



McCready Health
201 Hall Highway, Crisfield, MD 21817

Community Benefits
Fiscal Year 2017

I. GENERAL HOSPITAL DEMOGRAPHICS AND CHARACTERISTICS

Bed Designation: FY17	Inpatient Admissions FY17	Primary Service Area Zip Codes:	All other Maryland Hospitals Sharing Primary Service Area	Percentage of Uninsured Patients by County	Percentage of the hospital's patients who are Medicaid Recipients by County	Percentage of the hospital's patients who are Medicare Beneficiaries
3 licensed Med/Surg beds	286	21817 21838 21871	1. Peninsula Regional Medical Center (<i>Wicomico Co.</i>) 2. Atlantic General Hospital (<i>Worcester Co.</i>)	9.4% of Somerset County residents are uninsured. <i>Source: United States Census Bureau Small Area Health Insurance Estimates 2013 data</i> http://bit.ly/2yprObi	11.5% (inpatients) <i>Source: McCready Health Patient Accounts</i>	72.4% (inpatients) <i>Source: McCready Health Patient Accounts</i>

2. Community Benefit Service Area

Demographic Characteristic	Description	Source
Zip codes included in the organization's CBSA, indicating which include geographic areas where the most vulnerable populations (including but not necessarily limited to medically underserved, low-income, and minority populations) reside.	21817 21838 21871	McCready Health Patient Accounts
Median Household Income within the CBSA	\$35,154 in Somerset County (compared to \$74,551 statewide)	SHIP data
Percentage of households in the CBSA with household income below the federal poverty guidelines	20.3% in Somerset County (compared to 7% statewide)	SHIP data
For the counties within the CBSA, what is the percentage of uninsured for each county?	9.4%	United States Census Bureau Small Area Health Insurance Estimates 2013 data http://bit.ly/2yprObi
Percentage of Medicaid recipients per county within the CBSA	25.85% are eligible for Medicaid	CMS data http://go.cms.gov/2otueit
Life expectancy by county within the CBSA (including by race and ethnicity where data are available)	76.3% overall; 75.8% Black (Hispanic & Non-Hispanic); 76.0 White (Hispanic & Non-Hispanic)	SHIP data
Mortality rates by county within the CBSA	The mortality rate for females in Somerset	Healthdata.org http://bit.ly/2IJr22H

(including by race and ethnicity where data are available)	County is 777.1 per 100,000 and for men in Somerset County, 1069.0 per 100,000.	
Access to healthy food, transportation and education, housing quality and exposure to environmental factors that negatively affect health status by county within the CBSA (to the extent information is available from local or county jurisdictions such as the local health officer, local county officials, or other resources)	<p>Access to healthy food: 20% of the population of Somerset County did not have access to a reliable source of food in 2014. For the 2003-2009 measurement period, 74.3% of county residents age 18+ reported eating fewer than five servings of fruits and vegetables per day. 39.5% of adults are obese. In Crisfield (21817) there is 1 grocery store providing access to fresh foods. There are 2 national fast food chains in Crisfield (Subway and McDonalds). In 2013, 30.6% of adults age 20+ reported being physically inactive (did not participate in any physical activities for the previous month). 59.69% of students are eligible for the free lunch program. 16% of adults report binge or heavy drinking, and 54.1% of 12th grade teens have used alcohol. 12.5% of adults report they have been diagnosed with diabetes.</p> <p>Transportation remains an issue; limited public transportation is available via Shore Transit or a local taxi service.</p> <p>Education: 14.3% of residents have college degrees, compared to 29.1% nationally. 8.3% of the county's residents are unemployed but seeking work.</p> <p>Housing: 24% of residents have at least 1 of 4 housing problems (overcrowding, high housing costs, or lack of kitchen or plumbing facilities)</p>	SHIP data
Available detail on race, ethnicity, and language within CBSA.	Race and origin: White alone (53.9%), Black or African American alone (42.3%), American Indian and Alaska Native alone (0.4%), Asian alone (0.9%), Native Hawaiian and other Pacific Islander alone (0.1%); Two or more races	U.S. Census Bureau http://bit.ly/2zrs2yF

	<p>(2.4%), Hispanic or Latino (3.6%), White alone (not Hispanic or Latino (51.4%). 5.1% of residents are foreign-born. 7.5% of the population age 5+ speaks a language other than English at home.</p> <p>The county has a large migrant population from May – October. The rural migrant camp is approximately 20 miles from the hospital and is served by Somerset County Health Department.</p>	
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II. Community Health Needs Assessment

1. Has your hospital conducted a Community Health Needs Assessment that conforms to the IRS definition detailed on pages 4-5 within the past three fiscal years?

Yes Provide date here. 10/01/2014 *It is attached as a PDF document. The most recent report is in final draft form as of December 15, 2017 and is also attached as a PDF document.*

No

2. Has your hospital adopted an implementation strategy that conforms to the definition detailed on pages 3 – 4?

Yes Enter date approved by governing body/authorized body thereof here: 2015

No If you answered yes to this question, provide the link to the document here: Please refer to Section V. Once the final draft on the CHNA is completed, the implementation strategy will be revised as needed.

III. Community Benefit Administration

- a. Is Community Benefits planning and investments part of your hospital's internal strategic plan?

Yes

No

If yes, please provide a specific description of how CB planning fits into the hospital's strategic plan. If this is a publicly available document, please provide a link here and indicate which sections apply to CB planning.

A designated employee is responsible for storing the tracking of community benefit activities, compiling the annual report and educating employees on what constitutes a community benefit and how to complete a community benefit tracking form. McCready values our relationship with the community and works to attend events and provides services whenever possible. Additionally, a case manager was hired in 2017, and as of December 2017, her responsibilities will include the coordination attendance, free screenings and staffing at health fairs to increase our community outreach and further address needs in the CHNA.

- b. What stakeholders in the hospital are involved in your hospital community benefit process/structure to implement and deliver community benefit activities? (Please place a check next to any individual/group involved in the structure of the CB process and describe the role each plays in the planning process (additional positions may be added as necessary))

i. Senior Leadership

1. CEO
2. CFO
3. Other (please specify) Community Relations Director

The Community Relations Director collects all the data and completes the required narrative report based on the information received. Clinical leadership, organize and are actively involved in the CB activities including the completion of CB reporting forms. The CEO and CFO review the report and communicate with the HSCRC on related issues.

ii. Clinical Leadership

1. Physician
2. Nurse
3. Social Worker
4. Other (please specify) Director of Quality, Department Supervisors

The Director of Quality and Department Supervisors, along with senior leadership (noted above), organize and are actively involved in the CB activities including the completion of CB reporting forms.

iii. Population Health Leadership and Staff

1. Population health VP or equivalent (please list)
2. Other population health staff (please list staff)

Describe the role of population health leaders and staff in the community benefit process.

In 2017, a case manager was hired, and as of December 2017, part of her responsibilities will include coordinating attendance and free health screenings at community health fairs.

iv. Community Benefit Operations

1. Individual (please specify FTE) - Director of Community Relations, 1.0 FTE
2. Committee (please list members)
3. Department (please list staff)
4. Task Force (please list members)
5. Other (please describe) Department managers are responsible for reporting the community benefit activities of their staff/departments

The Director of Community Relations collects all data, researches statistics, and completes all necessary CB reports.

c. Is there an internal audit (i.e., an internal review conducted at the hospital) of the Community Benefit report?

Spreadsheet yes no Report is reviewed by the CEO and CFO prior to submission.

Narrative yes no

d. Does the hospital's Board review and approve the FY Community Benefit report that is submitted to the HSCRC?

Spreadsheet yes no

Narrative yes no

They are aware of it and info, including copies of documents and reports, is shared with them. Our board has given the authority to the executive staff for completion and submission of all reports.

IV. COMMUNITY BENEFIT EXTERNAL COLLABORATION

a. Does the hospital organization engage in external collaboration with the following partners:

- Other hospital organizations
- Local Health Department
- Local health improvement coalitions (LHICs)
- Schools
- Behavioral health organizations
- Faith based community organizations
- Social service organizations

b. The meaningful, core partners with whom the hospital organization collaborated to conduct the CHNA.

(Information for the December 2017 CHNA is below.)

Organization	Name of Key Collaborator	Title	Collaboration Description
Somerset County Health Department	Sharon Lynch	Director Health Planning & Prevention/Public Information Officer	Worked together to determine strategies needed to provide the most accurate and thorough data for our county.

BEACON/Salisbury University	Dr. Memo Diriker	Principle Investigator	Led a team of students and colleagues in a needs assessment unique to the county. Developed questions, conducted survey throughout the county, created document.
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c. Is there a member of the hospital organization that is co-chairing the Local Health Improvement Coalition (LHIC) in the jurisdictions where the hospital organization is targeting community benefit dollars?

____yes no

d. Is there a member of the hospital organization that attends or is a member of the LHIC in the jurisdictions where the hospital organization is targeting community benefit dollars?

yes ____no

The Community Relations Director attends the Healthy Somerset Coalition and the Tri-County Health Alliance.

V. Hospital Community Benefit Program and Initiatives

Identified Need	Hospital Initiative	# of People within the target population	# People reached by initiative	Primary objective of the Initiative	Single or Multi year time period	Key Partners	Impact/ Outcome	Evaluation of Outcomes	Continuation of Initiative	Expense
Access to Care	Recruit new providers	25,000 residents in county	70 patients total: 548 FTF visits	To increase # of providers	Single; continuing	Local providers	Hired two behavioral health specialists; launched behavioral health and addictions program	New staff hired to address limited provider access and increased need for behavioral health/addictions services in area.	yes	\$125,425 in salaries
Access to Care and Transportation	Patient transport	25,000 residents in county	1,616	Eliminate barrier to services	Single	Community, media, other providers	1,616 people served; 3,232 staff hours	Increase in use of service from last year	Yes	\$43,464.78 in salaries, vehicle maintenance and gas

Access to Care	Health Insurance resource	25,000 residents in county		To increase # of people with insurance	Single	MD Lower Shore Health Exchange	Health Exchange staff are on-site once a week to answer questions, assist with insurance sign-up; Spanish and English brochures available onsite	Increase in # of persons obtaining insurance.	Yes	Allow in-kind room space and marketing space
Obesity	Community Field day	25,000 residents in county	1,000	To focus on issue, provide resources for residents	Single	Healthy Somerset Coalition	Over 1000 attended Prep for event. 2 staff at event		Yes	\$152.20 in salaries, \$150 in materials
Access to Care/ Uninsured	Charity Care	25,000 residents in county		Provide financial assistance	Single	LS Health exchange, Dept. of Social services	Approved 100 applications for financial assistance	Increase of 30 approved applications from last year	Yes	N/A
Other (Training)	Students / Interns	25,000 residents in county	705 students served	Provide learning opportunity for future health care workers	Single	UMES, Wor-Wic College	452 staff hours	An increase in students served	Yes	\$57,549 in salaries and expenses
Preventative care	Flu Shots	25,000 residents in county	402	Prevent spread of flu	Single	Media	402 people vaccinated	Increase from 243 last year	Yes	19.5 staff hours; approximately \$1,500 in salaries
Access to Care, Awareness of Resources, Preventative Health Care	Health Fairs	25,000 residents in county	40	To increase awareness and links to services	Single	UMES, community	2 events	40 people received screenings for glucose and LDL	Yes	\$2,500 in staff hours and supplies
Awareness of resources	Educational presentations; job fairs	Approximately 10,000		To increase awareness of services and available	Single	Jobs fairs at McCready, Salisbury University, UMES and			Yes	22 hours spent at job fairs – approximately \$1,430 in salaries

				career opportunities		Delmarva Shorebirds				
Coalition and Community Building	Improving community health	25,000 residents in county		To provide expertise in planning strategies to improve health and economy	Single	SCHD, Tri-County Workforce, United Way, Blood Bank drives, Relay for Life	28 mtgs totaling est 70 hours; Relay for Life hours: 50		Yes	\$5,000 in staff salaries
Donations	Donations community (cash and in-kind support such as donated meeting space for organizations and support groups)	25,000 residents in county		To serve our community and improve health care and access	Single	Crisfield High School, Crisfield Chamber of Commerce, MAC, Wor-Wic College, Somerset County Parks and Rec, National Child Safety Council, Salisbury Dementia Conference, American Legion, Long Term Recovery Support Group	Cash to support events, scholarships and health/safety programs 10 hours volunteer time for events	Able to support community partners	Yes	\$2,315 in monetary contributions; 70 hours of donated meeting space to outside organizations

VI. Physicians

McCready Health is a primary care facility that offers primary care through the McCready Health Outpatient Center. We have two board certified physicians, a surgeon and a nurse anesthetist on staff full-time. We also have a gynecologist on staff one day per week. We have contracts with several specialty providers including cardiology and podiatry. Until December 1, 2017, the Emergency Department was staffed by the Emergency Services Associates group providing doctors 24 a day; now the ED medical director is a board-certified McCready employee. Additional physicians staffing the ER are employees or contract employees. The McCready Immediate Care & Imaging Center is staffed with Physician Assistants and supervised by our physicians.

VII. Appendices

1. Financial Assistance Policy (FAP):

McCready Memorial Hospital posts its financial assistance/charity care policy along with necessary contact information in all patient care/registration areas. Upon admission, each patient also receives the same information about the program. Patients who are uninsured or underinsured receive assistance with determining eligibility for governmental programs or the hospital's financial assistance program through one-on-one financial counseling, including assistance in filling out all necessary paperwork. In addition, self-pay patients whose balances remain unpaid after three consecutive billing cycles receive a financial assistance application with instructions and contact information in their final statement before being sent to collections. Every effort is made to identify and assist patients in receiving the financial assistance they need.

Additionally, we partner with the Lower Shore Health Insurance Exchange. We provide them a private space year round, for on-site consultation to help county residents navigate through the system with advice on the best plan, completion of the enrollment forms and further guidance once the process is completed.

Our Financial Assistance Policy is attached.

2. Mission, Vision, Value Statement

Our Mission: Provide high quality, compassionate healthcare through an efficient and diversified service network, maintaining and improving the health of the people and communities we serve over their lifetime.

Our Vision: A healthy community with access to the expertise, tools and information needed to maintain wellness.

Our Values:

1. Service - Driven to provide the highest levels of service to our customers and communities
2. Quality- Providing superior care across all platforms is our reason for being
3. Dedication - Committed to compassionate healthcare throughout all of our entities
4. Caring - Promise that our hearts and minds are connected to all we do

McCready Health embodies the description “community” hospital in every sense of the word. We are located in the heart of a rural, somewhat isolated area where high-paying jobs are scarce and per-capita income is low. Our healthcare team provides compassionate quality care to those in need of hospital and health services, regardless of a person's ability to pay. Many employees live in the county and personally know the patients; often it's neighbors caring for neighbors. That quality and tradition has endured for nearly 100 years.

**McCready Foundation, Inc.
Administrative Policies and Procedures**

SUBJECT: Financial Assistance

**FILE: Index Tab
Organizational Ethics**

APPROVED BY:


Joy Strand, CEO

Page: 1 of 4

**Effective Date: 9/2005
Revised: 5/2006, 3/2007, 3/2008,
7/2009, 10/2010, 8/2012, 01/2013,
04/2014,**

I. Policy

McCready Foundation is committed to providing charity care to persons who have healthcare needs and are uninsured, underinsured, ineligible for a government program, or otherwise unable to pay, for medically necessary care based on their individual financial situation. Consistent with its mission to deliver compassionate, high quality, affordable healthcare services and to advocate for those who are poor and disenfranchised, McCready Foundation strives to ensure that the financial capacity of people who need health care services does not prevent them from seeking or receiving care.

Charity is not considered to be a substitute for personal responsibility. Patients are expected to cooperate with McCready Foundation's procedures for obtaining charity or other forms of payment or financial assistance, and to contribute to the cost of their care based on their individual ability to pay. Individuals with the financial capacity to purchase health insurance shall be encouraged to do so, as a means of assuring access to health care services, for their overall personal health, and for the protection of their individual assets.

In order to manage its resources responsibly and to allow McCready Foundation to provide the appropriate level of assistance to the greatest number of persons in need, the Board of Directors establishes the following guidelines for the provision of patient charity.

II. Definitions

For the purpose of this policy, the terms below are defined as follows:

Charity Care: Healthcare services that have or will be provided but are never expected to result in cash inflows. Charity care results from a provider's policy to provide healthcare services free or at a discount to individuals who meet the established criteria.

Family: Using the Census Bureau definition, a group of two or more people who reside together and who are related by birth, marriage, or adoption. According to Internal Revenue Service rules, if the patient claims someone as a dependent on their income tax return, they may be considered a dependent for purposes of the provision of financial assistance.

Family Income: Family Income is determined using the Census Bureau definition, which uses the following income when computing federal poverty guidelines:

- a. Includes earnings, unemployment compensation, workers' compensation, Social Security, Supplemental Security Income, public assistance, veterans' payments, survivor benefits, pension or retirement income, interest, dividends, rents, royalties, income from estates, trusts, educational assistance, alimony, child support, assistance from outside the household, and other miscellaneous sources;
- b. Non-cash benefits (such as food stamps and housing subsidies) do not count;
- c. Determined on a before-tax basis;
- d. Excludes capital gains or losses; and
- e. If a person lives with a family, includes the income of all family members (Non-relatives, such as housemates, do not count).

Uninsured: The patient has no level of insurance or third party assistance to assist with meeting his/her payment obligations.

Underinsured: The patient has some level of insurance or third-party assistance but still has out-of-pocket expenses that exceed his/her financial abilities.

III. Procedures

A. Services Eligible Under this Policy.

For purposes of this policy, "charity" refers to healthcare services provided without charge or at a discount to qualifying patients. The following healthcare services are eligible for charity:

1. Emergency medical services provided in an emergency room setting;
2. Services for a condition which, if not promptly treated, would lead to an adverse change in the health status of an individual;
3. Non-elective services provided in response to life-threatening circumstances in a non-emergency room setting; and
4. Medically necessary services, evaluated on a case-by-case basis at McCready Foundation's discretion.

B. Eligibility for Charity.

Eligibility for charity will be considered for those individuals who are uninsured, underinsured, ineligible for any government health care benefit program, and who are unable to pay for their care, based upon a determination of financial need in accordance with this Policy. The granting of charity shall be based on an individualized determination of financial need, and shall not take into account age, gender, race, social or immigrant status, sexual orientation or religious affiliation. McCready Foundation shall determine whether or not patients are eligible to receive charity for deductibles, co-insurance, or co-payment responsibilities.

Patients eligible for programs, such as PAC, already determined by the HSCRC to be presumptively eligible for Financial Assistance will be considered eligible for the McCready Financial Assistance program at 100% without additional screening.

C. Determination of Financial Need.

1. Financial need will be determined in accordance with procedures that involve an individual assessment of financial need; and may
 - a. Include an application process, in which the patient or the patient's guarantor are required to cooperate and supply personal, financial and other information and documentation relevant to making a determination of financial need;
 - b. Include the use of external publicly available data sources that provide information on a patient's or a patient's guarantor's ability to pay (such as credit scoring);
 - c. Include reasonable efforts by McCready Foundation to explore appropriate alternative sources of payment and coverage from public and private payment programs, and to assist patients to apply for such programs;
 - d. Take into account the patient's available assets, and all other financial resources available to the patient; and
 - e. Include a review of the patient's outstanding accounts receivable for prior services rendered and the patient's payment history.
2. It is preferred but not required that a request for charity and a determination of financial need occur prior to rendering of services. However, the determination may be done at any point in the collection cycle. The need for payment assistance shall be re-evaluated at each subsequent time of services if the last

financial evaluation was completed more than a year prior, or at any time additional information relevant to the eligibility of the patient for charity becomes known.

3. McCready Foundation's values of human dignity and stewardship shall be reflected in the application process, financial need determination and granting of charity. Requests for charity shall be processed promptly and McCready Foundation shall notify the patient or applicant in writing within 30 days of receipt of a completed application.

D. Presumptive Financial Assistance Eligibility.

There are instances when a patient may appear eligible for charity care discounts, but there is no financial assistance form on file due to a lack of supporting documentation. Often there is adequate information provided by the patient or through other sources, which could provide sufficient evidence to provide the patient with charity care assistance. In the event there is no evidence to support a patient's eligibility for charity care, McCready Foundation could use outside agencies in determining estimate income amounts for the basis of determining charity care eligibility and potential discount amounts. Once determined, due to the inherent nature of the presumptive circumstances, the only discount that can be granted is a 100% write off of the account balance. Presumptive eligibility may be determined on the basis of individual life circumstances that may include:

1. State-funded prescription programs;
2. Homeless or received care from a homeless clinic;
3. Participation in Women, Infants and Children programs (WIC);
4. Food stamp eligibility;
5. Subsidized school lunch program eligibility;
6. Eligibility for other state or local assistance programs that are unfunded (e.g., Medicaid spend-down);
7. Low income/subsidized housing is provided as a valid address; and
8. Patient is deceased with no known estate.

E. Patient Charity Guidelines.

Services eligible under this Policy will be made available to the patient on a sliding fee scale, in accordance with financial need, as determined in reference to Federal Poverty Levels (FPL) in effect at the time of the determination, as follows:

1. Patients whose family income is at or below 150% of the FPL are eligible to receive free care;
2. Patients whose family income is above 150% but not more than 250% of the FPL are eligible to receive services at a sliding fee schedule according to the following guidelines:

Reduced Cost Chart

Family Size	100%	75%	50%	25%	Full Pay
1	\$17,505	\$21,356	\$25,207	\$29,175	\$29,176
2	\$23,595	\$28,786	\$33,977	\$39,325	\$39,326
3	\$29,685	\$36,216	\$42,746	\$49,475	\$49,476
4	\$35,775	\$43,646	\$51,516	\$59,625	\$59,626
5	\$41,865	\$51,075	\$60,286	\$69,775	\$69,776
6	\$47,955	\$58,505	\$69,055	\$79,925	\$79,926
7	\$54,045	\$65,935	\$77,825	\$90,075	\$90,076
8	\$60,135	\$73,365	\$86,594	\$100,225	\$100,226

3. Patients whose family income exceeds 250% of the FPL but less than 500% may be eligible to receive discounted rates on a case-by-case basis based on their specific circumstances, such as catastrophic illness or medical indigence, resulting in a Financial Hardship at the discretion of McCready Foundation. A Financial Hardship for the purposes of this policy means medical debt incurred by a family over a 12 month period that exceeds 25% of family income. "Medical debt" means out of pocket expenses, excluding co-payments, coinsurance, and deductibles, for medical costs billed by a hospital.

Financial Hardship Chart

Family Size	100%	75%	50%	25%	Full Pay
1	\$29,175	\$38,861	\$48,547	\$58,350	\$58,351
2	\$39,325	\$52,381	\$65,437	\$78,650	\$78,651
3	\$49,475	\$65,901	\$82,326	\$98,950	\$98,951
4	\$59,625	\$79,421	\$99,216	\$119,250	\$119,251
5	\$69,775	\$92,940	\$116,106	\$139,550	\$139,551
6	\$79,925	\$106,460	\$132,995	\$159,850	\$159,851
7	\$90,075	\$119,980	\$149,885	\$180,150	\$180,151
8	\$100,225	\$133,500	\$166,774	\$200,450	\$200,451

F. Communication of the Charity Program to Patients and the Public.

Notification about charity available from McCready Foundation, which shall include a contact number, shall be disseminated by McCready Foundation by various means, which may include, but are not limited to, the publication of notices in patient bills and by posting notices in emergency rooms, urgent care centers, admitting and registration departments, hospital business offices, and patient financial services offices that are located on facility campuses, and at other public places as McCready Foundation may elect. Information shall also be included on facility websites and in the Conditions of Admission form. Such information shall be provided in the primary languages spoken by the population serviced by McCready Foundation. Referral of patients for charity may be made by any member of the McCready Foundation staff or medical staff, including physicians, nurses, financial counselors, social workers, case managers, chaplains, and religious sponsors. A request for charity may be made by the patient or a family member, close friend, or associate of the patient, subject to applicable privacy laws.

G. Relationship to Collection Policies.

McCready Foundation management shall develop policies and procedures for internal and external collection practices that take into account the extent to which the patient qualifies for charity, a patient's good faith effort to apply for a governmental program or for charity from McCready Foundation, and a patient's good faith effort to comply with his or her payment agreements with McCready Foundation. For patients who qualify for charity and who are cooperating in good faith to resolve their hospital bills, McCready Foundation may offer extended payment plans to eligible patients, will not impose wage garnishments or liens on primary residences, will not send unpaid bills to outside collection agencies, and will cease all collection efforts.

H. Regulatory Requirements.

In implementing this Policy, McCready Foundation management and facilities shall comply with all other federal, state, and local laws, rules, and regulations that may apply to activities conducted pursuant to this Policy.



Your Patient Guide



About Your Hospital

Edward W. McCready Memorial Hospital began as a gift to the people of Crisfield for their kindness to someone just passing through. In September of 1919, a former Crisfield resident, his young daughter and her nurse governess were involved in a devastating automobile accident in Westover. The father and governess died at the crash site. The child died on the way to Crisfield's General and Marine Hospital.

When the grieving wife and mother, Mrs. Caroline McCready, arrived in Crisfield, the Hospital's superintendent, Florence Smith, took her under her wing. Ms. Smith provided Mrs. McCready with a room for the time she would stay in Crisfield along with seeing to funeral arrangements. Her response when asked by Mrs. McCready for the bill, "Why, Mrs. McCready, you have no bill from us. We are all very sorry we could not have done more for you."

"You and the people of Crisfield will be paid." Caroline McCready replied.

Her payment, it turned out, was a gift to all of Crisfield - land to build a new hospital at Cork Point on the Little Annemessex River, which was named the Edward W. McCready Memorial Hospital for her late husband. The hospital opened in May of 1923.



McCready Health
201 Hall Highway
Crisfield, MD 21817
410-968-1200
mccreadyhealth.org

(A division of The McCready Foundation, Inc.)

McCready Health Patient Right and Responsibilities

McCready Hospital is a private, non-profit healthcare organization owned and operated by the McCready Foundation Inc. The hospital is accredited by the Joint Commission for Accreditation of Healthcare Organizations and licensed by the Maryland Department of Health and Mental Hygiene.

PATIENT RIGHTS

You have the right:

1. To express a grievance. Call the Chief Nursing Officer at Ext. 3358/3454 or the Corporate Compliance hotline at 410.968.1027.
Should you have a complaint about quality of care, you may contact the Joint Commission on Accreditation of Healthcare Organizations at 800.944.6610 or email: **complaint@jcaho.org**. You can call the Maryland Office of Healthcare Quality at 877.402.8218 or 410.402.8000 to make a complaint about healthcare facilities or Community based treatment programs.
2. To be informed of your diagnosis and to participate in the development and implementation of your plan of care. This includes the right to consult with a specialist at your own request/expense and to change physicians/hospitals.
3. To make informed decisions regarding your care, including refusal of treatment to the extent permitted by law.
4. To effective pain management.
5. To change your mind about any procedure for which you have given your consent.
6. To formulate advance directives and to have care providers comply with them to the extent permitted by law.
7. To be informed of the reason you are given various tests and treatments and who the persons are who give them to you.

PATIENTS RESPONSIBILITIES

You, in turn, have the responsibility:

1. To follow the Hospital's rules affecting patient care and conduct.
2. To cooperate with Hospital personnel and follow the care prescribed or recommended for you by your physician.
3. To provide, to the best of your knowledge, accurate and complete information about present complaints, past illnesses, hospitalizations, medications and other matters relating to your health.
4. To notify your physician or nurse if you do not understand your diagnosis, treatment or prognosis.

5. To ask your doctor or nurse what to expect regarding pain and pain relief measures, to ask for pain relief when your pain first begins, to help your doctor and nurse evaluate your pain and to tell them if your pain is not relieved.
6. To let the nurse and your family know if you feel you are receiving too many outside visitors.
7. To respect the privacy of your roommate if you are not in a private room.
8. To accept financial obligations associated with your care.
9. To advise your nurse or physician of any dissatisfaction you may have in regard to your care at the hospital.
10. To be considerate of the rights of other patients and hospital personnel, to assist in the control of noise and to follow the Hospital's visitor, no smoking and other policies.
11. To keep appointments, or, when unable to do so for any reason, notify the responsible practitioner of the Hospital.

THE ADMISSION PROCESS

REGISTRATION

You will be guided through the registering process by the hospital's admitting staff. Your personal information, such as address, age and next of kin, will be recorded in the hospital's computer system. You will be asked about your health insurance, so please bring your Medicare, Medical Assistance, or private insurance identification cards.

During your registration process you will be asked if you have an "advance directive". This is a legal document that communicates your decisions about health care. If you have an advance directive, please bring it with you. If you do not have one but wish to create one, our staff will help.

You will also be asked if you are registered as an organ donor or if you have made arrangements to donate your body after death to a medical school or other research facility.

WRISTBAND

Once registered, you will receive a wristband that you must wear until you leave the hospital. Show the caregiver your patient ID bracelet prior to any care given.

PERSONAL ITEMS

There are certain personal items that you will want from home for your stay at McCready. Only bring items needed during your stay.

VALUABLES

Please leave your expensive jewelry or other valuables at home, or send them home with a relative. Do not keep credit cards or large amounts of cash in your room. If you wear eyeglasses, contact lenses, dentures, or a hearing aid, keep them in protective cases when not in use as the hospital cannot be responsible for loss or breakage. **Your personal property is your responsibility.**

MEDICATIONS FROM HOME

We cannot let you take drugs that you bring from home to the hospital unless your physician writes orders in your chart telling us to allow them. If drugs brought with you are not to be used while you are here, you should send them home or we will package, seal, and store them for you until you are released from the hospital.

YOUR HOSPITAL ROOM

YOUR BED

Bed controls are located in the bed rails and can be easily operated by you or the healthcare staff. Using the controls you can summon the nurse, raise and lower the bed, and even adjust different portions of the mattress for softness or firmness. The mattress will help prevent the sore spots that can develop if you lie too long in one position. Your bed rails are adjustable.

MAIL AND FLOWERS

Patient mail is delivered Monday through Friday. Flowers may be delivered daily during regular business hours.

TELEVISION AND TELEPHONE SERVICES

Television is available in your room at no charge. Telephone service is also available. The daily charge allows unlimited local calling, and you can use your phone credit card or call collect to make long distance calls.

HOUSEKEEPING SERVICES

Environmental Service Aides keep your room clean and sanitary daily, but if you notice something that needs special attention, please mention it to your nurse.

FIRE AND DISASTER DRILLS

At McCready we are always mindful of various safety issues. This includes what takes place during a fire or other disaster. For this reason, we conduct frequent fire drills so that our staff is constantly practicing the procedures they need to know. Please don't be disturbed if you see or hear evidence of such a drill.

NURSING PROFESSIONALS

Our Nursing Department consists of Registered Nurses, Licensed Practical Nurses, and Certified Nursing Assistants. Nursing care is provided 24 hours a day, every day. You will meet your nurses as you are admitted to your room and they will carry out the orders your doctor leaves for medications and treatments. Your nurses will call your doctor for special orders as needed. They also can explain any test, procedures, or therapies you may need so that you and your family understand your care plan.

In cases when a patient needs very intense nursing care, patients or families may contract separately with private duty nurses to care for a hospitalized patient. Such arrangements must first be cleared with the supervisor.

PHYSICIANS

Both general and specialized physicians are available at McCready for patients who have no established personal physician. Consulting physicians are also available on call.

EMERGENCY SERVICES

All Emergency Department physicians are Board Certified in Emergency Medicine. Registered Nurses and technicians also have had advance training.

RESPIRATORY THERAPY

Our Certified Respiratory Therapists work under the direction of a physician to provide both diagnostic and therapeutic procedures. Diagnostic procedures include arterial blood gas sampling, analysis, bedside and outpatient pulmonary testing. Therapeutic procedures include oxygen therapy, mechanical ventilation, airway care, bronchial hygiene therapy and respiratory rehabilitation.

PHARMACY SERVICES

All medications you receive while you are hospitalized are prepared under the supervision of a Registered Pharmacist. Medications are dispensed only upon the written orders of your physician who will prescribe any drugs you will need when you are discharged. The Hospital may give you a dose or two of those medications to get you started until you can fill your prescriptions at a local pharmacy.

MENTAL HEALTH SERVICES

Should you require mental health services or counseling, you will be referred to a psychiatrist or another mental health professional.

CHAPLAINS

Clergy members and chaplains can visit you to offer comfort and help with your spiritual needs during your illness. Our volunteer chaplains are pastors from the Southern Somerset County Ministerial Association. Your nurse can call a chaplain for you at any time.

VISITOR INFORMATION

VISITING HOURS

Visitors are welcomed at McCready Hospital from 8a.m. until 8p.m. Children may visit your room for 15 minutes, but cannot be left unattended anywhere in the hospital or on the grounds. Sometimes, for example, when a child is hospitalized or when a patient is extremely ill, special arrangements can be made for family members to stay with the patient at any time. Ask the Nursing Supervisor.

TOBACCO USE AND SMOKING

The use of any tobacco product or e-cigarettes is prohibited both inside and outside on the McCready campus.

PARKING

parking is free on the hospital grounds. The lot in front of the main hospital entrance is the most convenient.

WAITING ROOMS

Visitor's waiting rooms include the main lobby and the sitting room adjacent to the Emergency Department.

SNACKS AND MEALS FOR VISITORS

Snack machines are available on the main floor of the Hospital for the convenience of visitors. Visitors are also welcome to the cafeteria located in the Tawes Nursing & Rehabilitation Center.

The cafeteria offers reasonably priced meals, sandwiches, grilled items, beverages and desserts. Breakfast is served between 8:30 and 10a.m., lunch between 11:30a.m.and 4:30p.m.and dinner from 5:30 to 6:30p.m.

Guest trays are available for a small charge and will be brought to your room. Your nurse can order guest trays for your visitors between 7 -9a.m., 11:30a.m.-1:15p.m. 4:30-5:30p.m. Please note, your visitors should not bring you food or share with you food they bring to the hospital without first checking with the nurse. Certain foods may be restricted because of your special dietary needs or before certain tests or procedures.

LEAVING THE HOSPITAL

When your physician decides you no longer need acute hospital care, he or she will write orders for your discharge. The following information will help answer any questions you have once you arrive home.

PATIENT EDUCATION AND INSTRUCTIONS FOR CARE

Your doctor and your nurse will review any instructions about how to take care of yourself, medications, outpatient therapy, testing, or counseling you will need after you leave the hospital. If you have questions after you reach home, please call your physician.

PATIENT SURVEY

A patient satisfaction survey and mailing envelopes are included in your Admission folder. Please take the time to answer the questions. Your favorable comments or your suggestions for improvement will help us to assure the comfort and safety of patients who come to McCready in the future. We also welcome your spoken comments. Call the Hospital at (410) 968-1200 and ask for Administration.

LOST AND FOUND

The Hospital is not responsible for lost items, but if after arriving home you discover that you have left something behind, call (410) 968-1200 to report it. We hold found items for at least 60 days.

YOUR BILL

If you need assistance in understanding your hospital bill when it is mailed to your home, please call us at 410.968.1200 and ask for our Business Office Manager.

YOUR RECORDS

All of the care and services you receive at McCready are recorded in your personal health record. This record, organized and maintained over the years, ensures continuity of care across all levels and areas of health care delivery.

McCready safeguards your health record in accordance with state and federal laws. It is a legal document, and information in it is released only if you or your legal representative provides express written consent. If you request your medical record for personal or business reasons, there will be a charge (in accordance with Maryland law). The charges are waived when information is needed by another healthcare provider. If you have questions about your medical record, call the Health Information Management Department.

Thank you for choosing McCready Health

Somerset County, Maryland

2014 Health Needs Assessment

This document was prepared for the Somerset County Health Department and McCready Foundation by Cherise B. Harrington, PhD, MPH and project team at The George Washington University Milken Institute School of Public Health, Department of Prevention and Community Health.

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EXECUTIVE SUMMARY

Background: The Somerset County Health Department and McCreedy Foundation partnered with The George Washington University Milken Institute School of Public Health to sponsor a Health Needs Assessment in Somerset County, Maryland. The goal of this needs assessment was to survey a representative sample of county residents to identify the health priorities of residents and the barriers they encounter in accessing health care in the county.

Objectives: The overall objective of the needs assessment is to improve the health outcomes of Somerset County residents.

Methods: A mixed method approach was used to assess the needs, identify resources, and identify opportunities for intervention. The Somerset County Health Department with the support of the McCreedy Foundation Inc. and The George Washington University, Milken Institute School of Public Health Project Team identified the primary population in which to conduct the needs assessment (Part 1: quantitative) and a secondary population in which to conduct structured interviews (Part 2: qualitative). Eligibility criteria for both Parts 1 and 2 included being English-speaking, a county resident of at least two years, and over the age of 18. A sample size of 200 was chosen to represent the greater population. The needs assessment instrument was a 94-question questionnaire that took 15-25 minutes to complete. This questionnaire assessed demographics, social and environmental factors, health behavior, health status, health priorities, and perceived barriers to care. The instrument also asked about perceptions of community level health priorities and barriers. Participants were compensated with a \$10 Food Lion gift card upon completion of the survey. The secondary population (Part 2) was residents who were involved in the community either through employment, residence, or an organizational affiliation. A secondary sample size of 10 was chosen to complete the structured interviews.

Results: N=153 Somerset County residents participated in the needs assessment. Eight cities in the county were represented, however the majority of participants resided in Crisfield (42%) and Princess Anne (30.5%). The average age was 46.1 with a range of responses from 18-85. The sample was 61% White and 31.4% Black or African American. In general the sample was mostly female (62.8%), married (36.7%), high school graduates (40.7%), and employed (37.9%). With regard to income, we see a bimodal pattern with 22.1% reporting incomes less than \$5,000 and 20% reporting between \$25,000-\$49,999 per year. Thirty-three (33.3%) of the sample reported “excellent” or “very good” health. However, 59.6% of the population reported their physical health was “not good”. Most were overweight or obese (57.5%). Weight (47.7%), physical activity (45.7%), and eating properly (41.9%) were the highest rated health priorities. The participants were also asked to rate which programs they would be most interested in if available. Dental services (38.6%), exercise programs (38.6%), weight loss programs (35.9%), healthy eating cooking classes (24.8%) and financial planning (24.8%) were rated the highest.

Secondary data analyses were conducted to investigate the role of income and race on general health. Participants reporting an income in the lowest tier (<5,000-9,999) were more likely to report fair or poor health compared to higher income groups ($X^2 = 33.143$ $p < .01$). Racial groups did not differ significantly on reports of general health status ($X^2 = 14.86$ $p > .05$). And Whites were more likely to earn incomes over \$50,000 ($X^2 = 13.52$ $p < .05$) compared to other racial groups.

The report also includes comparisons with 1) current census data and 2) the previous needs assessment. This report compares the current needs assessment demographic data with

census data to assess our sampling and recruitment strategies. In general the sample was similar to the most recent census data with several notable deviations. Compared to the most recent census data our sample were more educated (85.7% vs. 79.6%) with a high school diploma or higher and with a bachelor's degree or higher (20.6% vs. 14.2%). A lower number of Black/African American residents (31.4% vs. 42.8%) and a higher number of White residents (61.2% vs. 53.8%) compared to the most recent census data. With regard to the income data we collected this information differently; using categorized ranges as opposed to having participants specify a dollar amount. These data were bimodal where we observed the highest income categories as < \$5,000 or between \$25,000-\$49,999, 22.1% and 20% respectively, whereas the latest census reported a median income of approximately \$38,000. From these comparisons we can make assumptions about the adequacy of the recruitment strategy and approach while also identifying areas to focus on in the future.

This report also includes a comparison to the previous (2009) county needs assessment in order to assess changes, gaps, and compare sample characteristics. There were some notable differences. Transportation and employment challenges emerged as the biggest barriers to health care, versus insurance and affordable health care in previous years. Additionally, childcare emerged as a significant barrier. The general health ratings were considerably lower than the 2009 Tri-County rating for those reporting "excellent" or "very good" health (33.3% vs. 58.3%). One of the most striking differences is the number of days per month participants reported experiencing poor health. The number of days increased from 4.8 to 12.05 per month. Similarly, the amount of time in good mental health decreased markedly from 83.4% to 21.6%. Anxiety about house related finances also increased to 35.9% from 26.2%. The percentage of the sample that reported being current smokers increased dramatically from 21.9% to 32.0%. A much lower percent of the population reported alcoholism/binge drinking, which decreased to 7.8% from 20.9%. It also is notable that fewer people reported having a regular primary care physician or site for medical care (93.7% vs. 71.1%). Furthermore, lack of insurance increased from 9.5% to 13.1% since the 2009 report.

Conclusions: Overall the recruitment approach was successful in obtaining a representative sample. Future efforts should consider ways to increase yield among Black/African American residents and Hispanics. The data also highlighted gaps in care and identified areas to potentially leverage into additional programs, services, and interventions.

Recommendations: It would be the recommendation of the project team that additional secondary analyses be conducted on the data to explore patterns not immediately evident in the descriptive analyses. Additionally, future efforts should seek to incorporate more of the community in the planning and execution of the needs assessment. These efforts could include convening an advisory board that includes community members and also hiring community members to assist in data collection. In order to further explore some of the priority concerns and problems of county residents and solutions, focus groups made up of county residents could be instrumental in generating ideas, and identifying resources and potential barriers prior to implementation of proposed programs or services.

ACKNOWLEDGEMENTS

This needs assessment included the development of the approach and methodology, data collection, data analysis, and data interpretation and presentation.

Principle Investigator Dr. Harrington would like thank the project team: Shelkecia Lessington, Jordanna Snyder, Sevetra Peoples, Hira Chowdhary, Nicole D. Hubb, Jalisa Holt, Shakita Jenkins, and Tinika McIntosh, all graduate students in The George Washington University Milken Institute School of Public Health, Masters of Public Health Program in Washington, D.C.

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Funding for this project came from the Somerset County Health Department and McCready Foundation who trusted our vision to provide a community-based recruitment strategy to enrich the data in this important County needs assessment.

We finally acknowledge the Somerset County residents, businesses, and churches that participated and allowed us entry into their community. Their kindness and insight were instrumental to the success of this project.

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INTRODUCTION

Somerset County is one of 23 counties in the state of Maryland.¹ It is located on the eastern shore between the Chesapeake Bay and the Atlantic Ocean², and has an estimated population of over 26 thousand³; 52% Non-Hispanic White; 42% Non-Hispanic African American; 3% Hispanic; and 1% Asian.⁴

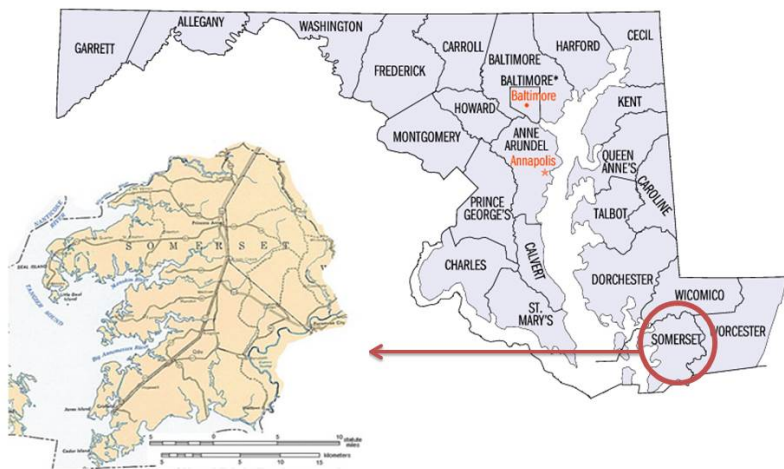


Figure 1. Map of the State of Maryland and of Somerset County

Somerset County Commissioners. (2014). *Maps*. Retrieved from Somerset County, Maryland:

<http://www.somersetmd.us/maps.html>

United States Census Bureau. (2013). *Maryland County Selection Map*. Retrieved from State & County QuickFacts:

http://quickfacts.census.gov/qfd/maps/maryland_map.html

Somerset County is favorably known for its “lush woodlands, smogless skies, and seafood bounty.”² It is considered “a paradise for hunters, fishermen, photographers, kayakers, and nature lovers.”²

Though beautiful in scenery, the citizens of its community have experienced health issues that have drawn the attention of its health department and other stakeholders. In recent years Somerset County has seen high rates of sexually transmitted disease (725 per 100,000 population compared to 467 in Maryland), children in poverty (35% under age 18 compared to 14% in Maryland), and obesity (38% with BMI > 30 compared to 28% in Maryland).⁵ In response to these unfavorable health trends, the Somerset County Health Department sought to identify the limitations, barriers, and gaps in the community by partnering with The George Washington University, Milken Institute School of Public Health to sponsor a Health Needs Assessment with the overall objective to improve the health outcomes of the Somerset County community.

BACKGROUND

Community Definition and Characterization of Somerset County, Maryland

Somerset County is located in Maryland directly above the Chesapeake Bay. It is one of 24 Maryland counties/jurisdictions. The county has a rural designation, as defined by the United States Department of Agriculture, hosting a population of less than 50,000 residents.⁶ The county includes twelve cities: Chance, Prince Anne, Crisfield, Dames Quarter, Deal Island, Eden, Fairmount, Frenchtown, Mount Vernon, Rumbley, Smith Island, and West Pocomoke.⁷ Somerset County contains one hospital and four health clinics that address various health concerns including sexually transmitted diseases, title ix family planning, HIV/AIDS, flu and dentistry/oral needs.⁸ Two of the four health centers are federally qualified health centers or operate similarly.⁸

Racially, the county is majority white (53.5%) but includes 42.3% black, and Asian and Native American races total less than 1% each.⁹ The median age of the county is 36.5 years old.⁹ The population aged 19 or younger is 23.6%, 62.5% are between the ages of 20 and 64 years old and 13.8% is aged 65 and older.⁹ In Somerset County the median household income is \$41,558.00 with 20.4% of the population living in poverty.^{10,11} The population living in single parent homes is at 20.2%, with half, 10.2%, living in single parent homes that have children under the age of 18.⁹ A great deal of the population, 22,611 individuals to be exact, is aged 16 and over and eligible to work however, 56 percent of those individuals are currently unemployed.¹⁰ According to 2012 data reported in the Maryland Chartbook of Minority Health and Health Disparities, Somerset County has a major imbalance of type 2 diabetes (46 to 19) when comparing white and black residents, respectively.¹²

When compared to counties touching its borders, Somerset County ranks 20th in terms of health outcomes and 23rd in reference to health factors; significantly worse in comparison to neighboring counties in both regards.¹³ The county shares borders with Wicomico County, ranked number 18 in overall health outcomes, and Worcester County, ranked number 11. Worcester County has a single parent household percentage of 14.7 with 7.4% of those households containing children under the age of 18⁹. Wicomico County has a similar structure to Somerset with 20.1% of households being single parent and 11.4% of those containing children under the age of 18 years old.¹⁴ Despite population similarities, the contributing factor to the low ranking and severity of the health outcomes present in Somerset County is that it is

home to 26,470 people compared to Worcester and Wicomico counties with 51,454 and 98,730 residents, respectively.¹¹

According to the 2009 Tri-County Community Health Assessment Report, of the three counties, Somerset residents consistently self-reported lower? in a number of health categories including identifying as having fair/poor health, experiencing three or more days of consecutive bad physical health, experiencing worry in relation to housing payments, and having no insurance coverage.¹⁵ In addition, April of 2011, the Maryland Department of Health and Mental Hygiene's Office of Minority Health and Health Disparities identified ten of fifteen elevated indicators for health disparities including but not limited to percent of families in poverty, substance abuse treatment rate, teen birth rate, and Medicaid enrollment rate.¹⁶ Fourteen percent of the population in Somerset County is uninsured compared to 12% in the entire state of Maryland.¹³ The county holds an unemployment rate of 10.3% (compared to the state's 6.8%) and 35% of the children in the county are living in poverty (as opposed to the lower state value of 14%).¹³

Health Needs Assessments

Needs assessments are used to identify barriers and limitations in a selected population.¹⁷ Sponsored by an individual or organization, such as a hospital or health department,¹⁸ they can be used to (1) identify gaps between current health status and those desired, and to (2) categorize such gaps via level of importance and source of influence (environmental, behavior, genetic, or healthcare).¹⁸ Once categorized, the timeframe of the desired outcome is established i.e. short-term, intermediate-term, or long-term, based on the resources and objectives outlined by the sponsor.¹⁸

Health needs assessments have many benefits, including the development of a roadmap of how to reach a specific health or/and behavior objective and defining indicators that will capture the completion of such objectives.¹⁸ Other benefits include a snapshot of the health needs of an entire community, generating stakeholder understanding and support of needed programs and increased visibility of the sponsor in the community.¹⁹

Limitations of a needs assessment are introduced once the method of research is chosen; i.e. quantitative versus qualitative. Quantitative research methods of assessment are objective, generalizable and are used to test concepts, constructs, and hypothesis of a theory²⁰; examples include surveys, structured interviews, and observations.^{20,21} Qualitative research

methods are subjective, less generalizable, and are used to formulate a prediction;²⁰ examples include focus groups, in-depth interviews and brainstorming.^{20, 21}

Design Rationalization: Using in-person community-based sampling

In community-based approaches, it is beneficial to use designs that are sensitive to sociocultural backgrounds of the community. Community-based recruiting is most successful when there is a partnership between the researchers and local, community-based organizations. When organizational partners introduce the research and its potential benefits to people in their own organization, such as churches or hospitals, recruitment is much more successful than researchers trying to build trust and create interest among community members without the buy-in from and engagement with local organizations.²³ In-person recruitment allows for creating and building trusting relationships with community partners and engagers. We found this to be true when we established a relationship with the Food pantry where we had the staff at the Food pantry help us to explain the research and benefits to the participants. This strategy allowed us to achieve a much higher participation rate than trying to recruit remotely because the participating community members knew the staff and trusted the community-based organization we were engaging with. Overall research supports telephone recruitment and in person meetings with potential participants helps to increase rates of recruitment.²⁴

Additionally, in-person community based participatory methods have the potential to establish meaningful relationships and give voice to those already working in local communities towards achieving positive health outcomes. Engaging community members who are already working in local communities not only builds trust but empowers members of the community to serve as active leaders with a voice.²² Anecdotally, this was demonstrated in the field during a recruitment event where a local mother asked to help with the research and assisted the research team in making connections to other organizations that she felt we should partner with. Her experience and knowledge of the community was beneficial to our sampling methods. We only had the ability to meet this community member through in-person recruitment in the community. Both sampling approaches were used in this assessment.

Rationale

In summary, rural, low income populations, and minorities are burdened by significant health disparities characterized by increased health risks, less engagement in preventive behaviors, increased incidence (for most diseases), and increased mortality rates. The high individual and public health burden of disease and health disparities make prevention efforts of

critical importance. The best approach to plan and implement primary and/or secondary prevention programs is through a thorough understanding of the needs in a community. As previously stated, the purpose of a needs assessment is to engage key stakeholders in a process of gathering and synthesizing data that includes demographics of a populations, resources, needs, barriers, health risk factors, and disease incidence and prevalence. The current report summarizes the process, methodology, and data from a needs assessment conducted in Somerset County, Maryland during Fall/Winter 2014.

METHODOLOGY

Overview

The Somerset County Health Department with the support of the McCready Foundation Inc. and The George Washington University, Milken Institute School of Public Health identified both primary and secondary populations in order to conduct the needs assessment using the quantitative research method. The primary population was persons who were English-speaking, have resided in Somerset County from no later than 2011 to present time (at least two years) and who had reached their 18th birthday at the time of assessment. A primary sample of 200 was chosen to represent the greater population using a self-report questionnaire (survey). As an incentive for participation in the needs assessment, participants were offered \$10 gift cards to Food Lion upon their completion of the survey. The secondary population was residents who were English-speaking, had resided in Somerset County for at least two years, had reached their 18th birthday at the time of assessment, and were involved in the community either through employment, residence, or organizational affiliation. A secondary sample of 20 was chosen to represent the greater population using the mode of interviewer structured questionnaire (survey).

As with any questionnaire or survey involving human research subjects, there are risks and benefits associated. The major benefits of questionnaires are that they can collect information from large groups,²⁵ they can be easily administered, their results can be quickly analyzed through the use of statistical software, and they are inexpensive to administer.²⁶ The risks associated with questionnaires are that they can be timely in their completion, there are limitations in measuring the truthfulness of respondents' answers,²⁶ and they may miss an unlisted barrier in the community as they do not readily allow for open ended responses.²⁷ The limitations of the questionnaires were considered before, during, and after the administration of the survey and were also accounted for during analysis of the survey results.

Primary Population (Part 1) – Self-Reported Questionnaire

The primary sample population of N = 153 was randomly recruited from various sites to complete the survey. Recruitment efforts took place in the following Somerset County locations which met the specified criteria; Princess Anne Bus Depot, the Crisfield Food Lion, the Princess Anne Food Lion, The Somerset Shopper's Fair, Ashbury United Methodist Church, Gordon's Restaurant, The Beauty Suite Beauty Salon, Duck In Emporium Beauty Salon, Waterman's Inn, and a food pantry at Crossroad's International Church (See Table 1).

Procedures

The owners/managers of each location were contacted in advance by a George Washington University (GWU), Milken Institute School of Public Health project team member (GWU graduate student) for their permission to conduct the health needs assessment in the establishment as well as schedule a date most convenient for both stakeholders. The ideal timeframe was that of most traffic or demand from customers. Each location was also asked to advertise the needs assessment to their customers in advance.

The project team wore bright orange sweaters to attract the attention of the community. A sign that read “Are You 18 or Older and a Somerset County Resident, Get a \$10 Gift Card, Ask Me How” was displayed to attract people to fill out the surveys and receive the 10\$ incentive for doing so.

Each participant was solicited by the team to participate in the survey via an introductory greeting. Candidates were (1) informed about the needs assessment’s purpose, sponsors, risks and benefits, (2) asked about their residency and age, (3) and if English speaking, 18 years of age, and resident of Somerset County for at least two years. If found to have met the outlined criteria they were asked to participate in the survey and informed of the \$10 Food Lion gift card incentive that they would receive upon their completion. If a candidate verbally agreed to participate, they were provided an institutional review board (IRB) Informed Consent to review and sign before the start of their self-administered survey; the IRB Informed Consent is a summary of the needs assessment including its’ purpose, procedure, risks and confidentiality, benefits, costs (\$10 food lion incentive), IRB assigned number, and information on how to reach the principal investigator for questions, concerns, complaints, or other inquires. Participants were also given a copy of the IRB Informed Consent for them to refer to at their leisure.

Prior to the start of the self-administered survey, participants were provided a pen and clipboard, and were encouraged to ask project team members questions throughout the survey, should they need clarification about a survey item.

If a candidate chose not to participate in the survey, either before or after their review of the IRB Informed Consent, they were given the location and timeframe for future needs assessments, should they change their decision.

If a candidate was found ineligible to participate in the needs assessment they were then given the option of sharing their contact information so that they could be notified of future studies that they could participate in if they qualified at that time.

Completed surveys, and signed IRB Consent Forms were kept separately in labeled envelopes, which were securely kept to protect the identity of the participants.

Upon completion of the survey, the participants' names were written on a log sheet to keep track of the participants' receipt of the \$10 Food Lion Gift Card incentive.

Secondary Population (Part 2) – Interviewer Structured Questionnaire

Recruitment of the secondary sample population of 6 (goal of 20) was randomly administered to persons who were at least 18 years of age and were involved in the community either through employment, residence, or organizational affiliation. Each participant was contacted via phone by a project team member and requested to participate in the survey. After participants were found to have met the outlined criteria, they were requested to give their consent to participate. The Informed Consent was given verbally by the participant before the start of the structured phone interview.

Advantages and Disadvantages of Interviewer Structured Questionnaire

Advantages of interviewer structured questionnaire include increased response rate to questions, clarity in questions asked so that the intended response is received, standardization due to the fact that all participants were asked the questions in the same manner therefore increasing standardization.²⁸

Limitations of interviewer structured questionnaires include interviewer bias, reduced honesty from participants potentially due to the fact that information will be shared verbally with another person rather than anonymously in a self-administered survey, and duration. Because these were loosely structured interviews, participants may deviate from the survey to hold a conversation with the interviewer.

Measurement

The self-administered survey was comprised of 94 questions, and included the following sections; Demographics, Environmental Influencers, Health Behavior, Health Status, Health Priorities, and Perceived Barriers to Care. A majority of the survey used questions from the Behavior and Risk Factor Surveillance System (BRFSS) where applicable. Overall, each section attempted to create a personal profile of each participant. The personal profile assisted with qualitatively assessing their needs, the needs of their family, and their perceived outlook on the needs of the Somerset Community as a whole. Collecting information on the participants needs sought to uncover barriers and limitations, as well as strengths and opportunities within existing

healthcare initiatives. Collecting information on the needs of the participant's family's assisted with retrieving data on people that we have not directly reached through survey solicitation. In addition, understanding the needs of the participants' family's also provided insight to any burdens that the participant may be facing as a caregiver. How an individual views their community is equally important as it supports validity that what each participant has reported on themselves and their family, is not only true at the individual level, but perhaps on the community level as well.

Demographics

The Demographic section of the survey included questions that were specific to the individual survey participant and included variables such as age, gender, ethnicity, marital status, sexual orientation, education level, employment level, employment status and type, income source and amount, health insurance status and type, home ownership, number in household younger than and older than age 18 weight and height, city name where they currently reside, and geographical prevalence (months and years in Somerset County). The variables used in this section were a mixture of multiple choice and written responses (age, geographical prevalence, city name, health insurance type, and age). This section facilitated the identification of those in the community that are in most need of assistance and those in the community that are thriving.

Social and Environmental Factors

A person's experience in specific situations or events can influence their health behavior. The specific variables used to identify environmental influencers include experience based on race and/or ethnicity, experience or knowledge concerning health-focused organizations, and experience or needs regarding previous arrest records or incarceration. This section used a combination of multiple choice and open ended. Other examples of environmental influence include support such as from family and friends (social), health care provider and health department (professional), and marketing initiatives such as magazines, television, the internet, or videos (media). These variables are also a major contributor to health behavior.

Health Behavior

A person's health behaviors can contribute to their overall health status or other defined conditions or diseases. Examples of health behavior include but are not limited to smoking habits, receipt of vaccinations or standard health tests and exams, frequency of exercise and consumption of fruits and vegetables, and the use of health services (frequency and type).

These variables will assist to predict if and how certain health behaviors have influence the health status of the members of the community.

Health Status

Participants in the self-administered survey were asked about the health status of themselves and their family, and their perceived outlook of the health status of the community. The following variables were used to assess the participant's health status; diagnosis of disease and/or disorder, disability (physical and mental), mood, and injuries. Similarly, diagnosis and disability were variables associated with the collection of family health; other variables included the status of health insurance and frequency of use of healthcare programs in Somerset County. Questions concerning the health status of the community were congruent with that of the family. Overall, these variables identify the health issues that are relevant in the community.

Health Priorities

The priorities of the survey participants are critical in analysis. Although the collection of demographics, environmental influencers, various health behaviors and status tell the story of the health issues for that particular, this information does not explicitly indicate whether those individually reported issues are important to community as a whole. With any community-based intervention, regardless of how well planned and implemented, if it is not accepted by the target population on a large scale, it has potential to fail. By gathering data on the health priority of the individual participants and the community as a whole, we can try to communicate and convey which priorities exist and why. Examples of variables used to identify health priorities include chronic illness treatment, exercising, and eating properly.

Perceived Barriers to Care for Self, Family, and Community

Survey participants were asked what they perceived as barriers to themselves and in the community. The variables used to measure the barriers were transportation, medical/physician experience, and financial means. Identifying and understanding the perceived barriers will help to align the overall needs of the individuals and community, as well as support the identified health priorities.

Data Analysis

The statistical software used to analyze the data was SPSS version 22. Descriptive analyses and bivariate analyses (chi squared tests) were conducted to analyze the data.

NEEDS ASSESSMENT: SUMMARY OF SURVEY RESULTS

RESULTS

Recruitment

In an effort to select a sample that was representative of the overall Somerset County population, residents were recruited from many different locations around the county. The largest number of surveys came from the Crossroad's International Church- Food Pantry (22%), and the Food Lion locations in Princess Anne (13%) and Crisfield (17%). See Table 1.

Demographics

After administering the needs assessment surveys, collecting the data and analyzing it, we were able to characterize our sample through demographic data. There were a total of N = 153 individuals who completed the survey in its entirety. See Table 10.

Gender and Sexual Orientation

The majority of responders were women (61%) while men represented 36% of the sample. When asked about sexual orientation the majority of respondents reported being heterosexual (87%).

Age

The average age for the surveyed residents was 46.1 and the majority of responders were between the ages of 45 and 64 (41.8%), with the smallest portion of responders being aged 65 or older (11%).

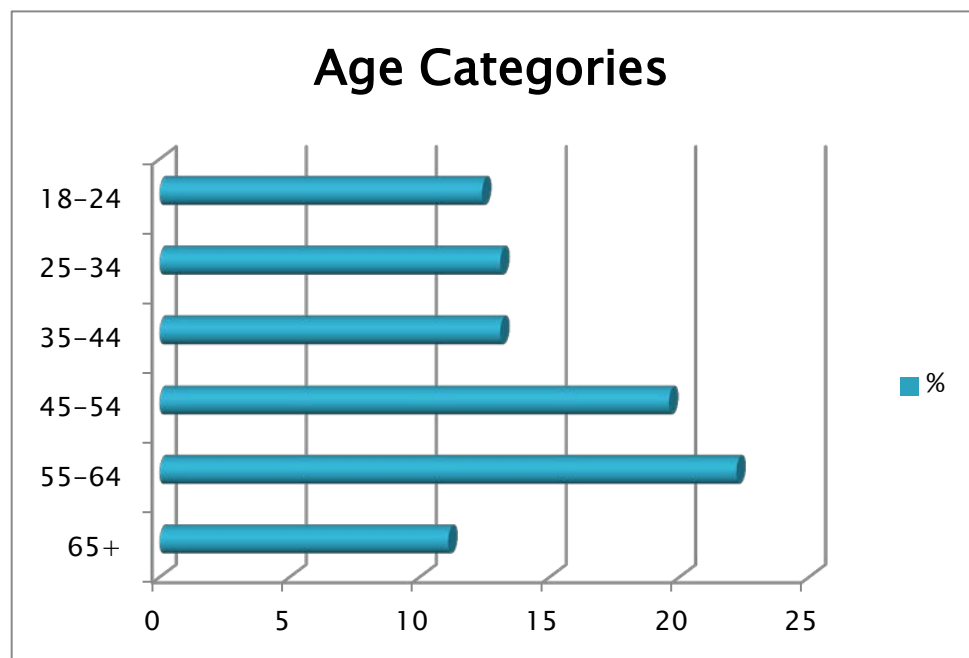


Figure 1. Age by Category

Race and Ethnicity

In terms of race and ethnicity the majority surveyed were White or Caucasian 62% while Blacks or African Americans made up 31.4% and Native Americans/American Indians made up less than 3%. Two percent (3) of respondents reported Hispanic ethnicity.

Education, Employment, and Income

The majority of county residents reported their educational status as having at least a high school diploma (41%) while others reported some post-secondary education or training (26%). While most of the respondents reported being employed (38%) with about 14 % reporting self-employment, the unemployed made up 14 % of survey responders. Furthermore, there were also residents reporting retirement status (11%) as well the inability to work (16%).

The majority of annual household incomes were either less than \$5,000 per year (20.9%) or between \$25,000 to \$49,999 (19%).

Additionally, there was almost an even split between the residents who rented and those who owned their homes. The majority of residents rented (41%) or owned (39%) their homes, while others managed with alternative arrangements (16%). The majority of the respondents lived in the cities of Crisfield (42%) and Princess Anne (30.5%). The median time as a Somerset County resident was 27.64 years (SD = 21.51) taken from the responses of 130 respondents.

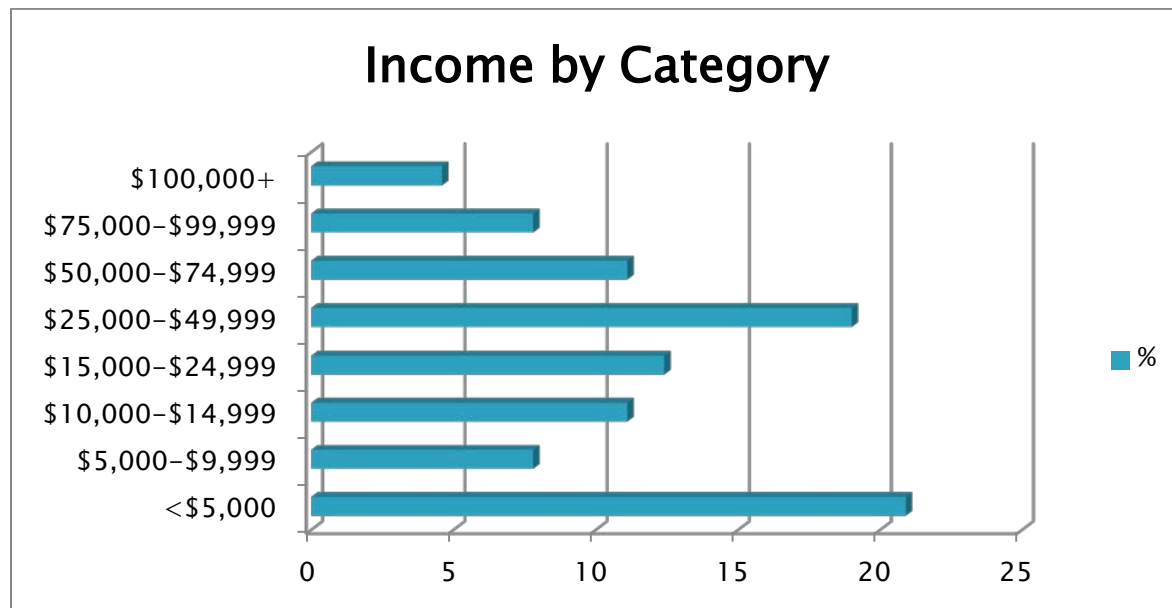


Figure 2. Income by Category

Marital status

When considering marital status the majority of the responders were married (37%); followed by 27% single, 12% divorced, 9% widowed, and 9% separated, and 6% cohabitating.

Household Members

Most households had either one or two children (22%) and (15%) respectively. There were typically two adults per household (35%), and in many cases only one adult in the home (27%).

Ratings of General Health

General Health (see complete data in appendices Table 11)

Respondents were asked to rate their general health ranging from poor to excellent, 67% of participants rated their health in general as good or better. However, 31.4% reported at least one physical limitation.

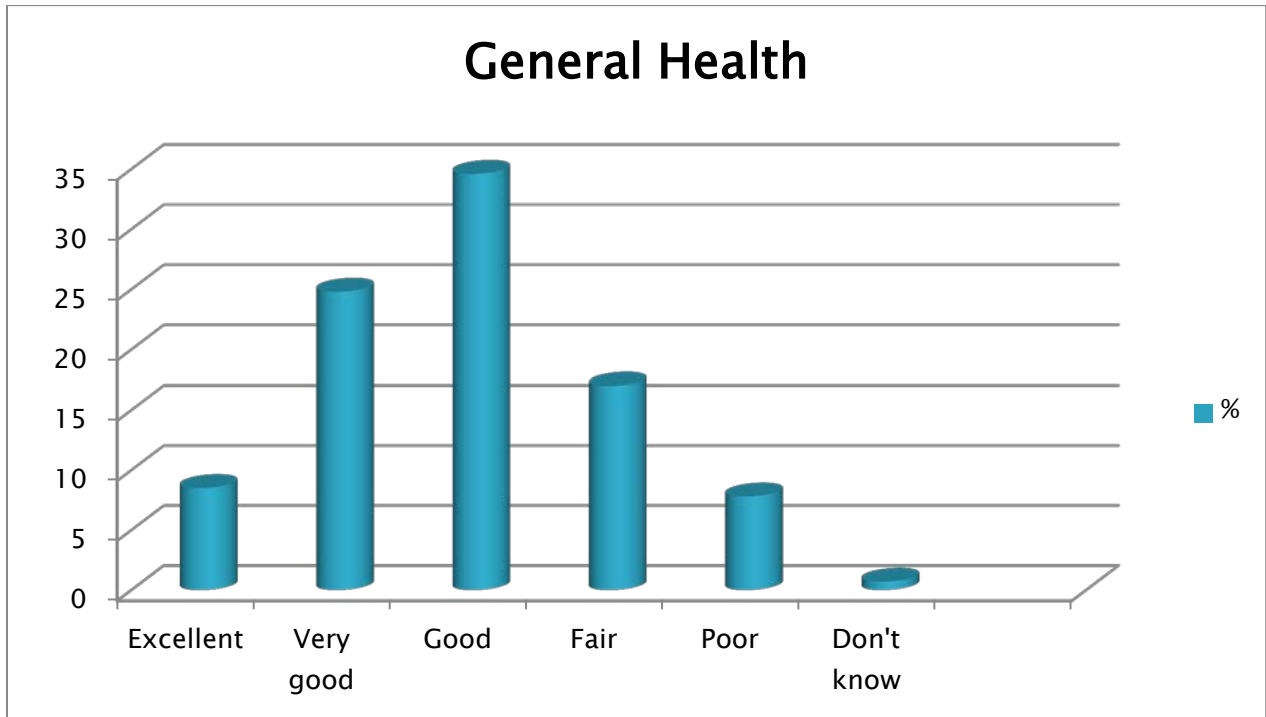


Figure 3: Self-reported General Health Status

Health and Risk Behaviors

Health Behaviors (see complete data in appendices, Table 12)

Exercise

Thirty-two percent of respondents report exercising three or more days per week. Additionally, 28.1% reported exercising for a duration of 30 minutes each time they exercised. A good proportion (17%) however, report exercising for less than 0-5 minutes per day.

Weight

When participants were asked if they believed they were a healthy weight, 48.4% of respondents reported yes, while 43.1% reported that they were not. When Body Mass Index (BMI) was calculated from self-reported height and weight, 22.9% were found to be overweight and 34.6% obese. Interestingly, when these data were probed further it was found that 65.7% of those who were found to be overweight and 19.2% of those who were found to be obese perceived their weight as healthy.

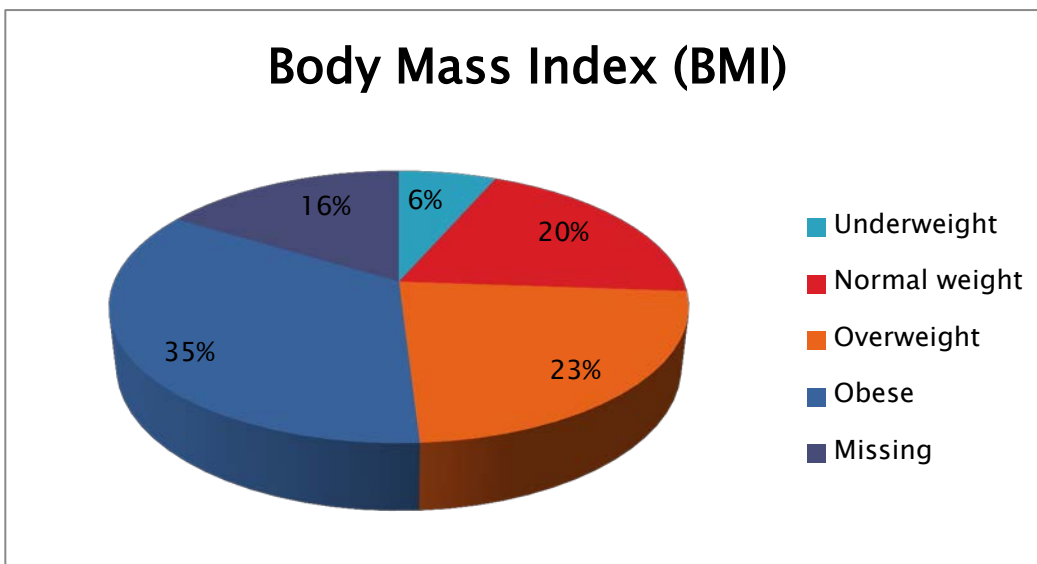


Figure 4. Body Mass Index

Smoking

A series of questions were included about smoking habits and smoking history. Thirty-two percent of respondents report being current smokers, 60.8% had smoked at one time, and 45% had reportedly smoked more than 100 cigarettes in their lifetime.

Seatbelt Use

Over 80% of respondents reported “always” or “nearly always” using a seatbelt when in a moving vehicle.

Flu Vaccine

Only 41.8% of respondents reported getting a flu vaccine in the previous 12 months.

HIV Testing

Almost 53% of participants reported having received an HIV test in the previous five years.

Cancer Screenings

Participants were asked about cancer screenings. With regards to a colorectal exam and/or a colonoscopy, 22.2% and 34.6% respectively reported having received those procedures. Women were asked about mammograms and cervical exams, and 35.3% and 45.1% respectively reported those procedures. Men were similarly asked about prostate exams and receipt of the Prostate specific antigen test (PSA) and only 15.7% and 12.4% of men, respectively, reported having received those examinations.

Individual Personal Life and Health Priorities

Characteristics of Family Life (see complete data in appendices)

Participants were asked to rate the frequency of the occurrence of specific worries or concerns using the response options: all the time, most of the time, some of the time, a little of the time, and none of the time. The following percentage of respondents reported the following worries or concerns occurring “all” or “most the time”; money (52.2%), making housing payments (35.9%), affording nutritious meals (26.8%), and medication costs (23.5%). (See complete data in Appendix 1).

Additionally, participants were asked to note the frequency that cost prevented care or concerns with affording care. Twenty percent of respondents report that cost prevented health care all or most of the time. Similarly, 29.4% reported that cost prevented receipt of dental services all or most of the time and 18.9% reported that cost affected their ability to obtain medications.

Cost also prevented care for at least one family member with respondents reporting all or most of the time that cost prevented health care (17%), dental care (18.9), and medications (15.1%) for a family member.

Self-report of personal health problems and priorities (see complete data in appendices)

County residents were asked a series of questions to better understand the perception of their health compared to others, the availability of relevant services to fit their needs, and access to those services. These data reflect those that report that they “Strongly Agree” or “Agree” to the following health problems. Thirty-nine percent of respondents reported their health was worse than others. Most thought that there were services available to help them address their needs (36.6%) and that the health department services were relevant to their needs (37.3%). Most also agreed that they had access to needed programs (41.2% vs. 17.6% who did not agree). Lastly, 21.6% of respondents report having unique health needs.

Additionally, we asked respondents to rate their personal health priorities. These data reflect those that report that they “Strongly Agree” or “Agree” to the following health priorities. Forty-seven percent of participants reported that weight was a personal health priority. Additionally, most respondents also rated physical activity (45.7%) as a priority.

Table 1. Self-reported Health Priority	%
Weight (Overweight/Obesity)	47.7
Physical Activity	45.7
Eating properly	41.9
Oral Health (Mouth or teeth)	33.3
Cardiovascular disease/Diabetes	30.7
Mental health	29.4
Cancer prevention/treatment	26.2
Sexual and reproductive health	25.5
Injuries	25.4
Smoking Cessation	24.2
Asthma/Respiratory Problems	24.2
Drug use/abuse	18.3
Sexually transmitted disease (chlamydia, gonorrhea, hepatitis, HIV/AIDS, HPV, syphilis, herpes, other)	17.7

Physical and Mental Health

Survey participants were also asked to consider the time during the past 30 day that included various physical and mental symptoms. These data reflect those that report that they “Strongly Agree” or “Agree” to the following symptoms: pain which prevents usual activities (20.3%), worried or tense (19.6%), and healthy/energetic (21.6% vs. 25.5% which reported little to none of the time feeling healthy/energetic).

Table 2. Physical & Mental Health Previous 30 days	%
<i>DURING THE PAST 30 DAYS, HOW OFTEN DID YOU FEEL...</i>	
Pain that made it hard for you to do your usual activities	20.3
Sad, blue, or depressed?	13.7
Worried, tense, or anxious?	19.6
Very healthy and full of energy?”	21.6
<i>ABOUT HOW OFTEN DURING THE PAST 30 DAYS DID YOU FEEL ...</i>	
Nervous?	15.7
Hopeless?	11.1
Restless or fidget?	13.7
So depressed that nothing could cheer you up?	7.8
Everything was an effort?	11.8
Worthless?	10.5
A mental health condition or emotional problem keep you from work or other usual activities?	7.8

Health Concerns and Priorities (see complete data in appendices)

From a prepopulated list, we asked respondents to acknowledge the health conditions and/or disease that they had been diagnosed with. Forty-one percent of the population reported being hypertensive (i.e., having high blood pressure). Additionally, allergies (26.8%), anxiety (24.2%), pain (23.5%), headaches/migraines (22.9%), high cholesterol (22.9%), and stress (22.2) were among the most reported conditions and/or diseases.

Table 3. Percentage of the Sample with a Chronic disease or condition

	#	%
High Blood Pressure	63	41.2
Allergies	41	26.8
Anxiety	37	24.2
Pain	36	23.5
Headaches/Migraines	35	22.9
High Cholesterol	35	22.9
Stress	34	22.2
Arthritis	29	19.0
Diabetes (Sugar)	28	18.3
Depression	27	17.6
Asthma/Bronchitis/Emphysema	24	15.7
Thyroid Disease	16	10.5
Heart Disease/Heart Attack/Heart Failure	13	8.5
Alcoholism/Drinking/Drug Abuse	12	7.8
Mental Illness	10	6.5
Gout	9	5.9
Cancer	7	4.6
Gastrointestinal Disease	7	4.6
Stroke	6	3.9
Kidney Disease	5	3.3
Sexual Problems	5	3.3
Vascular Disease	4	2.6
Epilepsy/Seizures	3	2.0
Prostate Problems	3	2.0
Glaucoma	2	1.3
Autoimmune Disease	1	.7
HIV/Aids	1	.7
Developmental Disabilities	-	-

Barriers to Care (see complete data in appendices)

Somerset County residents were asked to acknowledge personal barriers that they experienced in obtaining health care. These data reflect those that report that they “Strongly Agree” or “Agree” to the following: Transportation (30%), Insurance Status (25.5%), Employment challenges (26.1%), Child care (19.6), Awareness of Available services (24.2%), Mistrust of Programs and Services (18.3%), Language/Translation concerns (9.8%), and Culturally competent programs (10.4%).

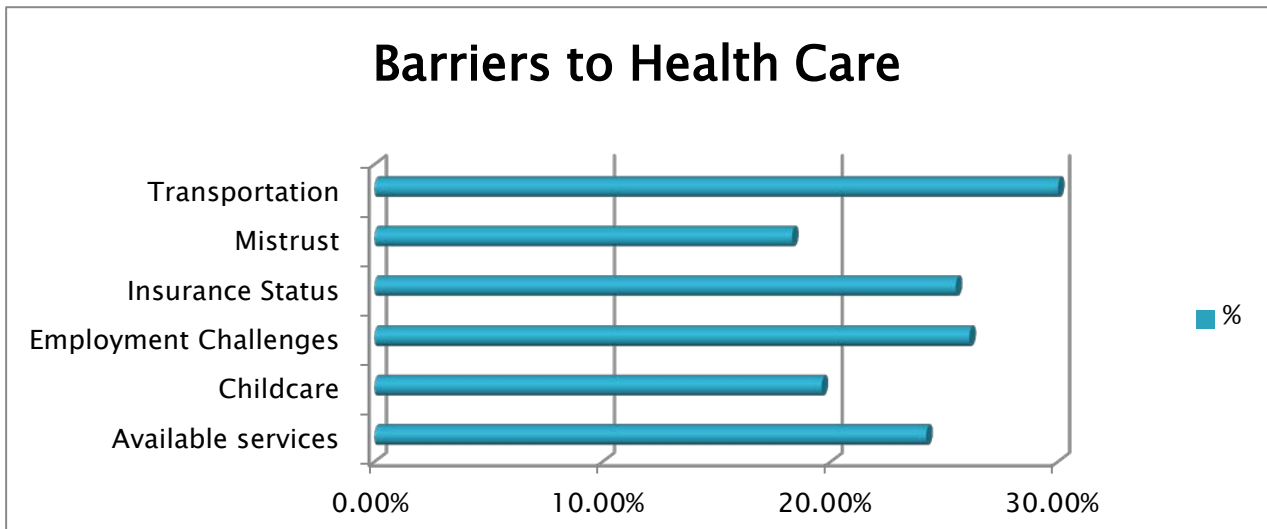


Figure 5. Barriers to Health Care

Health Information Seeking and Program Interest

Health Information Seeking Sources (see complete data in appendices)

To better understand where residents typically seek and receive health-related information we asked about specific modalities. Most respondents report receiving information about health related issues from their healthcare provider (47.7%). Other sources include the internet (32.7%), television (22.2%), brochures (19.6), and a family member or friend (17.6).

Table 4. Health Information Seeking Sources

	#	%
Healthcare provider	73	47.7
Internet	50	32.7
Television	34	22.2
Brochures	30	19.6
Family or Friend	27	17.6
Health Department	20	13.1
Health Magazines	18	11.8
Newspapers	17	11.1
Classes	5	3.3
Videos	4	2.6
Other Sources	Insurance company	1
(open answer)	School nurse	2

Program/Service Interest (see complete data in appendices)

To better understand the need and interest for services available in the county, the survey asked a series of questions regarding interest in services of various types and content. The most popular potential services included exercise programs (38.6%), dental services (38.6%), and weight loss programs (35.9%)

Table 5. Services that respondent would be interested in if available

	#	%
Exercise Programs	59	38.6
Dental services	59	38.6
Weight loss Programs	55	35.9
Financial Planning	38	24.8
Healthy Eating Cooking Classes	38	24.8
Diabetes (Sugar) Monitoring	32	20.9
Mental Health Counseling	28	18.3
Family Counseling	23	15.0
Cancer screening and education classes	19	12.4
Family Planning	17	11.1

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Marriage/Couples Counseling	16	10.5
Primary Care Services (Visit with nurse of doctor)	15	9.8
Chronic Disease Support Groups	13	8.5
Alcoholism/Drug Abuse Counseling	10	6.5

Perceptions of the Overall Counties' Health Problems, Priorities, & Barriers to Health Care

Somerset County Health Problems, Priorities, and Barriers (see complete data in appendices)

A series of questions were asked to assess what participants perceived to be the health problems of county residents in general. Respondents were also asked to consider the health of their county and its residents in comparison with others. These data reflect those that report that they “Strongly Agree” or “Agree” to the following health problems. Thirty-six percent of respondents reported that Somerset County’s resident’s health was worse than others. Most thought that there were services available to help Somerset County’s residents address their needs (31.3%), and that the health department services were relevant to Somerset County’s resident’s needs (33.3%). Thirty-one percent agreed that residents have access to needed programs (vs. 26.8% who did not agree). Lastly, 34.0% of respondents reported that Somerset County’s resident’s had unique health needs.

County health priorities were also considered. These data reflect those that “Strongly Agree” or “Agree” to the following health priorities. Fifty-seven percent of participants reported that weight was a county-wide health priority. Additionally, cardiovascular disease (53.0%), physical activity (52.9%), and drug use/abuse (50.9) were rated as county priorities.

Table 6. Perceptions of Overall County Health Priorities	%
Weight (Overweight/Obesity)	57.7
Cardiovascular disease/Diabetes	53.0
Physical Activity	52.9
Eating properly	51.0
Drug use/abuse	50.9
Smoking Cessation	48.4
Oral Health	47.1
Cancer prevention/treatment	47.1
Mental health	43.8
Asthma/Respiratory Problems	43.2
Sexually transmitted disease	41.9
Injuries	41.9
Sexual and reproductive health	32.0

Perceptions of barriers to obtaining health care were also assessed at the community level. Somerset County residents were asked what barriers exist for most residents in obtaining health care. These data reflect those that report that they “Strongly Agree” or “Agree” to the

following: Transportation (54.3%), Insurance Status (52.3%), Employment challenges (53.0%), Child care (46.4), Awareness of Available services (45.7%), Mistrust of Programs and Services (37.2%), Language/Translation concerns (30.7%), and Culturally competent programs (31.4%).

Race and Health Care, Incarceration and Reentry, and Community Engagement

Race and Healthcare (see complete data in appendices)

The survey also assessed racial issues and concerns of Somerset County residents. A series of questions were asked that assessed race and health, perceptions of treatment based on race, representativeness of various ethnicities in the healthcare workforce, and race among health care providers. Ten percent felt that their healthcare-related experience were worse than people of other races, 73.2% percent thought they were the same, and 9.8% thought they were better. Sixteen percent reported feeling upset as a result of differential treatment they perceived to be due to their race. Thirty-four percent reported they their race was not represented among the community organizations in the county. Lastly, 20% report that more providers of their same race would make them more comfortable sharing health-related information.

Incarceration and Reentry (see complete data in appendices)

The survey assessed issue surrounding incarceration and reentry. A series of questions were asked that assessed the experience of county residents in obtaining or accessing resources due to issues related to incarceration and arrest records. Sixteen percent report they themselves or someone in their household had been incarcerated or arrested in the previous seven years. Almost 5% will have someone returning to their home from being incarcerated in the next five years. Additionally, almost 4% reported than an arrest record or felony has prevented them from obtaining employment and from obtaining other basic necessities including housing or training. Lastly it was found that only 14% of participants reported being aware of county services available to offer assistance to someone reentering the community after being incarcerated.

Community Engagement (see complete data in appendices)

A series of questions were asked to assess the level of awareness of community engagement in the county. There appears to be little awareness of health-related efforts by community organizations.

Results: Secondary Analyses

In order to better understand the role that income and race have on the findings, we conducted several bivariate analyses.

First, we looked at the income category by general health status, and determined that participants reporting an income in the lowest tier (<5,000-9,999) were more likely to report fair or poor health compared to higher income groups ($X^2 = 33.143$ $p < .01$).

Next, we look at general health status by racial group. The racial groups did not differ significantly on reports of general health status ($X^2 = 14.86$ $p > .05$).

Lastly, we looked at income by race to determine if income was a better indicator of social factors than race. The data supports that Whites were more likely to earn incomes over \$50,000 ($X^2 = 13.52$ $p < .05$).

NEEDS ASSESSMENT: SUMMARY OF COMMUNITY STRUCTURED INTERVIEWS

Community Structured Interviews

Stakeholders Assessment

After conducting six interviews of several Somerset County stakeholders, a diverse set of information was gathered and analyzed thematically. Beginning with the demographics of the community stakeholders, fifty percent were health care professionals (3) and fifty percent were self-identified community leaders (3). The ages ranged between 50–59 years of age,. These stakeholders had years of experience in their specific fields of study. Four out of the six stakeholders were Somerset County residents, with a medium household income of 50,000–99,999 dollars a year. Five out of six stakeholders identified as female and all identified as heterosexual or straight. In addition, all stakeholders identified themselves as White or Black/African American, and none of them considered themselves to be Latino.

Organization's Health Participation

Stakeholders were asked a series a questions that assessed their personal and organizational involvement in improving the health of the community in Somerset County. The organizations spent about a 36.6–minute average of their work time per week interacting with Somerset County Residents. Most reported that their organization was involved with health activities, and which health focuses they targeted. The most common health services were focused on improving diet and nutrition, programs targeting youth, and programs attempting to increase physical activity among County residents. None of the organizations reported participation in LGBTQ services. Services are prioritized based upon both funding and focus of the organization, and therefore vary across organization and survey respondent. On average, about 25–30 percent of the community participates in health related programs; however, this does not reflect reported accessibility (location) or reach.

Most organizations share their health information through social media sites, faith-based programs, and brochures. Over 85% reported to have Facebook pages.

Although these organizations try to target younger audiences, mostly women and older residents participate.

Somerset County Health

When asked various questions regarding the health of Somerset County residents, participating stakeholders were presented a Likert Scale to report each response. Participants were asked if the health of Somerset County residents is worse than that of other counties

residents; most chose the range of agree to strongly agree. There was one outlier who strongly disagreed. When asked if the health services are adequate and reflected the community need, four of the six disagree to strongly disagree with the statement. Oral health and smoking were two of the top health priorities with transportation and awareness as the leading reasons why people did not attend.

The interviewees were also asked some open-ended questions that focused on their personal thoughts and abilities to impact health. The participating stakeholders considered themselves to be leaders or advocates for the county who are able to negotiate with other leaders and community stakeholders. Also, most believed that more interdisciplinary contributions would aid in tackling overall health issues. When asked about challenges that are faced by the organizations approach to health dissemination, the lack of trust and knowledge about healthcare was a consistent answer. On the other hand, even when Somerset County residents expressed interest in receiving the various health services, barriers such as transportation and reach seemed to be an issue. Most participants vocalized that they wished they could better understand what the County needs were. To combat this, outreach and education programs are being administered to increase health concern amongst Somerset County Residents.

COMPARISON WITH CENSUS DATA - COUNTY AND STATEWIDE

Comparison with County and Statewide Census Data

We compared the current needs assessment demographic data with census data to assess our sampling and recruitment strategies. In general this sample was similar to the most recent census data with several notable deviations. Compared to the most recent census data our sample were a more educated (85.7% vs. 79.6%) with a high school diploma or higher and with a bachelor's degree or higher (20.6% vs. 14.2%). This sample had a lower number of Black/African American residents (35.9% vs. 42.8%) and a higher number of White residents (61.2% vs. 53.8%) compared to the most recent census data. With regard to the income data we collected this information differently, using categories vs. a specific dollar amount. These data were bimodal where we observed the highest income categories as < \$5,000 or between \$25,000- \$49,999, 22.1% and 20% respectively, compared to a median income of \$38,447 according to the census. From these comparisons we can make assumptions about the recruitment strategy and approach and also identify areas to focus on in the future.

Table 7. Comparison with census data – County and Statewide

Category	2014 Somerset Needs Assessment	Most Recent Census Data for Somerset	Most Recent Data for Maryland
Population, 2013 Estimate	---	26,273	5,928,814
Average Age			
Male	35.9% (37.2%)		
Female	60.8% (62.8%)		
Education (persons 25+)			
High School Graduate or Higher	85.3 (87.7%)	79.6%	88.7%
Bachelor's Degree or Higher	20.3% (20.6%)	14.2%	36.8%
Race			
White	41.8% (61.2%)	53.8%	60.5%
Black or African American	24.2% (35.9%)	42.8%	30.1%
American Indian/Alaskan Native	0%	0.4%	0.6%
Asian (alone)	0%	0.9%	6.1%
Native Hawaiian/Pacific Islander	.7% (1.0%)	-	0.1%
Hispanic/Latino	(2.1%)	3.8%	9.0%
Home Ownership Rate			
Renters	39.9%		
Income	See text	\$38, 447 ^a	\$73, 538 ^a
Persons Below Poverty Level	See text	23.4% ^b	9.8% ^b
Persons Per Household		2.29	2.65

^aMedian household income, 2009-2013

^b2009-2013

Note: Figures in parentheses reflect cumulative percentage (i.e., omitting missing values)

COMPARISON WITH PREVIOUS NEEDS ASSESSMENT

Comparison with Previous Needs Assessment

We compared the current needs assessment with the previous 2009 version to assess changes and gaps and compare sample characteristics. There were some notable differences. Transportation and employment challenges emerged as the biggest barriers to health care, versus insurance and affordable health care in previous years. Additionally, childcare emerged as a significant barrier. The general health ratings were considerably lower than the 2009 Tri-County rating (33.3% vs. 58.3%) for those report “excellent” vs. “very good”. One of the most striking differences is in the number of days per month in poor health. The number of days increased from 4.8 to 12.05. Similarly, the amount of time in good mental health decreased markedly from 83.4% to 21.6%. Anxiety about house related finances also increased to 35.9% from 26.2%. The percentage of the sample that reported being current smokers increased dramatically from 21.9% to 32.0%. And a much lower percent of the population reported alcoholism/binge drinking which decreased to 7.8% from 20.9%. Also notable is that fewer people reported having a regular physician or site for medical care (93.7% vs. 71.1%). Additionally, lack of insurance increased from 9.5% to 13.1%.

Table 8. Comparison with previous needs assessment

Health Indicator		Somerset County (2014)	Somerset County (2009)	Tri-County Area (2009)	US	HP 2020
Perceived Number One Barrier to Health Care	Transportation	30.0%	Insurance	21%	15.7	-
	Employment Challenges	26.1%	Affordable Healthcare	16.4%	15.6	-
	Insurance Status	25.5%	Available Physicians/ Services	11.4%	15.4	-
	Available services	24.2%	Poor Quality of Care	4.4%	4.5	-
	Childcare	19.6%	Behavioral Health Risks	2.6%	2.7	-

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(Q22) Overall Health Status/ Self-Reported Health Status “Would you say that in general your health is excellent, very good, good, fair or poor?”	Mistrust	18.3%	Uncertain	27.1%	26.2		
		8.5%			6/10		
	Excellent				58.3%	“excellent or very good”	
	Very Good	24.8%					
	Good	34.6%					
	Fair	17.0%		26.1%	16.2%		17.4%
Poor	7.8%		(highest of 3 counties)				
(Q 23) Average Days of Poor Physical Health in last month	Days		4.8 days		3.5 days	-	-
	12.05 (SD=10.5)						
Healthy Weight (BMI 18.5-24.9)		23.4%	24.7%	29.3%		32%	60%+
BMI Based Overweight Status		68.7%	73.9%	69.2%		67.4%	
Frequency of Good Mental Health in the Past Month Q74 (Feel very healthy and full of energy)	All or Most Of The Time	21.6%	Most Of The Time	83.4%	86.7%	-	
	Some of the Time	23.5%	Some of the Time	10.7%	8.3%		-
	Little of the Time	11.8%	Little of the Time	5.3%	5.1%		
	None	25.5%	None	1.7%			
(Q55) Anxiety Related to Finances – House Payments		35.9%	Always or usually experienced worry or stress over house payments in	26.2%	19.4%	-	-

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Self-Reported Prevalence of Chronic Illness	High Blood Pressure	41.2	Arthritis	34.3%	-	-
	Allergies	26.8	Sciatica/ Chronic Back Pain	25.0%		
	Anxiety	24.2	Diabetes	19.5%		
	Pain	23.5	Asthma	14.6%		
	Headaches/Migraines	22.9	Skin Cancer	7.7%		
	High Cholesterol	22.9	Deafness/ Trouble Hearing	8.8%		
	Stress	22.2	Chronic Lung Disease	11.9%		
	Arthritis	19.0	Chronic Heart Disease	10.4%		
	Diabetes (Sugar)	18.3	Blindness/ Trouble Seeing	9.0%		
	Depression	17.6	Cancer (other than skin)	7.5%		
	Asthma/Bronchitis/E mphysema	15.7	Kidney Disease	5.2%		
	Thyroid Disease	10.5	Stroke	4.2%		
	Self-Reported Prevalence of Diabetes		18.3%	19.5%	14.3%	11.1%
(Related to Q38) Access to Nutritious Foods	Always or Usually Worried About Affording Nutritious Meals	26.8%		12.9%	7.6%	-
(Related to Q39) Engage in Regular Physical Activity			45.9%	47.2%	-	-
(Related to Q43)		32.0%	21.9%	16.3%	14.1%	

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Cigarette Smoking Prevalence (Related to Q56)	7.8%	20.9%	22.6%	
Alcoholism/Binge Drinking (Related to Q56)	41.2%	45.5%	33.8%	34%
Hypertension (Related to Q56) Self-Reported Prevalence of High Cholesterol	22.9%	44.6%	36.3%	30.5%
Seniors – Flu Vaccinations in the past 5 years (Related to Q33, 34)	Received flu vaccination previous 12 months – all ages	41.8%	1-2 Vaccines	13.1%
			3-4 Vaccines	7.3%
			5+ Vaccines	53.7%
			None	25.9%
Sigmoid or Colonoscopy (age 50+) (Related to Q36, Q37)	34.6%	75.2%	77.5%	64.8%
Mammogram in the past 2 years (age 40+) (Related to Q36)	35.3%	78.3%	84.5%	
Pap Smear (age 18 +) (Related to Q36)	77.5%	74%	80.5%	74.9%
Regular Site for Medical Care (Related to Q46)	77.1%	93.7%	90%	85.1%
“Always” wear a Seatbelt – Motor Vehicle Safety (Related to Q32)	73.2	77.8%	87.9%	83.5%
Health Insurance Coverage (Related to Q9)	79.7%		78.3% (private) 13.3% (govt sponsored)	
Lack of Health Insurance (Related to Q9)	13.1%	9.5%	8.4%	17.7%

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Coverage (18-64)					
(Related to Q77)		20.9%	25.2%	13.9%	
Financial Barriers to Health Care – cost or lack of insurance prevented physician visit in past 2 years					
(Related to Q77) Reason for Difficulty Getting In To See a Physician	Transportation	17%		Scheduling	64.4%
	Getting an Appointment	21%		Inconvenient Hours	12.9%
	Long wait times	15.7%		Difficulty Finding Doctor	7.6%
	Office not open	3.3%		Cost/Insurance	5.8%
	--	--		Uncertain	3.9%
	--	--		Health Concern	2.8%
	--	--		Lack of Transportation	2.5%
(Related to Q55) Not able to access dental care when needed in the past 2 years					
Cost prevented services all or most of the time	29.4%	15.4%	7.9%		
(Q58) Primary Source of Health Care Information	Healthcare provider	47.7%		Family Doctor	46.6%
	Internet	32.7%		Internet	13.1%
	Television	22.2%		Friends/Relatives	9.5%
	Brochures	19.6%		Other	6.9%
	Family or Friend	17.6%		Television	5.4%
	Health Department	13.1%		Uncertain	4.9%
	Health Magazines	11.8%		Work	4.8%
	Newspapers	11.1%		Hospital Pub	2.6%
	Classes	3.3%		Insurance	2.4%
	Videos	2.6%		Books/Magazines	2.2%
	Other	1.3%		Newspaper	1.6%

Bolded Question References refer to questions in the GW Somerset County Needs Assessment Instrument. (2014)

DISCUSSION

The information provided by the needs assessment is to be used to guide further programming, initiatives, and services of the health department for their residents. The data were able to highlight gaps in care and areas to potentially leverage into additional programs, services, and interventions. Overall the recruitment approach was successful in obtaining a representative sample and the community was vocal and in general was eager to share their health experiences. Future efforts should consider ways to increase yield among Black/African American residents and Hispanics.

Next Steps

These data highlight some specific needs of Somerset County Residents. Higher level analyses of the data could further highlight patterns and gaps not evident in these descriptive analyses. A cost-saving approach to this recommendation would be to develop a practicum or internship with a public health student to complete these analyses.

Additionally, focus groups with county residents would offer a more in depth perspective and understanding of some of the results. This would especially be important in the developmental phase of any programming or services that will be developed based on these results.

Recommendations for Future Needs Assessments

One recommendation for future needs assessment projects would be to hire community residents to work on the needs assessment. This would not only promote the county's commitment to its residents but also strengthen the buy-in from residents regarding the purpose/usefulness of the needs assessment and combating any mistrust between local organizations and the community. Similarly, future efforts should consider convening a community advisory board to help plan and organize recruitment. This board could also serve to promote participation to increase yield.

Another recommendation would be to shorten the survey. Anecdotally, one of the biggest complaints of this process was the length of the survey instrument. While each question provided important information to best serve the county, areas to minimize should be explored.

Future needs assessments should also schedule data collection for warmer months. Outdoor recruitment sites offer the most promise, but recruiting during the fall months has

limitations and advantages. Mild temperatures were certainly an advantage but when the temperature turned cooler it appeared to affect participant's likelihood to participate. This is an assumption based on the research team's observations and difficulty recruiting during the colder weather.

When conducting future needs assessments, researchers could assess the feasibility of online surveys, the use of tablets, or other technology for data gathering. The field is moving toward more technological and/or web based survey software which could save both time and money. It can be an affordable option which can be sent out to large number of people quickly, enabling a wealth of data in a short amount of time. Money is saved on physically publishing and distributing questionnaires. In-person methods require manual data entry, which requires time. It is also prone to data entry errors, which are often mitigated by online survey collection. An online platform guarantees more privacy and anonymity to the respondent, compared to in-person recruitment, where the presence of a researcher may increase interviewer response bias or hesitation to participate and reveal private information. The remote web-based recruitment method requires researchers to have access to email addresses and local newsgroups,²⁹ which were not available in this needs assessment. If the goal is to identify members of the community, and to identify their needs, these lists may be useful in increasing reach for future recruitment efforts. However, when a comprehensive list of community members is not available in an underserved or resource-poor community, web based recruitment will undoubtedly miss a crucial segment of the population.

It is also important to note that web-based recruitment requires access to computers, to the internet, and all participants must possess the ability to read and understand directions. Clarification on items may not be possible. Surveying in this manner may miss large subsets of the population, who cannot afford computers, cannot read, or do not have internet access. Thus, the data that is acquired through this recruitment method may not be representative of the population. It may over-represent those with more wealth and affluence, or those who experience drastically different barriers to leading healthy lifestyles. This data may be less generalizable. Such is the case in Somerset County where resources are limited for some county residents, as indicated in a meeting with the Department of Health and the McCreedy Foundation. A hybrid approach which could combine the two approaches where tablets and in-person surveys are used in the field to gather data could increase the number of people reached by the research team. The cost of purchasing the necessary technology should be weighed against the cost of personnel time needed for the standard paper/pencil method.

Limitations

Advantages and Disadvantages of Self-Reported Questionnaire

Self-Reported Questionnaires have many advantages, including low cost to administer, increased participant confidence and honesty when providing responses to questions, and stimulation of participant involvement.³⁰

Limitations of a self-reported questionnaire include recall-bias (inability to recall or remember certain occurrences before survey participation), over-reporting, and inaccurate participant interpretation of questions that are different than that of the researcher, therefore providing an inaccurate response and introducing research bias.³⁰

Recruitment

There were limitations associated with the selection of residents to complete the needs assessment. Respondents were self-selected and the locations we chose limited us to only reaching individuals who visited those establishments during the recruitment events. Another limitation of the potential for the effects of social desirability in respondents reply in a manner they believe is wanted or expected. Conversely there is also the potential for inaccurate reporting due to mistrust of the process and project team. In an effort to avoid tailored answers, caution was taken during data collection to ensure that the residents knew their responses were going to be completely confidential.

Conclusion

The data highlighted gaps in care and identified areas to potentially leverage into additional programs, services, and interventions. This report also summarizes a new recruitment approach for the county needs assessment. Overall the recruitment approach was successful in obtaining a representative sample. One of the most striking characteristics of the sample is the income variations, where the majority of sample either reported incomes below \$5000 or over \$25,000. This income variation should be considered in the planning and implementation of services and programs. Research supports tailoring efforts to the specific social determinants of health facilitating or impeding health behaviors in a community.

Additionally, future efforts should consider ways to increase yield among Black/African American and Hispanics residents. Lastly, it is the recommendation of the team that future efforts incorporate more of the community in the planning and execution of the needs assessment.

REFERENCES

1. Maryland Government, *Local Government: Counties*. Retrieved from Maryland State Archives: <http://msa.maryland.gov/msa/mdmanual/01glance/html/county.html>. 2014.
2. Somerset County Commissioners, *Somerset County Maryland*. Retrieved from Somerset County Commissioners: <http://www.somersetmd.us/>. 2014.
3. United States Census Bureau, *State and County QuickFacts: Somerset County, Maryland*. Retrieved from United States Census Bureau: <http://quickfacts.census.gov/qfd/states/24/24039.html>. 2013.
4. County Health Rankings, *Somerset Additional Measures*. Retrieved from County Health Rankings: <http://www.countyhealthrankings.org/app/maryland/2014/rankings/somerset/county/outcomes/overall/additional>. 2014.
5. County Health Rankings, *Somerset County Snapshot*. Retrieved from County Health Rankings: <http://www.countyhealthrankings.org/app/maryland/2014/rankings/somerset/county/outcomes/overall/snapshot>. 2014.
6. Roisum, S., *What makes a place 'rural'? The USDA has an answer*, in *Winsconsin Public Radio*2013.
7. FamilySearch.org, *Somerset County, Maryland*, in *FamilySearch.org*.
8. Maryland Department of Health and Mental Health Hygiene, *Maryland Health Access Assessment Tool - Somerset County Health Profile*, 2013, Maryland Department of Health and Mental Health Hygiene.
9. United States Census Bureau, *American FactFinder Table Generator Somerset County, Maryland*, in *Profile of General Population and Housing Characteristics*2010.
10. United States Census Bureau, *American FactFinder Table Generator*, in *Somerset County, Maryland Income in the Past 12 Months (In 2012 Inflation-Adjusted Dollars)*2008-2012.
11. United States Census Bureau, *American FactFinder Table Generator*, in *Somerset County, Maryland Selected Economic Characteristics*2008-2012.
12. Maryland Department of Health and Mental Health Hygiene, *Somerset County*2012: *Maryland Chartbook of Minority Health and Minority Health Disparities: 3rd Edition*.
13. Institute, U.W.P.H., *Somerset County*, in *County Health Rankings*2014.
14. Bureau, U.S.C. *American FactFinder Table Generator Wicomico County, Maryland*. 2010.
15. Professional Research Consultants, I., *2009 PRC Community Health Assessment*, 2009.
16. DHMH, M. *Maryland Minority Health Disparities Selected Statewide and Somerset County*. 2011 April.
17. Connecticut Hospital Association and Connecticut Association of Directors of Health, *Guidelines for Conducting A Community Health Needs Assessment*. Wallingford: Connecticut Hospital Association. Retrieved from <http://www.cdpd.ca.gov/data/informatics/Documents/CT-cha-chna%20guidelines.pdf>. 2013.
18. Wright, J., R. Williams, and J.R. Wilkinson, *Development and importance of health needs assessment*. *British Medical Journal*, 1998: p. 1310 - 1313.
19. Tilson, H.H., *Benefits of a Community Needs Assessment*. *American Journal of Public Health*, 1988: p. 850 - 851.
20. Oakridge Institute for Science and Education, *Differences Between Qualitative and Quantitative Research Methods*. Retrieved from Oakridge Institute for Science and Education:

- http://www.orau.gov/cdcynergy/soc2web/Content/phase05/phase05_step03_deeper_qualitative_and_quantitative.htm.
21. DeSilets, L.D., *Needs Assessments: An Array of Possibilities* The Journal of Continuing Education in Nursing, 2007: p. 107-102.
 22. Wallerstein, N.B. and B. Duran, *Using Community-Based Participatory Research to address health disparities* Journal of Health Promotion Practice, 2006. 7(3): p. 312-323.
 23. Horowitz, C.R., M. Robinson, and S. Seifer, *Community-Based Participatory Research from the margin to the mainstream: Are researchers prepared?* . Circulation, 2009. 119: p. 2633-2642.
 24. Lennox, N., et al., *Beating the barriers: recruitment of people with intellectual disability to participate in research.* Journal of Intellectual Disability, 2005. 49(4): p. 296-305.
 25. Intitative, L.T.D., *Questionnaires: Advantages and Disadvantages.* Retrieved from Learning Technology Disseminaton Intitative: http://www.icbl.hw.ac.uk/ltdi/cookbook/info_questionnaires/. 1999.
 26. University of Surrey, *The advantages and disadvantages of questionnaires.* Retrieved from Introduction to Research: http://libweb.surrey.ac.uk/library/skills/Introduction%20to%20Research%20and%20Managing%20Information%20Leicester/page_51.htm. 2004.
 27. Research Connections, *Survey Research and Questionnaires.* Retrieved from Child Care & Early Education Research Connections: <http://www.researchconnections.org/childcare/datamethods/survey.jsp#advantages>. 2013.
 28. Trueman, C., *Structured Questionnaires.* Retrieved from History Learning Site: http://www.historylearningsite.co.uk/structured_questionnaires.htm.
 29. Schmidt, W.C., *World-Wide Web survey research: Benefits, potential problems, and solutions* Journal of Behavior Research Methods, Instruments and Computers, 1997. 29(2): p. 274-279.
 30. National Collaborating Centre for Primary Care (UK), *Medicines Adherence: Involving Patients in Decisions About Prescribed Medicines and Supporting Adherence.* 179. 2009.

APPENDIX. 1 Complete Findings

Table 9. Recruitment Location

Recruitment Location	#	%
Bus Depot (Princess Anne)	19	12.4
Food Lion (Princess Anne)	26	17
Food Lion (Crisfield)	20	13.1
Somerset Shoppers Fair	11	7.2
Ashbury United Methodist Church	11	7.2
Gordon's Restaurant	18	11.8
The Beauty Suite Salon	2	1.3
Duck Emporium Beauty Salon	5	3.3
Waterman's Inn	2	1.3
Crossroad's International Church – Food Pantry	34	22.2
Downtown Crisfield – Various Businesses	5	3.3
TOTAL	153	100%

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Table 10. Demographics

	N	M (SD)	
Age	140	46.1 (16.21)	Range (18-85)
Years in Somerset County	130	27.64 (21.51)	
Age Categories		#	%
	18-24	19	12.4 (13.6)
	25-34	20	13.1 (14.3)
	35-44	20	13.1 (14.3)
	45-54	30	19.6 (21.4)
	55-64	34	22.2 (24.3)
	65+	17	11.1 (12.1)
	Missing	13	8.5
Gender			
	Female	93	60.8 (62.8)
	Male	55	35.9 (37.2)
	Missing	5	3.3
Race Categories			
	White	95	61.2
	Black or African American	48	31.4
	Asian	0	0
	Native Hawaiian/Pacific Islander	1	.7
	American Indian/Alaska Native	4	2.6
	Other	-	-
	Missing	5	4.1
Ethnicity			
	Hispanic or Latino	3	2.0 (2.1)
	Not Hispanic or Latino	138	90.2(96.5)
	DK	2	1.3(1.4)
	Missing	10	6.5
Marital status			
	Single	41	26.8 (27.3)
	Married	55	35.9 (36.7)
	Divorced	18	11.8 (12.0)
	Widowed	13	8.5 (8.7)
	Separated	14	9.2 (9.3)
	Cohabiting	9	5.9 (6.0)
	Missing	3	2.0
Education			
	Middle School	5	3.3(3.3)
	Some High School	14	9.2 (9.3)
	High School Graduate	61	39.9 (40.7)

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	Some College/Technical School	39	25.5 (26.0)
	College Graduate	17	11.1 (11.3)
	Graduate School	14	9.2 (9.3)
	Missing	3	2.0
Income			
	<\$5,000	32	20.9 (22.1)
	\$5,000-\$9,999	12	7.8 (8.3)
	\$10,000-\$14,999	17	11.1 (11.7)
	\$15,000-\$24,999	19	12.4 (13.1)
	\$25,000-\$49,999	29	19.0 (20.0)
	\$50,000-\$74,999	17	11.1 (11.7)
	\$75,000-\$99,999	12	7.8 (8.3)
	\$100,000+	7	4.6 (4.8)
	Missing	8	5.2
Employment Status^a			
	Employed	58	37.9
	Self-Employed	21	13.7
	Unemployed	21	13.7
	Out of work < 1 year	8	5.2
	Homemaker	8	5.2
	Student	9	5.9
	Retired	17	11.1
	Unable to work	24	15.7
Sexual Orientation			
	Heterosexual	133	86.9 (90.5)
	Gay/Lesbian	2	1.3 (1.4)
	Bisexual	6	3.9 (4.1)
	Prefer not to say	6	3.9 (4.1)
	Missing	6	3.9
Children in Household			
	1	33	21.6 (73.2)
	2	23	15.0 (16.2)
	3	11	7.2 (7.7)
	4	3	2.0 (2.1)
	5	1	.7(1.0)
	Missing	11	7.2
Adults in Household			
	1	41	26.8 (29.5)
	2	53	34.6 (38.1)

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	3	20	13.1 (14.4)
	4	3	2.0 (2.2)
	5	2	1.3 (1.4)
	Missing	14	9.2
Housing Status			
	Own	60	39.2 (40.5)
	Rent	61	39.9 (41.2)
	Other	25	16.3 (16.9)
	DK	2	1.3 (1.4)
	Missing	5	3.3
Insurance Status			
	Insured	122	79.7
	Not Insured	20	13.1
	Missing	11	7.2
Years in Somerset County	N	M (sd)	
	130	27.64 (21.51)	
City			
	Crisfield	55	35.9 (42.0)
	Princess Anne	40	26.1 (30.5)
	Deal Island	14	9.2 (10.7)
	Marion	12	7.8 (9.2)
	Westover	4	2.6 (3.1)
	Freetown	2	1.3 (1.5)
	Wimico	1	.7 (.8)
	Dames Quarter	1	.7 (.8)
	Missing	3	15.1

^Anote more than one option can be selected

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Table 11. General Health

	N	M (SD)	
Weight	137	181.12 (72.2)	
General Health		#	%
	Excellent	13	8.5
	Very good	38	24.8
	Good	53	34.6
	Fair	26	17.0
	Poor	12	7.8
	Don't know	1	.7
	Missing	10	6.5
Regular Physician	Yes	118	77.1
	No	23	15.0
	DK	1	.7
	Missing	11	7.2
BMI (Body Mass Index)			
	Underweight	10	6.5 (7.8)
	Normal	30	19.6 (23.4)
	Overweight	35	22.9 (27.3)
	Obese	53	34.6 (41.4)
	Missing	25	16.3 (--)
Physical Health Not Good			
	Yes	59	38.6 (59.6)
	No	40	26.1 (40.4)
	Missing	54	35.3
Mental Health Not Good			
	Yes	69	45.1
	No	-	-
	Missing	84	54.9
Any Physical Limitation			
	Yes	48	31.4
	No	92	60.1
	Missing	13	8.5
Any Visual Impairment			
	Yes	22	14.4
	No	121	79.1
	Missing	10	6.5

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Limitations that impact daily activities			
	Yes	14	9.2
	No	128	83.7
	Missing	11	7.2

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Table 12. Health Behaviors

	M (SD)	#	%
# Exercise days per week			
	None	16	10.5
	One	19	12.4
	Two	25	16.3
	Three	22	14.4
	Four	6	3.9
	Five+	21	13.7
	Dk	9	5.9
	Missing	35	22.9
# Exercise minutes per day			
	0-5min/day	26	17.0
	15min/day	23	15.0
	30min/day	43	28.1
	60min/day	13	8.5
	60+min/day	13	8.5
	DK	17	11.1
	Missing	18	11.8
Perception of Healthy Weight			
	Yes	74	48.4
	No	66	43.1
	DK	4	2.6
	Missing	9	5.9
Current Smoker			
	Yes	49	32.0
	No	93	60.8
	Missing	11	7.2
Ever Smoked			
	Yes	93	60.8
	No	49	32.0
	Missing	11	7.2
Smoked 100 Cigarettes in Life			
	Yes	69	45.1
	No	74	48.4
	Missing	10	

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Seatbelt Use	Always	112	73.2
	Nearly Always	14	9.2
	Sometimes	11	7.2
	Seldom	1	.7
	Never	4	2.6
	Missing	11	7.2
Flu Vaccine	Yes	64	41.8
	No	77	50.3
	DK/not sure	2	1.3
	Missing	10	6.6
HIV testing	Yes	81	52.9
	No	72	47.1
Mammogram (Women)	Yes	54	35.3
	No	29	19
Cervical exam (Women)	Yes	69	45.1
	No	20	13.1
Colorectal exam (Women)	Yes	24	15.7
	No	54	35.3
	Missing	75	49.0
Colonoscopy (Women)	Yes	30	19.6
	No	46	30.1
	Missing	77	50.3
Prostate exam (Men)	Yes	24	15.7
	No	31	20.3
PSA exam (Men)	Yes	19	12.4
	No	34	22.2
Colorectal exam (Men)	Yes	10	6.5
	No	42	27.5
	Missing	52	34.0
Colonoscopy (Men)	Yes	23	15.0
	No	31	20.3
	Missing	99	64.7

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Table 13. Barriers to Healthcare

	M (SD)	#	%
Problem Preventing access to care			
	Transportation	26	17
	Getting an Appointment	21	13.7
	Long wait times	24	15.7
	Office not open	5	3.3
	None	85	55.6
Other Barriers			
(open answer)	Cost	3	
	All of the above	1	
	Didn't attend to needs	1	
	Had to go to Baltimore for a specialist	1	

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Table 14. Worries and Healthcare

	M (SD)	#	%
Money			
	All the time	53	34.6
	Most of the time	27	17.6
	Some of the time	26	17
	A little of the time	15	9.8
	None of the time	18	11.8
	Missing	14	9.2
House payments			
	All the time	38	24.8
	Most of the time	17	11.1
	Some of the time	18	11.8
	A little of the time	13	8.5
	None of the time	51	33.3
	Missing	16	10.5
Affording nutritious meals			
	All the time	29	19
	Most of the time	12	7.8
	Some of the time	22	14.4
	A little of the time	18	11.8
	None of the time	56	36.6
	Missing	16	10.5
Medication costs			
	All the time	19	12.4
	Most of the time	17	11.1
	Some of the time	18	11.8
	A little of the time	17	11.1
	None of the time	64	41.8
	Missing	18	11.8
Family medication costs			
	All the time	20	13.1
	Most of the time	11	7.2
	Some of the time	9	5.9
	A little of the time	15	9.8
	None of the time	76	49.7
	Missing	22	14.4
Family care in emergency			
	All the time	30	19.6
	Most of the time	15	9.8
	Some of the time	25	16.3
	A little of the time	16	10.5

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	None of the time	45	29.4
	Missing	22	14.4
Job security			
	All the time	33	21.6
	Most of the time	12	7.8
	Some of the time	14	9.2
	A little of the time	14	9.2
	None of the time	57	37.3
	Missing	23	15
Cost of healthcare prevented services			
	All the time	22	14.4
	Most of the time	10	6.5
	Some of the time	19	12.4
	A little of the time	13	8.5
	None of the time	73	47.7
	Missing	16	10.5
Cost of dental care prevented services			
	All the time	34	22.2
	Most of the time	11	7.2
	Some of the time	19	12.4
	A little of the time	13	8.5
	None of the time	62	40.5
	Missing	14	9.2
Cost of healthcare for family member			
	All the time	20	13.1
	Most of the time	6	3.9
	Some of the time	15	9.8
	A little of the time	14	9.2
	None of the time	79	51.6
	Missing	19	12.4
Cost of dental care for family member			
	All the time	25	16.3
	Most of the time	4	2.6
	Some of the time	11	7.2
	A little of the time	18	11.8
	None of the time	77	50.3
	Missing	18	11.8
Cost of medications for self			

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	All the time	21	13.7
	Most of the time	8	5.2
	Some of the time	13	8.5
	A little of the time	15	9.8
	None of the time	81	52.9
	Missing	15	9.8
Cost of medications for family member			
	All the time	16	10.5
	Most of the time	7	4.6
	Some of the time	12	7.8
	A little of the time	16	10.5
	None of the time	80	52.3
	Missing	22	14.4

Table 15. Health Information Seeking Sources

	#	%
Brochures	30	19.6
Newspapers	17	11.1
Health Magazines	18	11.8
Television	34	22.2
Classes	5	3.3
Videos	4	2.6
Internet	50	32.7
Healthcare provider	73	47.7
Family or Friend	27	17.6
Health Department	20	13.1
Other Sources	Insurance company	1
(open answer)	School nurse	2

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Table 16. Chronic disease or condition

	#	%
Alcoholism/Drinking/Drug Abuse	12	7.8
Allergies	41	26.8
Anxiety	37	24.2
Arthritis	29	19.0
Asthma/Bronchitis/Emphysema	24	15.7
Autoimmune Disease	1	.7
Cancer	7	4.6
Depression	27	17.6
Diabetes (Sugar)	28	18.3
Developmental Disabilities	-	-
Epilepsy/Seizures	3	2.0
Gastrointestinal Disease	7	4.6
Glaucoma	2	1.3
Gout	9	5.9
Headaches/Migraines	35	22.9
Heart Disease/Heart Attack/Heart Failure	13	8.5
High Blood Pressure	63	41.2
High Cholesterol	35	22.9
HIV/Aids	1	.7
Kidney Disease	5	3.3
Mental Illness	10	6.5
Pain	36	23.5
Prostate Problems	3	2.0
Sexual Problems	5	3.3
Stress	34	22.2
Stroke	6	3.9
Thyroid Disease	16	10.5
Vascular Disease	4	2.6

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Table 17. Chronic Diseases or Conditions and other Health Concerns

	#	&
Alcoholism/Drinking/Drug Abuse	12	7.8
Allergies	41	26.8
Anxiety	37	24.2
Arthritis	29	19.0
Asthma/Bronchitis/Emphysema	24	15.7
Autoimmune Disease	1	.7
Cancer	7	4.6
Depression	27	17.6
Diabetes (Sugar)	28	18.3
Developmental Disabilities	-	-
Epilepsy/Seizures	3	2.0
Gastrointestinal Disease	7	4.6
Glaucoma	2	1.3
Gout	9	5.9
Headaches/Migraines	35	22.9
Heart Disease/Heart Attack/Heart Failure	13	8.5
High Blood Pressure	63	41.2
High Cholesterol	35	22.9
HIV/Aids	1	.7
Kidney Disease	5	3.3
Mental Illness	10	6.5
Pain	36	23.5
Prostate Problems	3	2.0
Sexual Problems	5	3.3
Stress	34	22.2
Stroke	6	3.9
Thyroid Disease	16	10.5
Vascular Disease	4	2.6
Health concerns		
(open answer)	Back pain	2
	Blood pressure	5
	Cancer	12
	Chronic pain	3
	Diabetes	11
	Gastrointestinal issues	2
	Getting older in age/having care	5
	Heart disease	11
	Knee/hip pain	4
	Mental Health	7
	Neurological problems	4
	Respiratory disease	4
	Stress	3
	Weight management/Obesity	17

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Table 18. Self-report of personal health problems and priorities

	M (SD)	#	%
Personal Health is worse than others			
	Strongly agree	19	12.4
	Agree	41	26.8
	Neutral	44	28.8
	Disagree	18	11.8
	Strongly disagree	11	7.2
	Missing	20	13.1
Available services are available to address personal needs			
	Strongly agree	16	10.5
	Agree	40	26.1
	Neutral	41	26.8
	Disagree	23	15.0
	Strongly disagree	9	5.9
	Missing	24	15.7
Health Department services are relevant to personal needs			
	Strongly agree	16	10.5
	Agree	41	26.8
	Neutral	43	28.1
	Disagree	14	9.2
	Strongly disagree	12	7.8
	Missing	27	17.6
I have access to needed programs and services			
	Strongly agree	19	12.4
	Agree	44	28.8
	Neutral	40	26.1
	Disagree	15	9.8
	Strongly disagree	12	7.8
	Missing	23	15.0
I have unique health needs			
	Strongly agree	13	8.5
	Agree	20	13.1
	Neutral	40	26.1

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	Disagree	20	13.1
	Strongly disagree	39	25.5
	Missing	21	13.7
Personal Health Priorities			
Weight	Strongly agree	39	25.5
	Agree	34	22.2
	Neutral	19	12.4
	Disagree	20	13.1
	Strongly disagree	20	13.1
	Missing	21	13.7
Physical activity			
	Strongly agree	30	19.6
	Agree	40	26.1
	Neutral	32	20.9
	Disagree	15	9.8
	Strongly disagree	14	9.2
	Missing	22	14.4
Cardiovascular disease			
	Strongly agree	24	15.7
	Agree	23	15.0
	Neutral	26	17.0
	Disagree	25	16.3
	Strongly disagree	31	20.3
	Missing	24	15.7
Eating Properly			
	Strongly agree	29	19.0
	Agree	35	22.9
	Neutral	31	20.3
	Disagree	13	8.5
	Strongly disagree	23	15.0
	Missing	22	14.4
Sexual and Reproductive Health			
	Strongly agree	17	11.1
	Agree	22	14.4

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	Neutral	29	19.0
	Disagree	21	13.7
	Strongly disagree	38	24.8
	Missing	26	17.0
Mental Health			
	Strongly agree	19	12.4
	Agree	26	17.0
	Neutral	29	19.0
	Disagree	16	10.5
	Strongly disagree	38	24.8
	Missing	25	16.3
Drug Use/Abuse			
	Strongly agree	13	8.5
	Agree	15	9.8
	Neutral	25	16.3
	Disagree	20	13.1
	Strongly disagree	55	35.9
	Missing	25	16.3
Oral Health			
	Strongly agree	23	15.0
	Agree	28	18.3
	Neutral	26	17.0
	Disagree	19	12.4
	Strongly disagree	31	20.3
	Missing	26	17.0
Cancer Prevention/ Treatment			
	Strongly agree	14	9.2
	Agree	26	17.0
	Neutral	25	16.3
	Disagree	19	12.4
	Strongly disagree	42	27.5
	Missing	27	17.6
Sexually Transmitted Diseases/Infection			
	Strongly agree	14	9.2

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	Agree	13	8.5
	Neutral	23	15.0
	Disagree	21	13.7
	Strongly disagree	50	32.7
	Missing	32	20.9
Injuries			
	Strongly agree	12	7.8
	Agree	27	17.6
	Neutral	32	20.9
	Disagree	17	11.1
	Strongly disagree	39	25.5
	Missing	26	17.0
Smoking Cessation			
	Strongly agree	20	13.1
	Agree	17	11.1
	Neutral	20	13.1
	Disagree	22	14.4
	Strongly disagree	48	31.4
	Missing	26	17.0
Asthma/Respiratory Problems			
	Strongly agree	16	10.5
	Agree	21	13.7
	Neutral	27	17.6
	Disagree	25	16.3
	Strongly disagree	40	26.1
	Missing	24	15.7
Personal Barriers to Obtaining Health Care			
Transportation			
	Strongly agree	25	16.3
	Agree	21	13.7
	Neutral	24	15.7
	Disagree	16	10.5
	Strongly disagree	44	28.8
	Missing	23	15.0

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Insurance Status			
	Strongly agree	19	12.4
	Agree	20	13.1
	Neutral	30	19.6
	Disagree	16	10.5
	Strongly disagree	42	27.5
	Missing	26	17.0
Employment Challenges			
	Strongly agree	19	12.4
	Agree	21	13.7
	Neutral	32	20.9
	Disagree	15	9.8
	Strongly disagree	40	26.1
	Missing	26	17.0
Child Care			
	Strongly agree	12	7.8
	Agree	18	11.8
	Neutral	30	19.6
	Disagree	15	9.8
	Strongly disagree	50	32.7
	Missing	28	18.3
Awareness of Available Services			
	Strongly agree	17	11.1
	Agree	20	13.1
	Neutral	31	20.3
	Disagree	19	12.4
	Strongly disagree	41	26.8
	Missing	25	16.3
Mistrust of Program and Services			
	Strongly agree	15	9.8
	Agree	13	8.5
	Neutral	37	24.2
	Disagree	20	13.1
	Strongly disagree	41	26.8

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	Missing	27	17.6
Language/Translation Concerns			
	Strongly agree	7	4.6
	Agree	8	5.2
	Neutral	35	22.9
	Disagree	17	11.1
	Strongly disagree	60	39.2
	Missing	26	17.0
Culturally Competent Programs			
	Strongly agree	4	2.6
	Agree	12	7.8
	Neutral	39	25.5
	Disagree	17	11.1
	Strongly disagree	54	35.3
	Missing	27	17.6
Other Barriers (Open text)			
	Problems getting health insurance	2	
	Accessing with without using internet, help over phone difficult	1	
	Affordable health care	2	
	Lack of programs	2	
	Long wait times	3	
	Unkind staff	1	
	Doctors who accept insurance	1	
	Finances	3	
	Race issues	1	

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Table 19. Physical and mental health during past 30 days

		#	%
Pain prevents usual activities			
	All the time	22	14.4
	Most of the time	9	5.9
	Some of the time	29	19.0
	A little of the time	15	9.8
	None of the time	62	40.5
	Missing	16	10.5
Sad or Depressed			
	All the time	13	8.5
	Most of the time	8	5.2
	Some of the time	32	20.9
	A little of the time	16	10.5
	None of the time	66	43.1
	Missing	18	11.8
Worried or Tense			
	All the time	20	13.1
	Most of the time	10	6.5
	Some of the time	29	19.0
	A little of the time	22	14.4
	None of the time	51	33.3
	Missing	21	13.7
Healthy/Energetic			
	All the time	13	8.5
	Most of the time	20	13.1
	Some of the time	36	23.5
	A little of the time	18	11.8
	None of the time	39	25.5
	Missing	27	17.6
Nervous			
	All the time	18	11.8
	Most of the time	6	3.9
	Some of the time	29	19.0
	A little of the time	20	13.1
	None of the time	57	37.3
	Missing	23	15.0

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Hopeless			
	All the time	12	7.8
	Most of the time	5	3.3
	Some of the time	15	9.8
	A little of the time	19	12.4
	None of the time	78	51.0
	Missing	24	15.7
Restless			
	All the time	13	8.5
	Most of the time	8	5.2
	Some of the time	20	13.1
	A little of the time	23	15.0
	None of the time	67	43.8
	Missing	22	14.4
So Depressed could not be cheered up			
	All the time	10	6.5
	Most of the time	2	1.3
	Some of the time	15	9.8
	A little of the time	17	11.1
	None of the time	88	57.5
	Missing	21	13.7
Everything was an effort			
	All the time	14	9.2
	Most of the time	4	2.6
	Some of the time	14	9.2
	A little of the time	21	13.7
	None of the time	73	47.7
	Missing	27	17.6
Worthless			
	All the time	14	9.2
	Most of the time	2	1.3
	Some of the time	9	5.9
	A little of the time	15	9.8
	None of the time	85	55.6
	Missing	28	18.3

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Mental Health condition that prevents usual activities			
	All the time	8	5.2
	Most of the time	4	2.6
	Some of the time	15	9.8
	A little of the time	15	9.8
	None of the time	90	58.8
	Missing	21	13.7

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Table 20. Services that respondent would be interested in if available

	#	%	
Alcoholism/Drug Abuse Counseling	10	6.5	
Chronic Disease Support Groups	13	8.5	
Family Counseling	23	15	
Marriage/Couples Counseling	16	10.5	
Weight loss Programs	55	35.9	
Exercise Programs	59	38.6	
Financial Planning	38	24.8	
Healthy Eating Cooking Classes	38	24.8	
Mental Health Counseling	28	18.3	
Diabetes (Sugar) Monitoring	32	20.9	
Primary Care Services (Visit with nurse of doctor)	15	9.8	
Cancer screening and education classes	19	12.4	
Dental services	59	38.6	
Family Planning	17	11.1	
Other (open text)			
Better drug program	3		
Dental Services	4		
Better access to food banks	1		
Housing assistance	1		
Exercise	1		
Healthy eating	1		
Paying for health care not covered	1		
Help for middle class citizens	1		
Help for the needy	1		
Housing for homeless	1		
Lyme disease treatment	1		
Help for caregivers	3		
Pain management	1		
Computer Programs	1		
Senior Activities	1		
Help getting to doctor appointments	4		
Special events to raise awareness	1		

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Table 21. Perceptions of county health problems and priorities

		#	%
County Health is worse than others			
	Strongly agree	24	15.7
	Agree	31	20.3
	Neutral	48	31.4
	Disagree	18	11.8
	Strongly disagree	13	8.5
	Missing	19	12.4
Available services address county needs			
	Strongly agree	12	7.8
	Agree	36	23.5
	Neutral	46	30.1
	Disagree	23	15.0
	Strongly disagree	18	11.8
	Missing	18	11.8
Health Department services are relevant to county needs			
	Strongly agree	11	7.2
	Agree	40	26.1
	Neutral	46	30.1
	Disagree	21	13.7
	Strongly disagree	16	10.5
	Missing	19	12.4
Residents have access to needed programs and services			
	Strongly agree	12	7.8
	Agree	36	23.5
	Neutral	47	30.7
	Disagree	17	11.1
	Strongly disagree	19	12.4
	Missing	22	14.4
Somerset County has unique health needs			
	Strongly agree	16	10.5
	Agree	36	23.5
	Neutral	58	37.9
	Disagree	13	8.5

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	Strongly disagree	11	7.2
	Missing	19	12.4
Perceptions of Somerset County Health Priorities			
Weight	Strongly agree	54	35.3
	Agree	34	22.2
	Neutral	28	18.3
	Disagree	11	7.2
	Strongly disagree	9	5.9
	Missing	17	11.1
Physical activity			
	Strongly agree	47	30.7
	Agree	34	22.2
	Neutral	33	21.6
	Disagree	9	5.9
	Strongly disagree	10	6.5
	Missing	20	13.1
Cardiovascular disease			
	Strongly agree	44	28.8
	Agree	37	24.2
	Neutral	35	22.9
	Disagree	10	6.5
	Strongly disagree	8	5.2
	Missing	19	12.4
Eating Properly			
	Strongly agree	47	30.7
	Agree	31	20.3
	Neutral	36	23.5
	Disagree	9	5.9
	Strongly disagree	9	5.9
	Missing	21	13.7
Sexual and Reproductive Health			
	Strongly agree	27	17.6
	Agree	22	14.4
	Neutral	57	37.3

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	Disagree	14	9.2
	Strongly disagree	13	8.5
	Missing	20	13.1
Mental Health			
	Strongly agree	35	22.9
	Agree	32	20.9
	Neutral	49	32.0
	Disagree	8	5.2
	Strongly disagree	9	5.9
	Missing	20	13.1
Drug Use/Abuse			
	Strongly agree	55	35.9
	Agree	23	15.0
	Neutral	37	24.2
	Disagree	10	6.5
	Strongly disagree	8	5.2
	Missing	20	13.1
Oral Health			
	Strongly agree	42	27.5
	Agree	30	19.6
	Neutral	40	26.1
	Disagree	10	6.5
	Strongly disagree	10	6.5
	Missing	21	13.8
Cancer Prevention/ Treatment			
	Strongly agree	37	24.2
	Agree	35	22.9
	Neutral	41	26.8
	Disagree	9	5.9
	Strongly disagree	10	6.5
	Missing	21	13.7
Sexually Transmitted Diseases/Infection			
	Strongly agree	35	22.9
	Agree	29	19.0

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	Neutral	51	33.3
	Disagree	11	7.2
	Strongly disagree	7	4.6
	Missing	20	13.1
Injuries			
	Strongly agree	29	19.0
	Agree	35	22.9
	Neutral	50	32.7
	Disagree	10	6.5
	Strongly disagree	8	5.2
	Missing	21	13.7
Smoking Cessation			
	Strongly agree	45	29.4
	Agree	29	19.0
	Neutral	41	26.8
	Disagree	8	5.2
	Strongly disagree	9	5.9
	Missing	21	13.7
Asthma/Respiratory Problems			
	Strongly agree	31	20.3
	Agree	35	22.9
	Neutral	46	30.1
	Disagree	9	5.9
	Strongly disagree	11	7.2
	Missing	21	13.7
Perceptions of Somerset County Barriers to Obtaining Health Care			
Transportation			
	Strongly agree	46	30.1
	Agree	37	24.2
	Neutral	32	20.9
	Disagree	7	4.6
	Strongly disagree	11	7.2
	Missing	20	13.1

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Insurance Status			
	Strongly agree	41	26.8
	Agree	39	25.5
	Neutral	34	22.2
	Disagree	6	3.9
	Strongly disagree	14	9.2
	Missing	19	12.4
Employment Challenges			
	Strongly agree	42	27.5
	Agree	39	25.5
	Neutral	36	23.5
	Disagree	5	3.3
	Strongly disagree	12	7.8
	Missing	19	12.5
Child Care			
	Strongly agree	36	23.5
	Agree	35	22.9
	Neutral	40	26.1
	Disagree	6	3.9
	Strongly disagree	16	10.5
	Missing	20	13.1
Awareness of Available Services			
	Strongly agree	34	22.2
	Agree	36	23.5
	Neutral	41	26.8
	Disagree	11	7.2
	Strongly disagree	12	7.8

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	Missing	19	12.4
Mistrust of Program and Services			
	Strongly agree	32	20.9
	Agree	25	16.3
	Neutral	51	33.3
	Disagree	8	5.2
	Strongly disagree	18	11.8
	Missing	19	12.4
Language/Translation Concerns			
	Strongly agree	19	12.4
	Agree	28	18.3
	Neutral	58	37.9
	Disagree	14	9.2
	Strongly disagree	15	9.8
	Missing	19	12.4
Culturally Competent Programs			
	Strongly agree	18	11.8
	Agree	30	19.6
	Neutral	57	37.3
	Disagree	11	7.2
	Strongly disagree	18	11.8
	Missing	19	12.4

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Table 22. Awareness of Somerset County community engagement

		#	%
Do you think that other organizations in the community try to help you be a healthier person?			
	Yes	7	4.6
	No	78	51.0
	DK	53	34.6
	Missing	14	9.2
Community Programs Listed		Organization had Health-related events	Organization likely to have health-related event
General			
	Churches	7	4
	Grocery Stores		1
Specific			
	SC Health Department	10	5
	Health Matters		
	Church of God	1	
	Crisfield Clinic	1	2
	Crossroads Church	1	
	Go-getters	2	2
	Hospital		
	Mccready Foundation	6	
	Masons	1	1
	Recreation and Parks	1	
	Relay for Life	2	2
	Pharmacy (Rite Aid)		
	TLC	1	1
	Women Supporting Women	1	2
	Schools (SCPS)	2	1
	Physician	2	
	UMES	1	
	Red Cross		1

Table 23. Race and Health Care

	#	%	
Within the last 12 months, when seeking health care, do you feel your experiences were worse than, the same as, or better than for people of other races?			
Yes	16	10.5	
No	112	73.2	
DK	10	6.5	
Missing	15	9.8	
Within the past 30 days have you felt upset (physically or emotionally), as a result of how you were treated based on your race?			
Yes	25	16.3	
No	109	71.2	
DK	5	3.3	
Missing	14	9.2	
Do you feel that your race is represented among the community organizations that exist in the county?			
Yes	67	43.8	
No	53	34.6	
DK	20	13.1	
Missing	13	8.5	
Would having more health care providers of your race make you feel more comfortable sharing information?			
Yes	31	20.3	
No	80	52.3	
DK	28	18.3	
Missing	14	9.2	

Table 24. Incarceration and Reentry

		#	%
Have you or anyone in your household been incarcerated or arrested in the past 7 years?			
	Yes	25	16.3
	No	116	75.8
	Missing	12	7.8
Will someone be returning home from prison to your household in the next 5 years?			
	Yes	7	4.6
	No	134	87.6
	Missing	12	7.8
Has an arrest record or felony prevented you from gainful employment?			
	Yes	6	3.9
	No	130	85.0
	Missing	17	11.1
Has an arrest record or felony prevented you from obtaining other basic necessities? (housing, training)			
	Yes	5	3.3
	No	133	86.9
	Missing	15	9.8
Are you aware of any services available to help you or a loved one reenter the community in an effective way?			
	Yes	14	
	No	122	
	Missing	17	

APPENDIX 2. Bivariate Analyses

Table 25. Bivariate Analyses: BMI status on perceptions of healthy weight

BMI Category					
Perception of Healthy Weight	Underweight	Normal	Overweight	Obese	
Yes	5 (55.6%)	26 (86.7%)	23 (65.7%)	10 (19.2%)	
No	4 (44.4)	4 (13.3%)	11 (31.4%)	42 (80.8%)	
	9 (7.1%)	30 (23.8%)	35 (27.8%)	52 (41.3%)	
					* $X^2 = 42.95$, p<.001

Table 26. Bivariate Analyses: General Health Status by Income

Income Category n (%)	Excellent	Very Good	Good	Fair	Poor	
<\$5,000-9,999	3 (7.1)	9 (21.4)	9 (21.4)	13 (31)	8 (19)	
\$10,000-\$24,999	3 (8.6)	6 (17.1)	15 (42.9)	8 (22.9)	3 (8.6)	
\$25,000-\$49,999	4 (13.8)	7 (24.1)	14 (48.3)	4 (13.8)	0	
\$50,000-\$100,000+	3 (9.4)	14 (43.8)	13 (40.6)	1	0	
						* $X^2 = 33.143$ p<.01

Table 27. Bivariate Analyses: General Health Status by Race

Race Category n (%)	Excellent	Very Good	Good	Fair	Poor	
White/CA	7 (8)	21 (23.9)	36 (40.9)	17 (19.3)	7 (8)	
Black/AA	6 (12.8)	14 (29.8)	15 (31.9)	9 (19.1)	2 (4.3)	
American Indian/AN	0 (0)	1 (25)	1 (25)	0 (0)	2 (50)	
						$X^2 = 14.86$ p>.05 NS

Table 28. Bivariate Analyses: Income by Race

Race Category n (%)	<\$5,000-9,999	\$10,000-\$24,999	\$25,000-\$49,999	\$50,000-\$100,000+	
White/CA	21 (23.9)	20 (22.7)	19 (21.6)	28 (31.8)	
Black/AA	21 (45.7)	12 (26.1)	9 (19.6)	4 (8.7)	
American Indian/AN	1 (25)	2 (50)	0 (0)	1 (25)	
					* $X^2 = 13.52$ p<.05

The End

**Somerset County, Maryland
2017 - 2018
Community Health Needs Assessment**

Prepared by:



Somerset County Community Health Needs Assessment

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EXECUTIVE SUMMARY

The Somerset County Health Department and McCready Foundation partnered with the Business Economic and Community Outreach Network (BEACON) to sponsor a Health Needs Assessment in Somerset County, Maryland. The goal of this needs assessment was to identify the health concerns of residents and barriers they encounter in accessing health care.

A mixed method approach was used to assess the needs, identify resources, and identify opportunities for intervention. With assistance from the Somerset County Health Department and the McCready Foundation Inc., the BEACON team conducted in-depth key informant interviews focus groups accessing over 102 opinion leaders. The BEACON team also accessed secondary data and information from public sources to provide the background and context for the in-depth interviews.

The interviews and focus groups were conducted using questions involving the identification, discussion, and/or explanation of health concerns, health trends, and potential methods of prevention or improvement of health concerns in Somerset County.

Based on the interviews and focus groups, poverty, low health literacy, transportation barriers, financial constraints, and lack of insurance coverage emerged as the biggest barriers to accessing health care in Somerset County. In addition, obesity and diabetes were identified as major public health concerns for the county. The study participants discussed the lack of exercise programs and weight loss resources in the community. Most study participants listed the Somerset County Health Department as the best source of healthcare information in the county. Finally, the study participants offered the following recommendations to reduce risk factors and improve health outcomes in Somerset County:

1. Seeking Additional Resources
2. Pooling Resources within Somerset County and Regionally
3. Focusing more on Education, Outreach, and Prevention
4. Strengthening partnerships with Faith and Community Based Organizations
5. Breaking down silos and allocating funding to patients not the providers
6. Enhancing Case Management

INTRODUCTION

Somerset County, one of the 24 jurisdictions of the State of Maryland¹, is located on the Eastern Shore of Maryland, between the Chesapeake Bay and the Atlantic Ocean. The County has an estimated population of about 26,000, with 54% being White, 42% African American, 3.6% Hispanic; 2.4% Multiracial; and 0.9% Asian.²

Somerset County residents have to contend with a number of health needs that exceed the available resources to address them. The County has been ranked 19th out of 24 in length of life based on years of potential life lost before age 75 per 100,000 population. With the highest percentage of children in poverty throughout the state of Maryland (36% under age 18); the highest rate of obesity in Maryland (42% with BMI >30), and a 24.1% smoking rate among adults, the County's health needs are significant. There are over 3,000 residents for each primary care physician in the County putting it last in the State of Maryland.³

This study is an attempt to better quantify and qualify the community health needs in Somerset County, and to identify the limitations, barriers, and gaps that impact health outcomes in the County.

¹ <http://msa.maryland.gov/msa/mdmanual/01glance/html/county.html>

² https://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml#

³ <http://www.countyhealthrankings.org/app/maryland/2017/rankings/somerset/county/outcomes/overall/snapshot>

STUDY METHODOLOGY

A Community Health Needs Assessment is a method for reviewing the health issues facing a population, leading to agreed priorities and resource allocation that will improve public health and reduce inequalities.⁴ These assessments can be used to identify gaps between current health status and those desired, and to categorize such gaps via level of importance and source of influence (environmental, behavior, genetic, or healthcare). Health needs assessments have many benefits, including the development of strategies to address health care needs in the community, strengthened community involvement in decision making, improved communication with agencies and the public in the community, a snapshot of the health needs of an entire community, and better use of resources.

Limitations of a needs assessment are introduced once the method of research is chosen; i.e. quantitative versus qualitative. Quantitative research methods of assessment are objective, number-based, and generalizable. This method is used to test concepts, constructs, and hypothesis of a theory; examples include surveys, structured interviews, observations, and reviews of records or documents for numeric information. Qualitative research methods are subjective, text-based, and less generalizable. Qualitative research is used to formulate a prediction; examples include focus groups, in-depth interviews and brainstorming.⁵

⁴ https://www.k4health.org/sites/default/files/migrated_toolkit_files/Health_Needs_Assessment_A_Practical_Guide.pdf

⁵ http://www.orau.gov/cdcynergy/soc2web/Content/phase05/phase05_step03_deeper_qualitative_and_quantitative.htm

This study combines quantitative and qualitative approaches. In addition to a thorough review of the most recent federal, state, and local data sets pertaining to Somerset County's health needs and health outcomes, the BEACON Team has conducted a series of opinion leader and key stakeholder interviews as well as focus groups key County health care professionals, elected and appointed officials, business and economic development decision makers, emerging community leaders, and other key informants. The process included data collection from 102 unique individuals over a three-month period in the fall of 2017. Such community-based recruiting of key informants is most successful when there is a partnership between the researchers and local community-based organizations such as health departments or hospitals. The BEACON Team is grateful to the support of the study sponsors Somerset County Health Department and the McCready Foundation, Inc. for assisting in recruiting these study participants. These key informants have provided in-depth insights to the BEACON Team in better understanding the data and the outcomes observed through the initial data analysis. The information gathered from the key informants interviewed was organized as follows:

1. *Primary community health needs in Somerset County;*
2. *Somerset County's key health outcomes;*
3. *Health care access, affordability, and inequality issues;*
4. *Key community health trends (improving/worsening);*
5. *Gaps in health needs versus available services;*
6. *Health Literacy Issues.*

ABOUT SOMERSET COUNTY

Somerset County is located in Maryland directly above the Chesapeake Bay. It is one of 24 Maryland counties/jurisdictions. The county has a rural designation, as defined by the United States Census Bureau, hosting a population of less than 50,000 residents.⁶ The County includes eleven towns: Chance, Crisfield, Dames Quarter, Deal Island, Eden, Fairmount, Frenchtown, Mount Vernon, Princess Anne, Smith Island, and West Pocomoke.⁷ Somerset County has one hospital, three health care and social assistance clinics, and three nursing and residential care facilities.

Demographics

Somerset County is home to 26,000 residents. Racially, the county is majority white (54%); 43% black; 0.9% Asian, and less than 1% each of Native American and Hawaiian backgrounds. The median age of the county is 37 years old. In 2016, the Somerset County median household income was just under \$36,000 with 24.3% of the population living in poverty. Housing problems are an issue, with around 24% of all households (highest in Maryland) experiencing one or more of the following challenges: overcrowding, high housing costs, or lack of kitchen or plumbing facilities. A more detailed demographic profile of the County is presented on the following page in Table 1.

⁶ <https://storymaps.geo.census.gov/arcgis/apps/MapSeries/index.html?appid=9e459da9327b4c7e9a1248cb65ad942a>

⁷ <http://maryland.hometownlocator.com/counties/cities/cfips,039,c.somerset.cfm>

Table 1: Demographic Profile of Somerset County

SOMERSET COUNTY DEMOGRAPHICS	
Population	
Population estimate, July 1, 2016	25,928
Persons under 5 years, percent, July 1, 2016	4.80%
Persons under 18 years, percent, July 1, 2016	17.20%
Persons 65 years and over, percent, July 1, 2016	16.00%
Female persons, percent, July 1, 2016	46.30%
Race and Hispanic Origin	
White alone, percent, July 1, 2016	53.90%
Black or African American alone, percent, July 1, 2016	42.30%
American Indian and Alaska Native alone, percent, July 1, 2016	0.40%
Asian alone, percent, July 1, 2016	0.90%
Native Hawaiian and Other Pacific Islander alone, percent, July 1, 2016	0.10%
Two or More Races, percent, July 1, 2016	2.40%
Hispanic or Latino, percent, July 1, 2016	3.60%
White alone, not Hispanic or Latino, percent, July 1, 2016	51.40%
Population Characteristics	
Veterans, 2012-2016	1,813
Foreign born persons, percent, 2012-2016	5.10%
Housing	
Housing units, July 1, 2016, (V2016)	11,420
Owner-occupied housing unit rate, 2012-2016	64.40%
Median value of owner-occupied housing units, 2012-2016	\$131,800
Median selected monthly owner costs -with a mortgage, 2012-2016	\$1,218
Median selected monthly owner costs -without a mortgage, 2012-2016	\$482
Median gross rent, 2012-2016	\$667
Building permits, 2016	25
Families & Living Arrangements	
Households, 2012-2016	8,328
Persons per household, 2012-2016	2.32
Living in same house 1 year ago, percent of persons age 1 year+, 2012-2016	81.40%
Language other than English spoken at home, percent of persons age 5 years+, 2012-2016	7.40%

Source: U.S. Census Bureau

Education

In 2017, Somerset County had just under 3,000 students enrolled in K-12 classes.

Approximately 450 of these students were in Pre-Kindergarten and Kindergarten; about 1,135 of them were in elementary school; 625 in Middle school, and 730 in high school.

Overall, 80.5% of the County's population are high school graduates or higher. College graduates with Bachelor's degrees or higher comprise about 15% of the County population.

Economy

In 2017, Somerset County had a total labor income of \$415 million. The Median household income in the County is \$35,154 and the Average household income is \$49,530. At \$16,631, Somerset County's per capita income is the lowest in the State of Maryland.

Somerset County has a civilian labor force of 9,234 with 8,586 of them employed and 648 unemployed. The unemployment rate is 7% which is the highest in the State of Maryland (almost 3% higher than the state average). Close to half of County residents commute outside the County for work. A list of the major employers in the County can be seen on the following page, in Table 2. Please note that this list excludes post offices, state and local governments, national retail and national foodservice establishments. In fact, there are close to 3,000 federal, state, and local government employees working in 43 government establishments in Somerset County, making public service jobs the largest employment category. Median hourly wages in Somerset County range from the minimum wage up to \$39.85 per hour depending on education, experience and employment sector. However, in most categories, these median wages put the County at the bottom in the State of Maryland.

Table 2: Major Employers in Somerset County

Employer	Product/Service	Employment
University of Maryland Eastern Shore (UMES)	Higher education	930
Sysco Eastern Maryland	Food products distribution	450
Somerset Community Services	Services for the disabled	425
McCready Health	Medical services	300
Aurora Sr. Living of Manokin	Nursing care	175
Sherwin Williams / Rubberset	Paint brushes	150
Southern Connection Seafood**	Seafood processing, distribution	130
Three Lower Counties	Medical services	105

Source: Maryland Department of Commerce

Housing and Transportation

Somerset County has close to 8,500 occupied housing units of which 64.8% are owner occupied. Over 2,500 units are either currently vacant or abandoned. The median value of owner occupied housing units is slightly over \$130,000 with a median mortgage amount of \$736. The median non-mortgage owner costs are over \$480. For renters, the median gross rent is \$667.

Somerset County is served by US Route 13, a major North-South artery and a speed limited railroad for freight. The County has access to water transportation via the Ports of Salisbury and Baltimore. In addition, the Crisfield Harbor serves smaller vessels. Scheduled air service available at Salisbury-Ocean City Wicomico Regional Airport, 16 miles from Princess Anne; Crisfield Airport has one 2500' x 75' paved, lighted runway, and one 3350' x 100' grass runway. Transit services are provided by Shore Transit, a regional public transportation system.

Crime, Safety, and Disaster Preparedness

Violent crime in Somerset County is relatively low at under 280 per 100,000 population. However, property crime rates are above state averages at close to 1,500 per 100,000 population.

The Somerset County Department of Emergency Services has the mission of coordinating the resources necessary to respond to an emergency. On a daily basis this occurs through the 9-1-1 Emergency Communications Center. For large scale events the Emergency Operations Center coordinates emergency management services. This agency is the lead agency in the County for emergency management planning, response, mitigation and recovery. This office is responsible for the Emergency Operations Center, the County Emergency Operations Center, the County Emergency Operations Plan, and the Hazardous Materials Regulatory Program.

Other Societal and Geographic Factors

Based on its demographic, education, economic, and workforce profiles, Somerset County ranks at the bottom 5% of U.S. counties. In addition, proximity to Worcester County with Ocean City and Wicomico County with Salisbury means that a large number of the higher income workers in the County live in these two contiguous counties, creating a leakage of the economic impact or their earnings. This, in turn, exacerbates the resource limitations in the County for dealing with residents' needs, including healthcare.

Overview of Community Health Needs in Somerset County

In 2017, Somerset County was ranked 22nd out of 24 in health outcomes and 23rd in health risks. Some of the key statistics for the County were:

Factor	Somerset	Maryland
Poor or fair health	20% of the Population	13% of the population
Poor physical health days	4.5	3.5
Poor mental health days	4.2	3.4
Low birthweight	8% of births	9% of births
Premature age-adjusted mortality	430	320
Child mortality	130	50
Infant mortality	9 per 1000 Live Births	7 per 1000 Live Births
Frequent physical distress	14% of the population	11% of the population
Frequent mental distress	13% of the population	11% of the population
Diabetes prevalence	14% of the population	10% of the population
HIV prevalence	634 per 100,000 pop.	641 per 100,000 pop.

Source: <http://www.countyhealthrankings.org> – A Robert Wood Johnson Foundation Program

In addition, the Maryland Department of Health and Mental Hygiene’s Office of Minority Health and Health Disparities has identified ten of fifteen elevated indicators for health disparities including percent of families in poverty, substance abuse treatment rate, teen birth rate, and Medicaid enrollment rate. 11% of the population under age 65 in Somerset County is uninsured. The county holds an unemployment rate of 6.1% as of August 2017. There were 20% of families and people whose income were below the poverty line in 2015.⁸

Access to Healthcare in Somerset County

In addition to the offerings of the Somerset County Health Department (See:

<https://somersethealth.org/> for a comprehensive listing), the McCready Health organization

⁸ <https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=CF>

offers 24 Hour emergency services at McCready Hospital and immediate care/lab & imaging at Princess Anne; a behavioral health addictions program; an NA support group; assisted living & nursing home/skilled nursing (including rehab a wound care certified nurse); medical-surgical care; PT, OT, Speech Therapy; Pulmonary Rehab; Pain Clinic, and free or \$5 flu shots each season. McCready has providers in internal medicine, occupational health and surgery (full-time); pediatrics, cardiology, gynecology and podiatry (by appointment or set days per week or month). There is also a PA and/or LPN who goes to Smith Island two times a month to see patients.

In spite of these offerings, virtually all study participants ranked access to healthcare in the County as one of their top three critical concerns. Many have also noted that the proximity of Wicomico County with a much higher concentration of healthcare facilities as a positive factor. However, these same respondents agreed that to a rural population with economic, workforce, and transportation challenges, this proximity may not be the optimal solution.

Limited number of physicians, clinics, offices, urgent care centers, and the sparsely populated rural nature of the County (transportation barriers) were also mentioned as access challenges.

Healthcare Affordability in Somerset County

In Somerset County, 13% of adults are without health insurance, compared to 11% in Maryland as a whole. In children, these rates are 4% for the County compared to 3% in the State. The older residents with access to Medicare, the low-income residents with access to

Medicare and other affordable options, and a large number of government employees in the County with employer subsidized health insurance prevent these percentages from being worse than they are. However, affordability of wellness and nutrition programs, medication, co-pays, and other out-of-pocket costs make this issue a growing problem for County residents. When combined with low access to and/or low availability of services, Somerset County's low rankings are easier to understand.

Nature and Scope of Healthcare Services in the County

During the key-informant interviews, the lack of an adequate number of healthcare facilities and professionals in the County was a very common reason given for the troublesome health outcomes. In addition, about one in three key informants identified the limited scope of services in existing facilities as a cause for concern. These respondents linked the low numbers and limited scopes to the lack of resources and the nature of a sparsely populated region where it is not easy to reach a critical mass of clients to absorb the high cost of these services. Some key service statistics are:

Factor	Somerset	Maryland
Primary care physicians	3,230:1	1,130:1
Dentists	740:1	1,350:1
Mental health providers	500:1	490:01:00
Preventable hospital stays	55	46
Diabetes monitoring	84% (65-75 Yr. Old)	85% (65-75 Yr. Old)
Mammography screening	67% (67-69 Yr. Old)	64% (67-69 Yr. Old)

Source: <http://www.countyhealthrankings.org> – A Robert Wood Johnson Foundation Program

Healthcare Literacy

While most of the respondents listed low health literacy as a contributing factor to Somerset County's low health outcome and risk factor rankings, they also acknowledged the efforts of the County's Health Department in improving residents' access to health information. In addition, the collaborative efforts of the Health Department and of MrCready Health with the County's public schools, faith and community based organizations, and with various government agencies operating in the County were cited as key strategies for increasing health literacy. There was consensus that such activities suffer from fairly significant resource limitations. Some of the key risk factors that these outreach activities target were identified as follows:

Factor	Somerset	Maryland
Adult smoking	20%	15%
Adult obesity	42%	29%
Food environment index	5.6	8.2
Physical inactivity	31%	22%
Access to exercise opportunities	13%	93%
Excessive drinking	16%	16%
Alcohol-impaired driving deaths	20%	33%
Sexually transmitted infections	570.9	462.6
Teen births	29	25
Food insecurity	20%	13%
Limited access to healthy foods	11%	3%
Drug overdose deaths	18	18
Motor vehicle crash deaths	9	9
Insufficient sleep	43%	39%

Behavioral Health, Alcohol and Substance Abuse, and Alzheimer's/Dementia

There are four Behavioral Health Providers, one Recovery & Re-entry Center, and zero treatment beds in Somerset County. Dementia patients and their caregivers can be referred to an agency in Cambridge, MD that provides Dementia respite care. The local Area Agency on Aging (MAC) does not accept dementia patients due to risk of "walking off"; also clients need to toilet independently to attend. Adult Medical Day Care may be a resource to some; but the nearest facility is in Salisbury, MD and comes with a cost for some. There are currently no local support groups. McCready hospital has treated 164 patients with a primary or secondary diagnosis of dementia in the latest six month period.

Most of the key informants interviewed (78 out of 102) expressly linked the major behavioral health issues in Somerset County first to substance and alcohol abuse and secondarily to aging related depression and dementia concerns. Other issues voiced by the respondents included lack of counseling for kids and young adults. When asked what prevention measures are appropriate to these behavioral health problems, respondents gave mixed opinions. Access and affordability, stigma, lack of awareness of services available were all listed as major concerns. Some of the concerns include Excessive Drinking Prevalence. For Somerset County, this number has gone from around 10% of the population in 2015 to over 16% of the population in 2017. Deaths in Somerset County attributable to substance abuse, while low, are on the rise. In 2016 the Maryland Department of Health

and Mental Hygiene reported that Age Adjusted Death Rates for Total Unintentional Intoxication Deaths in Somerset County had reached 16.9 per 100,000 population, putting the county in the middle of the 24 jurisdictions of Maryland. Overall, approximately 24% of Somerset residents have Anxiety related conditions. On a slightly positive note, Alzheimer's and other dementia related conditions afflict approximately 2% of Somerset County residents which puts the County towards the bottom of Maryland jurisdictions.

Tobacco Cessation

The key informants have noted that Somerset County's tobacco cessation efforts have been effective. However, they also acknowledge that the County's smoking rate of 20% is 50% higher than that of the Maryland average. Diminishing resources, language barriers, and access to cessation services were identified as barriers to further success.

Diet and Obesity

The adult obesity rate in Somerset County is over 42%. This rate is nearly 50% higher than the Maryland rate. One of the reasons for this is the food environment in the county. The Food Environment in Somerset County is rated at 32% below the state average. In addition, almost a third of county residents do not get adequate physical exercise, exacerbating the obesity problem. Combined, these factors lead to increased negative health outcomes through Cardio Vascular Diseases, Diabetes, Cancer, Joint Disease, and other conditions (which are discussed further in the following sections).

Cardio Vascular Diseases

The Maryland Department of Health and Mental Hygiene estimates Age Adjusted Cardio Vascular Mortality per 100,000 population in Somerset County is close to 300 and increasing while this same ratio for the state as a whole is under 200 and falling. The study participants attribute the high numbers to (in descending order) obesity, lack of exercise, diabetes, health literacy, and access issues.

Cancer

The National Cancer Institute estimates that in 2017, the Somerset County Cancer deaths will be under 500 per 100,000 population. The good news is that this number reflects a downward trend of about 5% over the past five years. The age adjusted incidence rate per 100,000 population for some major cancer types are as follows:

Cancer Type	Somerset	Maryland
Lung	97.6	56.4
Colorectal	60.2	35.8
Breast	40.7	125.0
Prostate	117.3	112.0
Melanoma	18.9	20.7

Just as in the case for Cardio Vascular Diseases, the study participants attribute these incidence rates to obesity, lack of exercise, health literacy, and access issues.

Diabetes

According to the data compiled by Dartmouth College for all U.S. jurisdictions, Somerset County had just under 700 patients between the ages of 65 and 75 that received treatment for diabetes. About 30% of these patients were African-American. In 2016, these patients were given over 350 eye exams, just under 500 hemoglobin tests, and over 450 lipid tests as part of their diabetes care. All these numbers were growing at a slightly higher rate than the population growth in this age group. The difference, however, was not statistically significant. The study participants list (in descending order) obesity, lack of exercise, health literacy, and access issues as factors that contribute to the incidence of diabetes and related ailments in Somerset County. They also list the high (estimated) number of undiagnosed cases as well as the high number of pre-diabetes cases as major concerns.

Infectious Diseases and Immunization

According to the data compiled by the Maryland Department of Health and Mental Hygiene, Tuberculosis Incidence rates per 100,000 in Somerset County was 3.8 compared to 4.9 in Maryland as a whole. For Chlamydia, the Somerset rate was 835.6 compared to 437.9 in Maryland. For Gonorrhea, the Somerset rate was 115.0 compared to 118.3 in Maryland. A particularly bright spot was the rate for HIV/AIDS cases in Somerset at 17.7 versus 46.6 in Maryland.

On the immunization front, Somerset County rates were similar to or even better than those for Maryland. For example, the average % of Kindergarten Students Immunized in

Somerset County was 100.0 compared to 99.3% in Maryland. Adults Receiving Flu Shots in Somerset County were 37.4% of the population compared to 38.5% in Maryland. Finally, adults receiving Pneumonia Shots were 29.5% of the County population compared to 24.7 in Maryland.

Maternal and Child Health

The key informants taking part in this needs assessment rated Somerset County's Maternal and Child Health services as being adequate and praised the County Health Departments outreach and partnership efforts. However, slightly more than half of the participants were concerned about the limited resources available for education, outreach and prevention efforts. In addition, about a third of the participants were concerned that health literacy issues and language barriers were adding to these problems.

Environmental Health

The bulk of the environmental health services in the county are provided by the Somerset County Health Department. These include reviews, approvals, and inspections of private septic systems and wells; testing well waters; reviewing and approving commercial development and subdivisions; licensing and inspecting food service facilities (restaurants, grocery stores, bars, mobile food trucks, food services at fairs & events, and bed and breakfasts); licensing and inspecting public swimming pools to monitor health and safety conditions; conducting Rabies investigations and offering vaccination clinics; approving burn permits, and land plat reviews. About a third of the key informants participating in this community health assessment listed agriculture as a concern for environmental health.

Water and air pollution were listed as being linked to agriculture. However, the participants also recognized the progress that was made on these issues over the past 20 years.

Oral Health

According to the Maryland Department of Health and Mental Hygiene, more than half of Somerset County residents have not seen an oral health professional in the past 12 months. This is compared to slightly over a quarter of the residents of the State of Maryland. About a fifth of the study participants were concerned about the link between bad oral health and other diseases such as Cardio Vascular ailments. It should also be noted that the lack of adequate dental care offerings (Chesapeake Health plus three solo practitioners) in the county was mentioned by half of the participants. McCready hospital has treated 111 patients in the most recent six months with a primary dental diagnosis.

SNFs, Extended Care Organizations, and End-of-Life Care

The key informants taking part in this needs assessment praised the activities of the two Skilled Nursing Facilities in the County (Princess Anne and Crisfield) but also noted the growing need for elder care and memory care beds. They also discussed the lack of resources, long-term care insurance coverage and access/affordability barriers to such care in the county. The participants also praised the outreach efforts of Coastal Hospice in Somerset County. They noted that in the sparsely populated rural Somerset County, it may not be economically viable to have a stand-alone end-of-life facility. Finally, Adult Evaluation services (AERS) of the Somerset County Health Department was listed as a

valuable service. AERS provides assistance to aged and functionally disabled adults who are at risk of institutionalization. AERS staff conducts a comprehensive evaluation to identify services available to help the individual to remain in the community, or in the least restrictive environment, while functioning at the highest possible level of independence and personal well-being (See: <https://somersethealth.org/programs/community-health-nursing/aers-adult-evaluation-review/>).

Care Giver Needs

As the population of Somerset County ages, it is increasingly becoming common for family members to become primary care givers to their aging relatives. Frequently, these care givers are having to withdraw from the workforce, putting additional burdens on the households involved. The key informants taking part in this needs assessment noted that the lack of respite care, limited options for training care givers, and difficulties in securing adult medical and non-medical day care issues as additional concerns.

Conclusions and Recommendations

The key informants taking part in this needs assessment listed the rural nature of Somerset County, the low population density, poverty, low educational outcomes, lack of adequate healthcare services and professionals, and low health literacy as the major challenges. They praised the efforts of the County Health Department and the McCready Health organization against this background high risk factors and low outcomes. When asked for recommendations for improvement, the participants listed the following solutions (in descending order):

1. Seeking Additional Resources;
2. Pooling Resources within Somerset County and Regionally;
3. Focusing more on Education, Outreach, and Prevention;
4. Strengthening partnerships with Faith and Community Based Organizations;
5. Breaking down silos and allocating funding to patients not the providers;
6. Enhancing Case Management.