMUNIZATIONS & INFECTIOUS DISEASES**		UNITS	CALVERT COUNTY	HP2020	MARYLAND SHIP 2017	MARYLAND	U.S.	MEASUREMENT PERIOD
2.05	Adults with Influenza Vaccination		*percent*	38.4	70	49.1	41.7		*2014*
1.95	Age-Adjusted Hospitalization Rate due to Bacterial Pneumonia		*hospitalizations/ 10,000 population 18+ years*	33			22.7		*2013-2015*
1.53	Adults 65+ with Pneumonia Vaccination		*percent*	70.6	90		69.8	70.3	*2014*
1.50	Salmonella Infection Incidence Rate		*cases/ 100,000 population*	15.4	11.4		16.1		*2015*
1.28	Tuberculosis Incidence Rate		*cases/ 100,000 population*	1.1	1		2.9	3	*2015*
1.20	Age-Adjusted Hospitalization Rate due to Immunization-Preventable Pneumonia and Influenza		*hospitalizations/ 10,000 population 18+ years*	1.6			2.3		*2013-2015*

1.05	Age-Adjusted Hospitalization Rate due to Hepatitis	*hospitalizations/ 10,000 population 18+ years*	1.1			2.2		*2013-2015*
0.95	Chlamydia Incidence Rate	*cases/ 100,000 population*	288.3		431	509.6		*2016*
0.95	Gonorrhea Incidence Rate	*cases/ 100,000 population*	42			158.3		*2016*
0.95	Syphilis Incidence Rate	*cases/ 100,000 population*	1.1			8.5		*2016*
0.93	Adults 65+ with Influenza Vaccination	*percent*	69.6			62.1	60.8	*2014*
0.90	HIV Incidence Rate: Aged 13+	*cases/ 100,000 population*	3.9		26.7	26.5		*2015*
0.53	Age-Adjusted Death Rate due to Influenza and Pneumonia	*deaths/ 100,000 population*	7.8			16	15.2	*2012-2014*
SCORE	**MATERNAL, FETAL & INFANT HEALTH**	UNITS	CALVERT COUNTY	HP2020	MARYLAND SHIP 2017	MARYLAND	U.S.	MEASUREMENT PERIOD
1.75	Mothers who Received Early Prenatal	*percent*	69.7	77.9	66.9	62.2		*2015*
0.80	Babies with Very Low Birth Weight	*percent*	0.6	1.4		1.7		*2015*
0.75	Infant Mortality Rate	*deaths/ 1,000 live births*	5	6	6.3	6.6		*2011-2015*
0.65	Babies with Low Birth Weight	*percent*	5.3	7.8	8	8.6		*2015*
0.58	Preterm Births	*percent*	6.3	11.4		10	9.6	*2015*
0.38	Teen Birth Rate: 15-19	*live births/ 1,000 females aged 15-19*	9.6		17.8	16.9	22.3	*2015*
SCORE	**MEN'S HEALTH**	UNITS	CALVERT COUNTY	HP2020	MARYLAND SHIP 2017	MARYLAND	U.S.	MEASUREMENT PERIOD
2.65	Age-Adjusted Death Rate due to Prostate Cancer	*deaths/ 100,000 males*	28.1	21.8		21.3	20.7	*2009-2013*

1.20	Prostate Cancer Incidence Rate		*cases/ 100,000 males*	126.6			135	123.1	*2009-2013*
1.10	Life Expectancy for Males		*years*	77.1			76.8	76.7	*2014*
SCORE	**MENTAL HEALTH & MENTAL DISORDERS**		UNITS	CALVERT COUNTY	HP2020	MARYLAND SHIP 2017	MARYLAND	U.S.	MEASUREMENT PERIOD
2.58	Age-Adjusted Death Rate due to Suicide		*deaths/ 100,000 population*	16.5	10.2	9	9.2	12.7	*2012-2014*
1.95	Age-Adjusted Hospitalization Rate due to Adolescent Suicide and Intentional Self-inflicted Injury		*hospitalizations/ 10,000 population aged 12-17*	76.7			23.3		*2013-2015*
1.95	Age-Adjusted Hospitalization Rate due to Pediatric Mental Health		*hospitalizations/ 10,000 population under 18 years*	35.3			14.8		*2013-2015*
1.60	Self-Reported Good Mental Health		*percent*	70			76.2		*2015*
1.35	Age-Adjusted Hospitalization Rate due to Mental Health		*hospitalizations/ 10,000 population 18+ years*	51.1			59.7		*2013-2015*
1.35	Age-Adjusted Hospitalization Rate due to Suicide and Intentional Self-inflicted Injury		*hospitalizations/ 10,000 population 18+ years*	35.5			39.5		*2013-2015*
1.35	Depression: Medicare Population		*percent*	14.8			15.4	16.7	*2015*
1.28	Inadequate Social Support		*percent*	18.4			19.9		*2005-2010*
1.10	Age-Adjusted ER Rate due to Mental Health		*ER Visits/ 100,000 population*	2859.1		3152.6	3442.6		*2014*
0.83	Frequent Mental Distress		*percent*	9.4				11	*2015*
0.80	Alzheimer's Disease or Dementia: Medicare Population		*percent*	8.8			10.1	9.9	*2015*
0.75	Age-Adjusted Hospitalization Rate Related to Alzheimer's and Other		*hospitalizations/ 100,000 population*	162.4		199.4	194.1		*2014*

SCORE	MORTALITY DATA		UNITS	CALVERT COUNTY	HP2020	MARYLAND SHIP 2017	MARYLAND	U.S.	MEASUREMENT PERIOD
2.65	Age-Adjusted Death Rate due to Prostate Cancer		*deaths/ 100,000 males*	28.1	21.8		21.3	20.7	*2009-2013*
2.63	Age-Adjusted Death Rate due to Drug Use		*deaths/ 100,000 population*	22.1	11.3	12.6	15.2	14.6	*2012-2014*
2.58	Age-Adjusted Death Rate due to Suicide		*deaths/ 100,000 population*	16.5	10.2	9	9.2	12.7	*2012-2014*
2.40	Age-Adjusted Death Rate due to Breast Cancer		*deaths/ 100,000 females*	25.1	20.7		23	21.5	*2009-2013*
2.13	Alcohol-Impaired Driving Deaths		*percent*	39.6				30	*2011-2015*
1.98	Age-Adjusted Death Rate due to Diabetes		*deaths/ 100,000 population*	22			19	21.1	*2013-2015*
1.53	Age-Adjusted Death Rate due to Chronic Lower Respiratory Diseases		*deaths/ 100,000 population*	36.8			30.8	41.4	*2013-2015*
1.40	Age-Adjusted Death Rate due to Cancer		*deaths/ 100,000 population*	175.2	161.4	147.4	168.2	168.5	*2009-2013*
1.40	Age-Adjusted Death Rate due to Lung Cancer		*deaths/ 100,000 population*	49.4	45.5		44.5	46	*2009-2013*
1.33	Age-Adjusted Death Rate due to Heart Disease		*deaths/ 100,000 population*	175.1		166.3	169.4	168.4	*2013-2015*
1.25	Age-Adjusted Death Rate due to Colorectal Cancer		*deaths/ 100,000 population*	15.8	14.5		14.9	15.1	*2009-2013*
1.08	Age-Adjusted Death Rate due to Unintentional Injuries		*deaths/ 100,000 population*	31.6	36.4		37.5	41.1	*2013-2015*
0.75	Infant Mortality Rate		*deaths/ 1,000 live births*	5	6	6.3	6.6		*2011-2015*
0.58	Age-Adjusted Death Rate due to Cerebrovascular Disease (Stroke)		*deaths/ 100,000 population*	31.3	34.8		37.1	36.8	*2013-2015*
0.53	Age-Adjusted Death Rate due to Influenza and Pneumonia		*deaths/ 100,000 population*	7.8			16	15.2	*2012-2014*

SCORE	ORAL HEALTH	UNITS	CALVERT COUNTY	HP2020	MARYLAND SHIP 2017	MARYLAND	U.S.	MEASUREMENT PERIOD
2.50	Oral Cavity and Pharynx Cancer Incidence Rate	*cases/ 100,000 population*	15.1			10.7	11.3	*2009-2013*
2.00	Children who Visited a Dentist	*percent*	56.4		64.6	63.3		*2013*
1.85	Age-Adjusted ER Visit Rate due to Dental Problems	*ER Visits/ 100,000 population*	897.9		792.8	779.7		*2014*
1.55	Dentist Rate	*dentists/ 100,000 population*	44					*2015*
1.35	Adults who Visited a Dentist	*percent*	77.7			72.1		*2015*
0.95	Adults with No Tooth Extractions	*percent*	63.8			54.8		*2015*

SCORE	OTHER CHRONIC DISEASES	UNITS	CALVERT COUNTY	HP2020	MARYLAND SHIP 2017	MARYLAND	U.S.	MEASUREMENT PERIOD
2.50	Rheumatoid Arthritis or Osteoarthritis: Medicare Population	*percent*	33.4			30	30	*2015*
1.50	Chronic Kidney Disease: Medicare	*percent*	18			18.2	18.1	*2015*
0.65	Osteoporosis: Medicare Population	*percent*	4.3			5.7	6	*2015*

SCORE	PREVENTION & SAFETY	UNITS	CALVERT COUNTY	HP2020	MARYLAND SHIP 2017	MARYLAND	U.S.	MEASUREMENT PERIOD
1.20	Pedestrian Injuries	*injuries/ 100,000 population*	22.1	20.3	35.6	42.5		*2014*
1.18	Severe Housing Problems	*percent*	14.2				19	*2009-2013*
1.08	Age-Adjusted Death Rate due to Unintentional Injuries	*deaths/ 100,000 population*	31.6	36.4		37.5	41.1	*2013-2015*
0.35	Pedestrian Death Rate	*deaths/ 100,000 population*	0	1.4		0.9	1.5	*2013*

SCORE	PUBLIC SAFETY		UNITS	CALVERT COUNTY	HP2020	MARYLAND SHIP 2017	MARYLAND	U.S.	MEASUREMENT PERIOD
2.13	Alcohol-Impaired Driving Deaths		*percent*	39.6				30	*2011-2015*
1.75	Domestic Violence Offense Rate		*offenses/ 100,000 population*	490		445	455.8		*2014*
1.20	Pedestrian Injuries		*injuries/ 100,000 population*	22.1	20.3	35.6	42.5		*2014*
1.10	Child Abuse Rate		*cases/ 1,000 children*	4.2			7.3		*2015*
0.93	Violent Crime Rate		*crimes/ 100,000 population*	135.5			471.3	383.2	*2015*
0.35	Pedestrian Death Rate		*deaths/ 100,000 population*	0	1.4		0.9	1.5	*2013*
SCORE	**RESPIRATORY DISEASES**		UNITS	CALVERT COUNTY	HP2020	MARYLAND SHIP 2017	MARYLAND	U.S.	MEASUREMENT PERIOD
2.05	Adults with Influenza Vaccination		*percent*	38.4	70	49.1	41.7		*2014*
1.95	Age-Adjusted Hospitalization Rate due to Bacterial Pneumonia		*hospitalizations/ 10,000 population 18+ years*	33			22.7		*2013-2015*
1.90	Asthma: Medicare Population		*percent*	8.6			7.9	8.2	*2015*
1.85	COPD: Medicare Population		*percent*	12.2			9.9	11.2	*2015*
1.80	Age-Adjusted Hospitalization Rate due to COPD		*hospitalizations/ 10,000 population 18+ years*	28.6			20.9		*2013-2015*
1.53	Adults 65+ with Pneumonia Vaccination		*percent*	70.6	90		69.8	70.3	*2014*
1.53	Age-Adjusted Death Rate due to Chronic Lower Respiratory Diseases		*deaths/ 100,000 population*	36.8			30.8	41.4	*2013-2015*
1.50	Lung and Bronchus Cancer Incidence Rate		*cases/ 100,000 population*	64.7			59.2	62.4	*2009-2013*

1.40	Age-Adjusted Death Rate due to Lung Cancer		*deaths/ 100,000 population*	49.4	45.5		44.5	46	*2009-2013*
1.35	Children with Asthma		*percent*	15.5			16.1		*2013*
1.28	Tuberculosis Incidence Rate		*cases/ 100,000 population*	1.1	1		2.9	3	*2015*
1.20	Age-Adjusted Hospitalization Rate due to Adult Asthma		*hospitalizations/ 10,000 population 18+ years*	7.6			11.3		*2013-2015*
1.20	Age-Adjusted Hospitalization Rate due to Asthma		*hospitalizations/ 10,000 population*	7.9			12		*2013-2015*
1.20	Age-Adjusted Hospitalization Rate due to Immunization-Preventable Pneumonia and Influenza		*hospitalizations/ 10,000 population 18+ years*	1.6			2.3		*2013-2015*
1.20	Age-Adjusted Hospitalization Rate due to Pediatric Asthma		*hospitalizations/ 10,000 population under 18 years*	8.9			14.2		*2013-2015*
1.05	Adults with Asthma		*percent*	7				14.3	*2015*
0.93	Adults 65+ with Influenza Vaccination		*percent*	69.6			62.1	60.8	*2014*
0.80	Age-Adjusted ER Rate due to Asthma		*ER visits/ 10,000 population*	43.6		62.5	68.3		*2014*
0.53	Age-Adjusted Death Rate due to Influenza and Pneumonia		*deaths/ 100,000 population*	7.8			16	15.2	*2012-2014*
SCORE	**SOCIAL ENVIRONMENT**		UNITS	CALVERT COUNTY	HP2020	MARYLAND SHIP 2017	MARYLAND	U.S.	MEASUREMENT PERIOD
2.18	Social Associations		*membership associations/ 10,000 population*	7				9.4	*2014*
1.20	Single-Parent Households		*percent*	26.3			34.3	33.7	*2011-2015*
1.10	Child Abuse Rate		*cases/ 1,000 children*	4.2			7.3		*2015*

0.90	Voter Registration		*percent*	90			83.6		*2016*
0.50	Children Living Below Poverty Level		*percent*	6.3			13.3	21.7	*2011-2015*
SCORE	**SUBSTANCE ABUSE**		UNITS	CALVERT COUNTY	HP2020	MARYLAND SHIP 2017	MARYLAND	U.S.	MEASUREMENT PERIOD
2.63	Age-Adjusted Death Rate due to Drug Use		*deaths/ 100,000 population*	22.1	11.3	12.6	15.2	14.6	*2012-2014*
2.13	Alcohol-Impaired Driving Deaths		*percent*	39.6				30	*2011-2015*
1.75	Adolescents who Use Tobacco		*percent*	20.7	21	15.2	16.4		*2014*
1.75	Age-Adjusted ER Rate due to Alcohol/Substance Abuse		*ER visits/ 100,000 population*	1559.8		1400.9	1591.3		*2014*
1.70	Liquor Store Density		*stores/ 100,000 population*	19.9			20	10.5	*2015*
1.50	Teens who Smoke: High School Students		*percent*	12.7	16		8.7		*2014*
1.35	Age-Adjusted Hospitalization Rate due to Substance Abuse		*hospitalizations/ 10,000 population 18+ years*	7.2			8.8		*2013-2015*
1.28	Adults who Smoke		*percent*	15.5	12	15.5	15.1	17.5	*2015*
1.20	Age-Adjusted Hospitalization Rate due to Alcohol Abuse		*hospitalizations/ 10,000 population 18+ years*	8.2			15.4		*2013-2015*
0.58	Adults who Binge Drink		*percent*	7.6	24.4		14.2	16.3	*2015*
SCORE	**TEEN & ADOLESCENT HEALTH**		UNITS	CALVERT COUNTY	HP2020	MARYLAND SHIP 2017	MARYLAND	U.S.	MEASUREMENT PERIOD
2.00	Adolescents who have had a Routine Checkup: Medicaid Population		*percent*	47.3		57.4	54.7		*2013*
1.95	Age-Adjusted Hospitalization Rate due to Adolescent Suicide and Intentional Self-inflicted Injury		*hospitalizations/ 10,000 population aged 12-17*	76.7			23.3		*2013-2015*
1.75	Adolescents who Use Tobacco		*percent*	20.7	21	15.2	16.4		*2014*

SCORE	**WOMEN'S HEALTH**		UNITS	CALVERT COUNTY	HP2020	MARYLAND SHIP 2017	MARYLAND	U.S.	MEASUREMENT PERIOD
2.70	Breast Cancer Incidence Rate		*cases/ 100,000 females*	143.3			130.2	123.3	*2009-2013*
2.40	Age-Adjusted Death Rate due to Breast Cancer		*deaths/ 100,000 females*	25.1	20.7		23	21.5	*2009-2013*
2.18	Cervical Cancer Incidence Rate		*cases/ 100,000 females*	9	7.2		7.6		*2003-2007*
1.43	Mammogram in Past 2 Years: 50+		*percent*	81.7			82	75.6	*2014*
1.20	Life Expectancy for Females		*years*	81.3			81.4	81.5	*2014*
0.88	Pap Test in Past 3 Years		*percent*	92.1	93		79.8	75.2	*2014*

Appendix C. Key Informant Questionnaire

Key Informant Interview Questions

Name:	
Title:	
Email:	
Phone:	
Organization/Affiliation:	
Address:	
Role:	
Serves Calvert County?	
Population Served? **(medically underserved, low-income, etc.)**	
Primary Focus Area:	

QI: Could you tell me a little about yourself, your background, and your organization?	
A:	
	Part II – What is your organization's mission?
	A:
	Part III - Does your organization work in direct care, services or more in an advocacy role?
	A:
QII: What are the major health needs/issues you see in the community? (Please provide up to 5)	
A:	
	Part II – How would you rank these issues in your community (top priority to lowest priority) and why?
	A:
	Part III – What do you think contributes to the health needs you see?

	A:
QIII: Who in your community appears to struggle the most with these issues you've identified and how does it impact their lives?	
A:	
	Part II – What is the impact of these health issues on low-income, underserved/uninsured persons?
	A:
	Part III – What about the impact on different racial or ethnic groups of this health concern?
	A:
	Part IV – What about by age or gender?
	A:
QIV: Are there any barriers to receiving care in the community?	
A:	
	Part II – What might prevent someone in this community from accessing care? *(Examples might include lack of transportation, lack of health insurance coverage, language/cultural barriers, etc.)*
	A:
QV: Could you tell me about some of the strengths and resources in your community that address these issues, such as groups, initiatives, services, or programs? *(For any resource mentioned, please enter the name and type of program)*	
A:	
	Part II – What is the most beneficial health resource or service in your community?

	A:
QVI: We have found that there is limited publicly available data around some health topics for your area, which may make it difficult to assess the extent of the community need. Could you please help fill in some of our data gaps by telling us a little about how any of the following health topics are impacting the community?	
Food Safety ***Government & Politics*** ***Family Planning*** ***Chronic Diseases*** ***Men's Health*** ***Prevention & Safety*** ***Social Environment*** ***Environmental & Occupational Health*** ***Teen & Adolescent Health***	
QVII: What services or programs do you feel could potentially have the greatest impact on any of the needs that you've identified?	
A:	
QVIII: Are there opportunities for larger collaboration with hospitals and/or the health department that you want us to take note of?	
A:	
QIX: Is there anything additional that should be considered for this Community Health Needs Assessment?	
A:	

Appendix D. Community Conversation Questions

Questions:

1. What makes your community healthy? [probe: What strengths does your community have for supporting health?]

    - Goal: understand what currently exists in this community for supporting health (partnership opportunities, existing infrastructure, strengths) [STRENGTHS]

2. What resources do you or someone you know currently use in your community to support your health? What organizations or resources do you trust to support your health? [probe: are there any resources lacking in your community?]

    - Goal: understand existing resources and utilization, as well as get an idea where there are resource gaps [STRENGTHS/OPPORTUNITIES]

3. What are some of the reasons you or someone in your community might not seek health care when they need it? [probe: barriers/community weaknesses?]

    - Goal: understand barriers and points of weakness in the community [CHALLENGES]

4. What health concerns do you see most commonly amongst your family, friends, and neighbors?

    - Goal: understand major health concerns [THREATS]

    A. *[Once the group shares out about specific health issues]* → Do any of these health issues impact any particular groups of people?

    - Goal: understand **who** is most impacted by these health concerns, and identify groups with higher needs [PERSONAL EXPERIENCES]

5. What do you need from your community to have a healthy lifestyle?

    - Goal: understand greatest needs, areas and opportunities for improvement [SOLUTIONS]

Appendix E. Community Survey

Welcome to the Calvert Memorial Hospital
Community Feedback Survey

Calvert Memorial Hospital is conducting a Community Health Needs Assessment for Calvert County. This assessment allows Calvert Memorial Hospital to better understand the health status and needs of the community and use the knowledge gained to implement programs that will benefit the community.

We can better understand community needs by gathering voices from the community. This survey allows community members like you to tell us about what you feel are important issues for your community. We estimate that it will take about 20-30 minutes to complete this ~30 question survey.

Thank you very much for your input and your time!

Please Continue to Next Page

I. First, tell us a little bit about yourself...

1. Where do you currently live?

ZIP/Postal Code

2. What is your profession?

- ☐ Agriculture, forestry, fishing and hunting, and mining
- ☐ Construction
- ☐ Manufacturing
- ☐ Wholesale trade
- ☐ Healthcare
- ☐ Retail trade
- ☐ Transportation and warehousing, and utilities
- ☐ Information
- ☐ Finance and insurance, and real estate and rental and leasing
- ☐ Professional, scientific, and management, and administrative and waste management services
- ☐ Educational services, and social assistance
- ☐ Arts, entertainment, and recreation
- ☐ Hospitality and accommodations
- ☐ Food services
- ☐ Other services, except public administration
- ☐ Public administration
- ☐ Homemaker
- ☐ Currently unemployed
- ☐ Other *(please specify):*

_____

3. What is your age?

- ☐ 17 or younger
- ☐ 18-24
- ☐ 25-34
- ☐ 35-44
- ☐ 45-54
- ☐ 55-64
- ☐ 65-74
- ☐ 75+

4. **What is your gender identity?**

- ☐ Male
- ☐ Female
- ☐ Other *(please specify):*

5. **Please specify your race?** *(Select all that apply)*

- ☐ American Indian or Alaska Native
- ☐ Asian
- ☐ Black or African American
- ☐ Native Hawaiian or Other Pacific Islander
- ☐ Hispanic or Latino
- ☐ White
- ☐ Multi-racial
- ☐ Other *(please specify):*

_____

6. **Do you identify as Hispanic or Latino ethnicity?**

- ☐ Yes
- ☐ No

7. **Select the highest level of education you have achieved.**

- ☐ Less than High School
- ☐ High School Diploma or GED
- ☐ Some College
- ☐ Technical Certificate
- ☐ Associate's Degree
- ☐ Bachelor's Degree
- ☐ Professional or Advanced Degree

8. **Write the number of individuals in your household (including yourself).**

9. Are there any children (persons younger than age 18) in your household?

☐ No

☐ Yes *(if yes, please specify the number of children in your household):*

_____

10. Select your total household income level.

☐ Less than $25,000

☐ $25,000-$49,999

☐ $50,000-$74,999

☐ $75,000 or more

11. Is English the primary language spoken in your home?

☐ Yes

☐ No (*please specify the primary language spoken in your home.):*

_____

(please continue to next page)

II. Now we'd like to hear more about your health…

12. Do you have a disability?

- ☐ No
- ☐ Yes *(please specify):*

_____

13. How would you rank your personal health? *(Select one)*

- ☐ Excellent
- ☐ Very good
- ☐ Good
- ☐ Fair
- ☐ Poor
- ☐ Don't know/not sure

14. Do you have any kind of health coverage?

- ☐ No
- ☐ Yes (medical only)
- ☐ Yes (medical and dental)

15. Where do you go for routine healthcare? *(Select all that apply)*

- ☐ Physician's office
- ☐ Health Department
- ☐ Emergency room
- ☐ Urgent care clinic
- ☐ Clinic in a grocery or drug store
- ☐ I do not receive routine healthcare
- ☐ Other *(please specify):*

_____

16. Within the past year, have you been admitted to the hospital for care?

- ☐ No
- ☐ Yes *(please specify how many/number of times):*

_____

17. Within the past year, what type of health services did you receive? *(Select all that apply)*

- ☐ Bone/Orthopedic Care
- ☐ Cancer/Oncology Care
- ☐ Dental Care
- ☐ Ear, Nose, and Throat Care
- ☐ Eye Care
- ☐ Emergency Room Service
- ☐ Family Planning
- ☐ Foot/Ankle/Podiatry Care
- ☐ General Surgery
- ☐ Hearing Services
- ☐ Heart/Cardiac Care
- ☐ Immunizations
- ☐ Lab Work
- ☐ Mental Health Services
- ☐ Obstetrics/Gynecology/Women's Health
- ☐ Primary Care Provider
- ☐ Radiology Tests (X-Ray, CT Scan, MRI)
- ☐ Urology Care
- ☐ Other *(please specify):*

  _____
- ☐ None

18. In general, how satisfied are you with the health care you have received in the past year? *(Select one)*

- ☐ Very satisfied
- ☐ Somewhat satisfied
- ☐ Not at all satisfied
- ☐ Not applicable (did not receive health care services in the past year)

19. Was there a time in the past 12 months when you did not see a doctor because of cost?

- ☐ No
- ☐ Yes

20. Was there a time in the past 12 months that you were unable to take your medications as a prescribed because of cost?

- ☐ No
- ☐ Yes

21. Please select the top health challenge(s) you face. *(Select up to 3)*

- ☐ Alcohol Overuse
- ☐ Allergies
- ☐ Cancer
- ☐ Diabetes
- ☐ Drug Addiction
- ☐ High Blood Pressure
- ☐ Heart Disease
- ☐ Joint Pain or Back Pain
- ☐ Mental Health Issues
- ☐ Overweight/Obesity
- ☐ Respiratory/Lung Disease (asthma, COPD, etc.)
- ☐ Stroke
- ☐ Smoking Cessation
- ☐ Other *(please specify):*

_____

- ☐ I do not have any health challenges

(please continue to next page)

III. Next, we'd like to hear your thoughts and opinions about the community's health. Please answer the following questions with your community in mind.

22. How would you rate the health of your community? *(Select one)*

- ☐ Excellent
- ☐ Very good
- ☐ Good
- ☐ Fair
- ☐ Poor
- ☐ Don't know/not sure

23. Please select and rank the <u>population(s)</u> below who is(are) most negatively affected by poor health outcomes in your community.

Select Five *[x]*	Population	Rank those Five *(1 is most negatively affected)*
	Children	
	Teen and Adolescents	
	Low Income	
	Lesbian, Gay, Bisexual, and Transgender	
	Maternal, Fetal, and Infant	
	Men	
	Older Adults	
	Persons with Disabilities	
	Racial or Ethnic Populations	
	Refugees	
	Women	
	Other *(please specify):* _____	

24. Social determinants are the conditions, in which people are born, grow, work, live, and age, and the wider set of forces and systems shaping the conditions of daily life. Please select and rank the most critical <u>social determinant(s)</u> of health in your community.

Select Five *[x]*	Social Determinant	Rank those Five *(1 having greatest impact on the community)*
	Access to Health Services	
	Diet, Food, and Nutrition	
	Economy	
	Education	
	Employment (jobs, etc.)	
	Environmental Quality (exposure to secondhand smoke, etc.)	
	Housing	
	Language Barriers I Cultural Diversity	
	Physical Activity and Exercise	

	Transportation	
	Social Environment (faith, friendship, family, etc.)	
	Other *(please specify):* _____	

25. Please select and rank the most important <u>health issue(s)</u> in your community from this list of health topics.

Select Five *[x]*	Health Issue	Rank those Five *(1 being the most important)*
	Cancer	
	Clinical Preventive Services	
	Diabetes	
	Heart Disease & Stroke	
	Immunization & Infectious Diseases	
	Injury, Violence and Safety	
	Mental Health & Mental Disorders	
	Obesity/Overweight	
	Oral Health	
	Reproductive Health (family planning)	
	Respiratory/Lung Diseases (asthma, COPD, etc.)	
	Sexual Health (HIV, STD/I, etc.)	
	Substance Abuse (alcohol, tobacco, e-cigarettes, drugs, etc.)	
	Other *(please specify):* _____	

26. Please tell us whether you: "Strongly Disagree", "Disagree", "Feel Neutral", "Agree", or "Strongly Agree" with the following statements about your community.

Statement	Strongly Disagree	Disagree	Feel Neutral	Agree	Strongly Agree
Public transportation and other transit opportunities make accessing health services manageable.					
I, or someone I know, have delayed seeking health care due to cost in the last 12 months.					
My community is knowledgeable of the health resources available to them.					
I, or someone I know, have delayed seeking health care due to wait times or limited appointment opportunity.					

My community supports a healthy lifestyle.					
I, or someone I know, have had difficulty understanding a health professional because of a language barrier in the last 12 months.					
My community has a lack of resources related to health improvement.					
I and members of my community feel we have a voice in our community					
I consider my community to be safe.					

27. In your opinion, which racial or ethnic group is most disproportionately affected by health problems in your community? *(Select one)*

- ☐ White
- ☐ Black or African American
- ☐ American Indian or Alaska Native
- ☐ Asian
- ☐ Native Hawaiian and Other Pacific Islander
- ☐ Hispanic or Latino
- ☐ Multi-racial
- ☐ Other *(please specify):* _____

28. In your opinion, what are topics that your community needs more information on? (*Select all that apply)*

- ☐ Alcohol and substance abuse
- ☐ Alternative and complementary care
- ☐ Chronic disease management
- ☐ Emotional wellness
- ☐ Family planning
- ☐ Fitness and physical activity
- ☐ Mental health
- ☐ Nutrition and recipes
- ☐ Pain management
- ☐ Pregnancy and new baby
- ☐ Preventative health screenings
- ☐ Senior health
- ☐ Smoking cessation
- ☐ Stress reduction
- ☐ Transportation
- ☐ Other *(please specify):* _____

29. Where do you get most of your health-related resource information? *(Select all that apply)*

- ☐ 211 lines
- ☐ Books/Magazines
- ☐ Faith/Community
- ☐ Friends and Family
- ☐ Grocery Stores
- ☐ Health and Fitness Facilities
- ☐ Health Department
- ☐ Hospital
- ☐ Internet
- ☐ Pharmacist
- ☐ Primary Care Provider
- ☐ School
- ☐ Social Media (Facebook, Twitter, etc.)
- ☐ Television
- ☐ Other *(please specify):*

_____

30. Is it hard for you to obtain good information about your health?

- ☐ No
- ☐ Yes

31. Is there something in your neighborhood/community that makes you healthier?

32. (Optional) Is there anything else you would like us to know about your community? Please feel free to tell us below.

Thank you for your participation!

The final Community Health Needs Assessment report will be completed in November 2017.

Appendix F. Community Resources

- Community Resources Department
- Calvert County Health Department's onsite pharmacy
- Calvert County Office on Aging
- CalvertHealth and CAASA have partnered to address sports-related substance use in schools
- CalvertHealth Ask-the-Expert program
- CalvertHealth mobile health unit
- CCOOA Health Mentor
- Churches
- Dental Clinic
- Educational, nutritional, physical fitness, and recreational activities at the three county senior centers
- Free vaccination from CCHD
- Friends of Calvert County Seniors, Inc. (FCCS) – low-income dental program for older adults
- Geriatric Nurse Counselor
- Individual practices
- Lactation support and diabetes education at the Hospital
- Licensed Social Workers
- Lifestyles and Smart Ride are programs that can help with transportation for a fee.
- Living Well with Diabetes program
- MAP Coordinators and Social Workers at Aging Services
- Medical Arts buildings
- Outreach programs localized within other community resources, i.e. the library and farmers' markets
- Parish nursing programs – effectively building bridges to underserved and at-risk populations.
- Parks, trails, and beaches
- Partners In Care – assisted transportation through volunteers to drive individuals to doctor appointments, etc.
- Partnership with County Health Department for counseling
- Recreation center, sports & activity programs, and camps for kids
- Screenings at churches
- Social workers at select Calvert County Public Schools
- Social Workers through Project Phoenix at CalvertHealth
- Substance abuse services available to students and opiate addicted mothers
- The Cares Team – 4 free clinics a week and averaging about 15 home visits per month

Appendix G. Prioritization Toolkit

Prioritization Matrix

Calvert Health
Health Needs Prioritization
October 4, 2017
This packet will help you assess each of the pressing health needs identified by HCI's data analysis, and how each of those health needs relate to the criteria set forth by Calvert Health for prioritizing health needs in Calvert County. For each health need you will score how well you believe the health need meets the criteria. After you have completed the ranking, please submit your results using the Poll Everywhere software. The software will collate your results with those of other participants, and will instantaneously show the group's collective ranking of the most pressing health needs in your service area. There will be opportunities to work individually and in groups.
INSTRUCTIONS

On the following page, score each health need for how well it meets each criteria:

1=does not meet criteria through 3=meets criteria

1. Add total scores for each health need and write total in "Total Health Topic Score" column.
2. Some criteria may be weighted (look for directions to multiply score in each column)
3. Write the total scores for each topic in the table below.
4. Assign ranking to health needs based on total score, with highest score receiving a ranking of 1. If you have tie scores for health topics, break the tie by assigning rank as you see best fit.

Health Topics *(listed in no particular order)*	Rank
Exercise, Nutrition, & Weight ***(includes obesity)***	
Cancer	
Heart Disease & Stroke	
Mental Health & Mental Disorders	
Access to Health Services	
Substance Abuse ***(includes tobacco and illicit drug use)***	
Older Adults & Aging	
Children's Health	
Transportation	
[optional fill in]	

Health Need	Alignment with CMH's mission, strengths, priorities Weighted (x 2)	Alignment with Maryland SHIP objectives Weighted (x3)	Existing Programs and Resources at CMH	Opportunities for Partnership Weighted (x2)	Solution Could Impact Multiple Problems	TOTAL
Exercise, Nutrition & Weight ***(includes obesity)***						
Cancer						
Heart Disease & Stroke						
Mental Health & Mental Disorders						
Access to Health Services						
Substance Abuse ***(includes tobacco and other illicit substances)***						
Older Adults & Aging						
Children's Health						
Transportation						

Prioritization Notesheet

	Health Topic	Key Themes from Secondary Data *(*Indicator shows a significant race/ethnic disparity)*	Key Themes from Community Input
	**Exercise, Nutrition & Weight** *(includes obesity)*	• **77.2%** of Adults are Overweight or Obese (Maryland: 65%; U.S.: 65.3%) • **61%** Food Insecure Children Likely Ineligible for Assistance (Maryland: 41%; U.S.: 34.1%) • **33.6%** of People with Low Access to a Grocery Store	• Lack of knowledge about healthy lifestyles, especially eating, leads to obesity, as well as diabetes • Availability of low cost and accessible healthy recreation for all ages is an underlying issue
	**Cancer**	• **143.3** breast cancer cases per 100,000 females (Maryland: 130.2; U.S.: 123.3) • **28.1** age-adjusted deaths per 100,000 males (Maryland: 21.3; U.S.: 20.7) • **15.1** oral cavity and pharynx cancer cases per 100,000 population (Maryland: 10.7; U.S.: 11.3)	• High incidence of cancer, with added financial challenges for cancer patients • Social norms of the county include smoking and tobacco use
	**Heart Disease & Stroke**	• **41.2%** High Cholesterol Prevalence (Maryland: 35.9%; U.S.: 36.3%) • **29.8%** Ischemic Heart Disease: Medicare Population (Maryland: 26%; U.S.: 26.5%) • **261.7** age-adjusted ER visits due to hypertension per 100,000 population (Maryland: 252.2)	• Growth of aging population with chronic health issues
	**Mental Health & Mental Disorders**	• **16.5** age-adjusted deaths due to suicide per 100,000 population (Maryland: 9.2; U.S.: 12.7) • **76.7** age-adjusted hospitalizations due to adolescent suicide per 10,000 population aged 12-17 (Maryland: 23.3) • **35.3** age-adjusted hospitalizations due to pediatric mental health per 10,000 population under 18 years of Children with Health Insurance (Maryland: 14.8)	• Need community inpatient and outpatient care for mental health and substance abuse
	**Access to Health Services**	• **47.3%** of Adolescents who have had a Routine Checkup: Medicaid Population (Maryland: 54.7%) • **56.4%** of Children who Visited a Dentist (Maryland: 63.3%)	• Difficult to access services due to time constraints, lack of transportation, and cost • Need more accessibility of providers, especially specialists, and primary care providers for low-income and uninsured

		• **95.2%** of Children with Health Insurance (Maryland: 96.1%; U.S.: 95.2%) • **Adults Unable to Afford to See a Doctor*** – highest for Black/African American & Hispanic populations	
	**Substance Abuse** *(includes alcohol, tobacco, and other illicit drug use)*	• **22.1** age-adjusted deaths due to drug use per 100,000 population (Maryland: 15.2; U.S.: 14.6) • **39.6%** Alcohol-Impaired Driving Deaths (U.S.: 30%) • **20.7%** of Adolescents who Use Tobacco (Maryland: 16.4%)	• Need to target young parents for not smoking and drinking • Increasing number of pregnant women with substance abuse issues • The over-prescription of opioid pain medications is a main culprit of increased substance abuse
	**Older Adults & Aging**	• **33.4%** Rheumatoid Arthritis or Osteoarthritis: Medicare Population (Maryland: 30%; U.S.: 30%) • **29.9%** Diabetes: Medicare Population (Maryland: 29.1%; U.S.: 26.5%) • **29.8%** Ischemic Heart Disease: Medicare Population (Maryland: 26%; U.S.: 26.5%) • **People 65+ Living Below Poverty Level*** - highest for Black, American Indian, multi-race, and Hispanic populations	• Isolation of the aging population is exacerbating health issues • Growth of the aging population with multiple health issues, particularly chronic health conditions, dementia, and behavioral health issues • Need for a fall prevention program in the community
	**Children's Health**	• **61%** Food Insecure Children Likely Ineligible for Assistance (Maryland: 41%; U.S.: 34.1%) • **56.4%** of Children who Visited a Dentist (Maryland: 63.3%) • **35.3** age-adjusted hospitalizations due to pediatric mental health (Maryland: 14.8) • **Children with Asthma*** - highest for Black and Hispanic/Latino children	• Boredom, lack of supervision, and lack of direction can lead to unhealthy behaviors in youth • Increasing number of children with severe behavioral health issues at young ages
	**Transportation**	• **40.1 minutes** is the Mean Travel Time to Work (Maryland: 32.3; U.S.: 25.9) • **60.2%** of Solo Drivers with a Long Commute (U.S.: 34%) • **81.3%** of Workers who Drive Alone to Work (Maryland: 73.7%; U.S.: 76.4%) • **Workers Commuting by Public Transportation*** - highest for White, American Indian, & Hispanic populations	• Health care and services accessibility is an issue as a result of transportation-related barriers • Seniors need assisted transportation so that they are able to attend appointments • Public transportation is limited for those living in communities farthest from town centers