



2017 Community Health Needs Assessment FY18-FY20 Implementation Plan

In accordance with federal law and regulation, and in alignment with CalvertHealth Medical Center's mission and values, set forth below is our 2017 Community Health Needs Assessment Implementation Plan (the "CHNA Implementation Plan").

CalvertHealth Medical Center has partnered with numerous community leaders through the Calvert County Community Health Improvement Roundtable (the "Roundtable") to jointly develop the multi-faceted Calvert County Community Health Needs Assessment (the "CHNA"). The Board of CalvertHealth Medical Center has formally adopted this CHNA as its own. The specific members of the Roundtable and their affiliations are listed in Exhibit A along with a list of subcommittees.

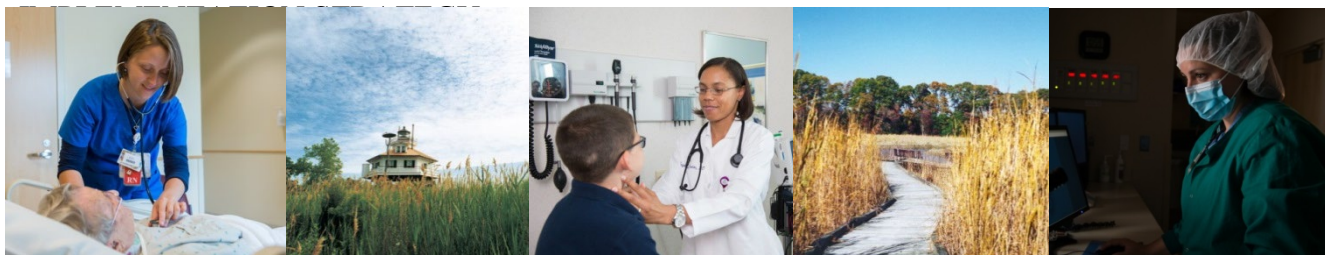
In developing this CHNA Implementation Plan, CalvertHealth Medical Center has followed both the needs identified in the CHNA and the Maryland State Health Improvement Plan ("SHIP") objectives. Summaries of the CHNA and SHIP objectives are set forth below and are followed by the details of this CHNA Implementation Plan. Copies of the CHNA and SHIP objectives are attached for your reference as Exhibits B. Any comments or questions should be addressed to Margaret Fowler, Director of Community Wellness at mfowler@cmhlink.org or 410-414-4573.

MISSION

CalvertHealth's trusted team provides Southern Maryland residents with safe, high quality health care and promotes wellness for a healthy community.

VISION

We provide exceptional care and make a difference in every life we touch.



SIGNIFICANT COMMUNITY HEALTH NEEDS IDENTIFIED

Primary and secondary data were evaluated to identify the significant community health needs in Calvert County. These needs span the following topic areas and are often inter-related:

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

VULNERABLE POPULATION

According to secondary data, the socioeconomic need is strongest around the areas of Prince Frederick, Lusby and North Beach and for Black or African American residents.

PRIORITIZATION PROCESS

CalvertHealth Medical Center developed a decision-making team to prioritize the significant community health needs of Calvert County considering several criteria: the alignment with the hospital's mission, priorities and strengths; alignment with Maryland SHIP objectives; existing programs and resources at the hospital; opportunities for partnership; and the solution impacting multiple problems. The following four health areas were selected as the top priorities:

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

RATIONALE:

In order to maximize the positive impact on community health, CalvertHealth Medical Center has chosen to concentrate its efforts into four areas of high-need and would provide the greatest impact to the community. The committee felt CalvertHealth Medical Center and its partners should focus on the four chosen priorities 1) Exercise, Nutrition & Weight (including Obesity), 2) Cancer 3) Heart Disease & Stroke and 4) Mental Health & Mental Disorders.

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 widely discussed as a need which should be considered as a priority.

Access to Health Services received a data score of 1.41, which was 12th highest among all topic areas. Calvert County has lower percentages of 1) Adolescents who have had a routine checkup in the past year, 2) Children who have visited a dentist, and 3) 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.

Mental health issues are becoming more prevalent and increasingly interfering with classroom success. There is often an inability to get an appointment from the healthcare providers or facilities in a timely and helpful manner

Children's Health

Secondary Data

From the secondary data scoring results, Children's Health was the 11th most pressing health need in Calvert County. Top related indicators include: 1) Food insecure children likely ineligible for assistance, 2) Children who visited a dentist, and 3) Age-adjusted hospitalizations due to pediatric mental health.

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.

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: 1) Age-Adjusted Deaths due to Drug Use, 2) Alcohol-Impaired Driving Deaths, and 3) Adolescents Who Use Tobacco.

The other significant community needs identified in the needs assessment will be addressed by CalvertHealth Medical Center through various continual efforts and initiatives that will not be subject to the same standard of monitoring and evaluation dedicated to the four prioritized needs.

PLAN

The following section is a description of the CalvertHealth Medical Center's Implementation Strategy for 2017-2019 and 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. It will include the Medical Center's planned actions, anticipated impact and the plan to evaluate these actions for the four areas of prioritized need: 1) Exercise, Nutrition and Weight (including obesity), 2) Cancer, 3) Heart Disease and Stroke and 4) Mental Health & Mental Disorders.

Priority Area: 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%	65.5%	65.3%		-	
2.08	Food Insecure Children Ineligible for Assistance (2015)	61%	41%	34.1%		-	
1.95	People with Low Access to a Grocery Store	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.

CHNA Implementation Plan

PRIORITY AREA #1: Exercise, Nutrition and Weight (including Obesity)

Identified Need	Hospital Initiative	Primary Objective of the Initiative	Initiative Time Period	Key Partners	Long-term Target Outcomes (2020)	Evaluation Date
Adult Obesity	Develop and Deploy Eat Right education and outreach plan to increase awareness of importance of healthy eat to reduce onset of diseases	Offer Healthy Lifestyle Programs through low coast and free programs focus on Nutrition	Ongoing	World Gym, Calvert County Health Dept., Parks and Rec, Office On Aging., PCPs	Reduce adult obesity rate by 5% Reduce prevalence of high cholesterol to 35.9% Reduce prevalence of high blood pressure to 26.9%	Annually – June 2019
Lack of Physical Activity	Develop and Deploy Move More education and outreach plans to increase awareness of importance of physical activity Provide Functionally Fit Program at three Senior Center located in underserved areas Walk for Wellness community-wide campaign	Offer Healthy Lifestyle Programs through low coast and free programs focus Fitness Focus on Elderly and Aging population to reduce falls, manage chronic disease and improve strength. Promote walking at work, town centers and schools by developing walking routes.	Ongoing FY18-FY19 FY19	World Gym, Calvert County Health Dept., Parks and Rec, Office On Aging. PCPs	Increase % of adult participants Reduce prevalence of high cholesterol to 35.9% Reduce prevalence of high blood pressure to 26.9%	Annually – June 2019
Adults Overweight	Develop and Deploy Eat Right education and outreach plan to increase awareness of importance of healthy eat to maintain healthy weight.	Offer Healthy Lifestyle Programs through low cost and free programs focus on Weight Loss	Ongoing	World Gym Calvert County Health Dept., Parks and Rec, Office On Aging., PCPs	Increase % of adults at healthy weight by 3.5% Reduce prevalence of high cholesterol to 35.9% Reduce prevalence of high blood pressure to 26.9%	Annually – June 2019
Increase Access	Utilize Mobile Health Center to provide free biometric screenings and lifestyle education. Offer KeepWell@Work Health Risk Assessment, Biometric Diabetes Prevention Programs	Identify health risks, provide basic education and navigate to community resources and programs within geographic area. Improve health of workforce and create a culture of wellness within southern Maryland businesses Reduce the onset of Diabetes	Ongoing Ongoing FY17-FY19	Calvert County Health Department, Office on Aging DHMH MD Healthiest Business, World Gym Calvert County Health Dept., Office on Aging, World Gym, PCPs	Increase % of adults at healthy weight by 3.5% Reduce prevalence of high cholesterol to 35.9% Reduce prevalence of high blood pressure to 26.9%	Annually – June 2019




















Priority Area : 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

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/1000 males	28.1	21.3	20.7 HP2020 21.8			
2.50	Oral Cavity and Pharynx Cancer Incidence Rate (2009-2013) Cases/100,000 populations	15.1	10.7	11.3			
2.40	Age Adjusted Death Rate due to Breast Cancer (2009-2013) Deaths/1000,000 females	25.1	23	12.5 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** 72	-		-
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 falls below 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 closely 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.

PRIORITY AREA #2 CANCER

Identified Need	Hospital Initiatives	Primary Objective of Initiative	Initiative Time Period	Key Partners	Long-Term Target Outcomes (2020)	Evaluation
Skin Cancer	Develop and Deploy an education and outreach plan to increase awareness of the importance of early detection Provide screenings for skin Cancer.	Reduce incidence rate of Melanoma	Ongoing	Calvert Dermatology	Reduce death rates due to cancer to 147.4	Annually track participation rates in screenings and navigate positive finding patients
Breast Cancer	Develop partnership with Health Ministry Team Network to increase number of mammography screenings Provide screenings for Breast Cancer in collaboration with Breast Center. Provide Breast Exam on Mobile Health Center	Early detection of Breast Cancer to improve outcome	Ongoing		Reduce death rate due to Breast Cancer to 20.7.	Annually track participation rates in screenings and navigate positive finding patients
Lung Cancer	Provide Lung Cancer Screening Program in collaboration with Anne Arundel Medical Center	Early detection of lung cancer to improve outcome	FY17-FY19	Ann Arundel Medical Center, Calvert County Health Dept	Reduce death rate due Lung Cancer 45.5	Annually
Cancer Death Rate	Develop and Deploy Oncology Service Line website .	Provide comprehensive coordinated cancer care through navigators and services through our Breast Cancer Center, Lung Cancer Screening Clinic and Urology Oncology	FY17-FY19			Annually Track # of clinical breast exams and mammogram to address disparities.
Oral Cancer	Provide Oral Cancer Screening to dental patients over 40 or who smoke	Early detection of oral cancer finding and referral	Ongoing	Calvert Community Dental Care	Reduce death rate due to Cancer to 147.4	Annually track participation rates in screenings and navigate positive finding patients
Prostate Cancer	Develop and Deploy an education campaign for early detection Work with Health Ministry Team Network churches to promote prostate health and screening Prostate Cancer Screenings	Increase awareness of health disparities within minority population.	FY19		Reduce disparity of death rate due to Prostate to 21	Increase number of persons screened annually

Priority Area : 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 Improvement Process (SHIP) targets for 2017, these targets are aligned with national targets set by Healthy People 2020

Secondary data indicates 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.

PRIORITY AREA #3 Heart Disease & Stroke

Identified Need	Hospital Initiative	Primary Objective of the Initiative	Initiative Time Period	Key Partners	Long-term Outcomes (2020)	Evaluation Date
Smoking	<p>In collaboration with Health Department advertise Freedom From Smoking programs</p> <p>Provide Fax-to-Assist to hospital employees</p> <p>Provide smoking cessation resources to all hospital inpatients upon admission.</p> <p>Promote MD QUIT NOW through Health Ministry Team Network</p>	Provide smoking cessation information and access to cessation products and services.	Ongoing	Calvert County Health Dept.	Reduce tobacco use by adults to 15.5%	Track quarterly enrollment in cessation programs by type.
Tobacco use	Conduct Tobacco Roadshow (TRS) presentation for public and private middle schools, church youth groups, summer camps and Girl and Boy Scouts	Conduct TRS at all 6 middle school with Calvert County and 1 private school.	Ongoing	Calvert County Public Schools	Reduce % of youth who use any kinds of tobacco product to 15.2%	Evaluate Annually number of schools and community members participate in program
Access	Referral of high risk in-patients prior to discharge to transition team	Provide chronic disease management service through Calvert CARES	Ongoing		Reduce ER Visits Due to Hypertension to 234	Annually
High Cholesterol Hypertension Ischemic	<p>Community Screening on Mobile Health Center and Health Ministry Team Network Churches:</p> <p>Free and low cost cholesterol screenings</p> <p>Free and low cost Blood Pressure Screenings</p> <p>Free and low cost vascular screening</p> <p>Congestive Heart Failure classes and educational materials.</p> <p>provides community education on stroke prevention and detection, as well as support groups for patients who have suffered from stroke</p>	Provide access to screenings and education services to improve heart health.	Ongoing		<p>Reduce prevalence of high cholesterol to 35.9%</p> <p>Reduce prevalence of high blood pressure to 26.9%</p> <p>Reduce death rates due to heart disease to 166.3</p> <p>Reduce ER visit due to hypertension to 234</p> <p>Reduce Ischemic Heart Disease: Medicare Population to 26%</p>	Annually

Priority Area : Mental Health & Mental Disorder




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 13th 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).

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 SHI 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	35.3	14.8	-	-	-	-
1.60	Self-Reported Good Mental/Health (2015) percent	70%	76.2%		-	-	

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

PRIORITY AREA #4 Mental Health & Mental Disorders

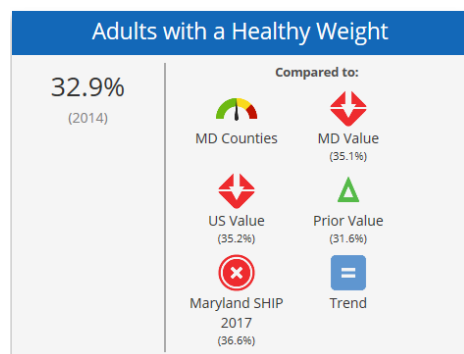
Identified Need Current Status	Hospital Initiative	Primary Objective of the Initiative	Initiative Time Period	Key Partners	Long-Term Target Outcomes (2020)	Evaluation
Drug Use	Opioid Stewardship Committee Collaborate with community Narcan Training sessions	Strengthen safety practices and policies for opioid prescribing within Calvert Health Reduce opioid utilization Community education about dangers of Opioids	FY17-FY19	Calvert County Health Dept.	Reduce number of opioid prescribe in Emergency Room Reduce use of Dilaudid in Emergency Room Provide alternative pain management treatments	Track quarterly prescribing practices
Tobacco Use	Conduct Tobacco Roadshow (TRS) presentation for public and private middle schools, church youth groups, summer camps and Girl and Boy Scouts	Increase awareness of the dangers of smoking, using tobacco and juuling.	Ongoing	Calvert County Public Schools, Calvert County Health Department	Reduce % of youth who use any kinds of tobacco product to 15.2%	Evaluate Annually number of schools and community members participate in program Invite all middle schools to participate in TRS program Conduct TRS at all 6 middle school with Calvert County and 1 private school.
Adolescent Suicide	Expand in-patient adolescent treatment program Expand out-patient adolescent day treatment program	Separate adult and adolescent for more age appropriate treatment	FY19		Reduce risk factors of depression, alcohol/substance abuse, mental health and stressful life event.	Annually
Suicide	Expand capacity of adolescent and adult treatment program. Collaboration with community resources to provide care coordination Collaboration with promotion of behavior health resources and services	Increase access to mental health services	FY19	Calvert County Health Dept., Pathways, Barstow Acres, Southern MD Community Network, Center for Children, CAASA,	Reduce number of suicides to 9	Annually
Pediatric Mental Health	Expand in-patient adolescent treatment program Collaborate with promotion of Mental Health First Aid training	Improve care coordination and collaboration with Calvert County Public Schools Increase awareness of mental health issue through community trainings	FY19	Calvert County Public Schools, Calvert County Health Dept.	Reduce hospitalization due to mental health	Annually

Summary of SHIP

The data available through the Department of Health and Mental Hygiene at the county level will allow Calvert County to benchmark improvements, collaborate with the state in meeting the 2017 targets outlined in the SHIP, and share program ideas and experience with other counties. The SHIP will provide additional access to data and tools to enhance Calvert County's long-term efforts to improve the health and well-being of the citizens of Calvert County.

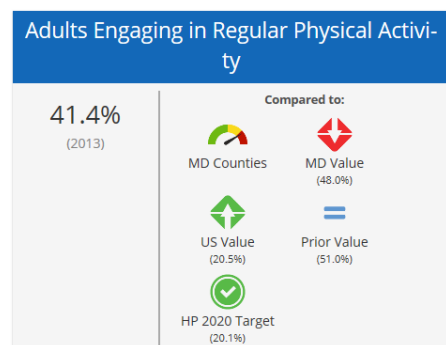
Summary of interaction between CHNA and SHIP Objectives

Health Needs Assessment Priority Area #1 Exercise, Nutrition and Weight (including Obesity)



This indicator shows the percentage of adults with a BMI of less than 25 kg/m². The BMI is calculated by taking a person's weight and dividing it by their height squared in metric units ($BMI = \text{Weight (Kg)} / [\text{Height (m)}^2]$).

The percentage of adults with a healthy weight is an indicator of the overall health and lifestyle of a community. Maintaining a healthy weight reduces the risk of many diseases and health conditions including heart disease, Type 2 diabetes, cancer, hypertension, stroke, liver and gallbladder disease, respiratory problems, and osteoarthritis. In addition, adults with a healthy weight may possess more energy and incur significantly less economic costs due to healthcare spending.

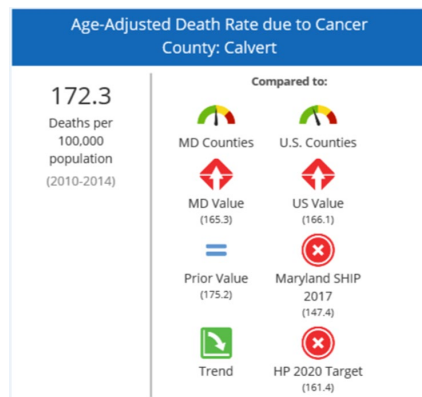


This indicator shows the percentage of adults who participate in moderate or high intensity muscle-strengthening activities as well as at least 150 minutes of moderate physical activity, 75 minutes of vigorous physical activity, or an equivalent combination of moderate and vigorous aerobic activity per week.

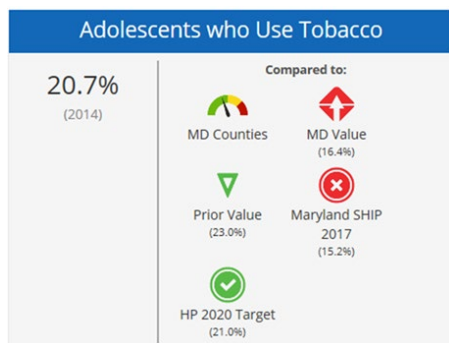
Active adults reduce their risk of many serious health conditions including obesity, heart disease, diabetes, stroke, colon cancer, and high blood pressure. Physical activity also helps maintain healthy bones, muscles, joints, and weight control. Furthermore, physical activity reduces the symptoms of anxiety and depression, improves mood and feelings of well-being, and promotes healthy sleep patterns.

The American College of Sports Medicine (ACSM) recommends that active adults perform physical activity three to five times each week for 20 to 60 minutes at a time to improve cardiovascular fitness and body composition.

Health Needs Assessment Priority Area #2: Cancer

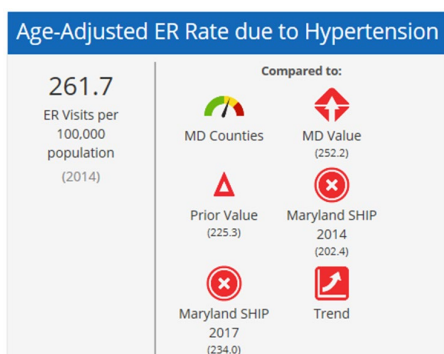


This indicator shows the age-adjusted mortality rate from cancer (per 100,000 population). Maryland's age adjusted cancer mortality rate is higher than the US cancer mortality rate. Cancer impacts people across all population groups, however wide racial disparities exist



This indicator shows the percentage of adolescents who reported using any kind of tobacco product on at least one day during the 30 days prior to the survey. Health behavior patterns formed in adolescence play a crucial role in health throughout life. Those who start smoking young are more likely to have a long-term addiction to nicotine than people who start smoking later in life, putting them at greater risk for smoking-related illness and death. Tobacco use begins and is established primarily during adolescence; preventing adolescent tobacco use is critical to ending the tobacco epidemic in the United States.

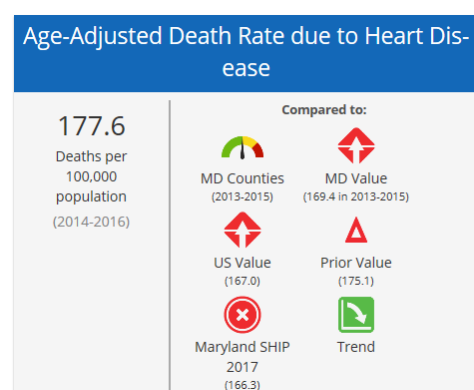
Health Needs Assessment Priority Area #3: Heart Disease & Stroke



This indicator shows the rate of emergency department visits due to hypertension (per 100,000 population). In Maryland, 30% of all deaths were attributed to heart disease and stroke. Heart disease and stroke can be prevented by control of high blood pressure.

Hypertension, also known as high blood pressure, is a significant increase in blood pressure in the arteries. Many people with hypertension may not experience symptoms, even if their blood pressure is dangerously high. However, a few might experience severe headaches, dizziness, irregular heartbeats, and other symptoms.

Hypertension is the leading cause of stroke and a major cause of heart attacks, and if left untreated can lead to damage of the blood vessels and kidneys, vision loss, and angina. Many factors affect blood pressure, including salt intake, kidney health, and hormone levels. The risk for high blood pressure increases with obesity, diabetes, high salt intake, high stress levels, high alcohol intake, and tobacco use. According to the CDC, nearly 1 in 3 adults have hypertension with only half of these individuals having their condition under control.



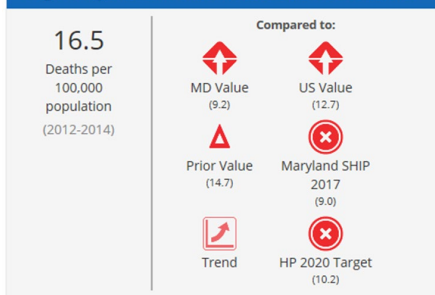
This indicator shows the age-adjusted mortality rate from heart disease (per 100,000 population). Heart disease is the leading cause of death in Maryland accounting for 25% of all deaths. In 2009, over 11,000 people died of heart disease in Maryland.

Heart disease is a term that encompasses a variety of different diseases affecting the heart and is the leading cause of death in the United States, accounting for 25.4% of total deaths. The most common type in the United States is coronary artery disease, which can cause heart attack, angina, heart failure, and arrhythmias. Coronary artery disease occurs when plaque builds up in the arteries that supply blood to the heart and the arteries narrow (atherosclerosis).

There are many modifiable risk factors for atherosclerosis, including tobacco smoking, obesity, sedentary lifestyle, and high levels of low-density lipoprotein in blood serum. Moreover, it is important to note that heart disease is the number one killer of women in the United States.

Health Needs Assessment Priority Area #4: Mental Health & Mental Disorders

Age-Adjusted Death Rate due to Suicide



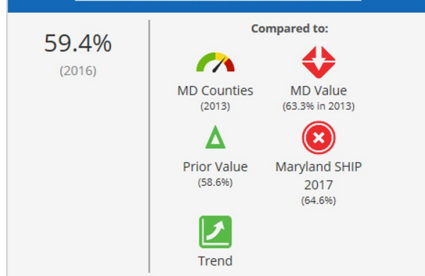
This indicator shows the age-adjusted death rate per 100,000 population due to suicide.

Suicide is a leading cause of death in the United States, presenting a major, preventable public health problem. More than 33,000 people kill themselves each year according to the Centers for Disease Control and Prevention, but suicide deaths only account for part of the problem. An estimated 25 attempted suicides occur per every suicide death, and those who survive suicide may have serious injuries, in addition to having depression and other mental problems. Other repercussions of suicide include the combined medical and lost work costs on the

community, totaling to over \$30 billion for all suicides in a year, and the emotional toll on family and friends. Men are about four times more likely than women to die of suicide, but three times more women than men report attempting suicide. Suicide occurs at a disproportionately higher rate among adults 75 years and older.

Other Identified Health Needs :

Children who Visited a Dentist

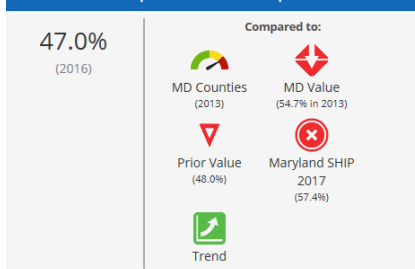


This indicator shows the percentage of children (aged 0-20 years) enrolled in Medicaid (320+ days) who had a dental visit during the past year. Diseases of the teeth and gum tissues can lead to problems with nutrition, growth, school and workplace readiness, and speech. Adoption and use of recommended oral hygiene measures are critical to maintaining overall health.

Oral health has been shown to impact overall health and well-being. In children, this can have serious consequences on development and ability to learn. According to the Centers for Disease Control and Prevention, tooth decay is the most common chronic,

infectious disease in American children. It is recommended that adults and children see a dentist on a regular basis. Professional dental care helps to maintain the overall health of the teeth and mouth, and provides for early detection of pre-cancerous or cancerous lesions

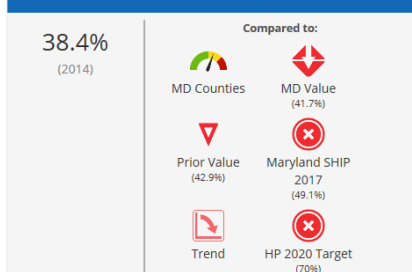
Adolescents who have had a Routine Checkup: Medicaid Population



This indicator shows the percentage of adolescents ages 13 to 20 enrolled in Medicaid for at least 320 days who visited a doctor for a wellness checkup within the last year.

Routine checkups are integral to maintaining good health and preventive care. Regular screenings and exams that take place during routine checkups can help diagnose problems before they begin or early on when chances for treatment and cure are better.

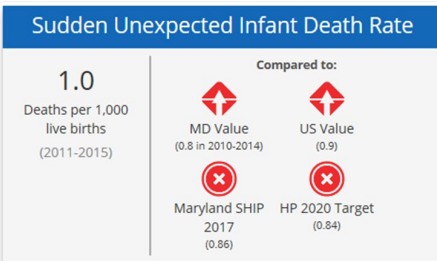
Adults with Influenza Vaccination



This indicator shows the percentage of adults who received an influenza vaccination in the past year.

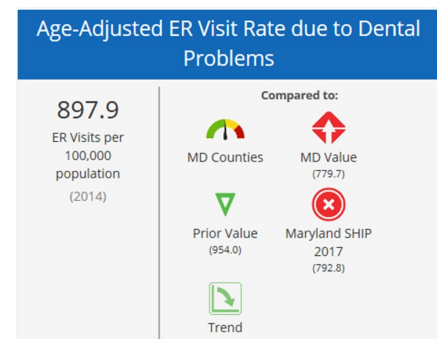
Influenza is a contagious disease caused by the influenza virus. The flu can cause severe illness and life-threatening complications particularly in older people, young children, pregnant women, and people with certain health conditions. It can lead to pneumonia and can be dangerous for people with heart or breathing conditions. The

Centers for Disease Control and Prevention (CDC) estimates that in the United States, 5% to 20% of the population on average gets the flu and more than 200,000 people are hospitalized each year. The seasonal influenza vaccine can prevent serious illness and death. The CDC recommends annual vaccinations to prevent the spread of influenza.



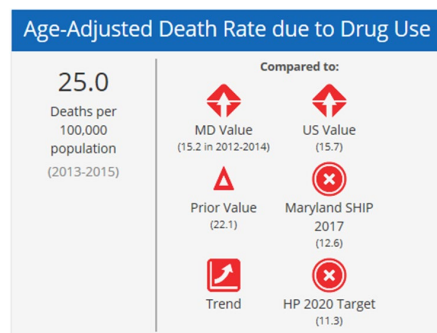
This indicator shows the mortality rate in deaths per 1,000 live births due to Sudden Infant Death Syndrome (SIDS), unknown cause, accidental suffocation and strangulation in bed.

Infant mortality rate continues to be one of the most widely used indicators of the overall health status of a community. According to the Centers for Disease Control and Prevention, there are about 3,500 Sudden Unexpected Infant Deaths (SUID) in the United States each year.



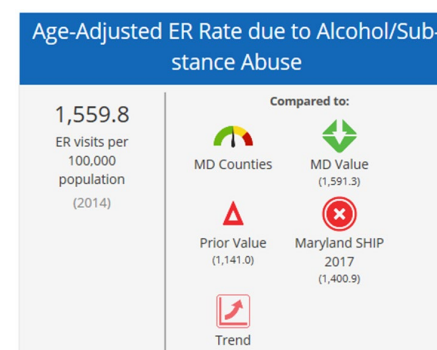
This indicator shows the annual emergency room visit rate due to dental problems per 100,000 population. Dental problems include ICD codes: 521.0-521.9, 522.0-522.9, 523, and 525.0-525.9

Many emergency department visits in the United States are caused by non-urgent or preventable medical conditions, adding strain to crowded emergency rooms and contributing to the rise of health care costs. Dental related visits are a growing contributor to unnecessary emergency room visits. Research has shown that these costs may be lowered by diverting such visits to dental offices where patients may receive continuous and longer-termed care. Saved costs may be used to fund Medicaid premiums and dental offices where cost effective preventative care may be administered.



This indicator shows the age-adjusted death rate per 100,000 population due to drug use.

Drug abuse and its related problems are among society's most pervasive health and social concerns. Causes of drug-induced deaths include dependent and non-dependent use of drugs (both legal and illegal use) and also poisoning from medically prescribed drugs. Addicted persons frequently engage in self-destructive and criminal behavior, which can result in injury or death. In addition, recreational drug-use can lead to unintentional overdose and death.



This indicator shows the average annual age-adjusted emergency room visit rate due to alcohol/substance abuse per 100,000 population.

Substance abuse is a major public health issue that has a strong impact on individuals, families, and communities. The use of illicit drugs, abuse of alcohol, and addiction to pharmaceuticals is linked to serious health conditions such as heart disease, cancer, and liver diseases, exacting over \$600 billion annually in costs related to lost work productivity, healthcare, and crime. Substance abuse also contributes to a wide range of social, physical, mental, and public health problems such as teenage pregnancy, HIV/AIDs, STIs, domestic violence, child abuse, motor vehicle crashes, crime, homicide, and suicide. Because of these far-reaching consequences of substance abuse, treatment programs have been

developed to counter addiction. In particular, a combination of behavioral therapy and treatment medications tailored to an individual's particular abusive pattern and other mental, emotional, or medical issues is suggested to help overcome addiction.

EXHIBIT A
Community Health Improvement Roundtable

Roundtable Membership:

Betsy Bridgett	Calvert County Health Department
TBD	Maryland Dept. of Social Services
TBD	Calvert County United Way
Candice D'Agostino	Calvert Alliance against Substance Abuse
Susan Dohony	CalvertHealth VP Quality Management
Jean Fleming	Calvert Hospice
Margaret Fowler	CalvertHealth Community Wellness
David Gail	Calvert County Health Department
Tammy Halterman	Calvert County Health Department
Kara Harrer	CalvertHealth – Pharmacy Representative
Christine Knode	Calvert County Public Schools
Terry Long	The Arc of Southern Maryland
Doris McDonald	Calvert County Health Department
Jennifer Moreland	Calvert County Community Resources Director
Dr. Larry Polsky	Calvert County Health Department
Ed Sullivan	Calvert County Office on Aging
Kasia Sweeney	CalvertHealth VP Strategic Planning
Rev. Alice Thompson	CalvertHealth Clergy Representative
Karen Twigg	CalvertHealth Integrative Care
TBD	Department of Juvenile Services