

McCready Health Edward W. McCready Memorial Hospital 201 Hall Highway, Crisfield, MD 21817

Community Benefits Fiscal Year 2015

I. GENERAL HOSPITAL DEMOGRAPHICS AND CHARACTERISTICS

1. Table One

Bed Designation: FY15	Inpatient Admissions FY15	Primary Service Area Zip Codes:	All other Maryland Hospitals Sharing Primary Service Area	Percentage of Uninsured Patients by County	Percentage of patients who are Medicaid Recipients by County
4 licensed Med/Surg beds	301 admissions 871 total in patient days	21817 21838 21871	 Peninsula Regional Medical Center (Wicomico Co.) Atlantic General Hospital (Worcester Co.) 	14% of Somerset County residents are uninsured. (2,489) Source: '2013 County Health Rankings' conducted by the Univ. of Wisconsin.	Approx. 41.7% Approx. 8,038 in County

2a. Describe in detail the communities served

McCready Health, a division of the McCready Foundation includes the Edward W. McCready Memorial Hospital, located in Crisfield, Maryland, Somerset County. During fiscal year 2015, the facility was licensed for four medical/surgical acute beds and had 301 inpatient admissions. Of those 13.6% were Medicaid. Most of the patients that come to McCready live in lower Somerset County, but the hospital also serves part of Maryland's Worcester County and the Eastern Shore of Virginia. An estimated 25,859 people live within our service area of which 45.5% are minorities. Only 14.3% of the residents over age 25 have a college degree compared to 37.1% of the state. Somerset County is the poorest county in the state of Maryland with a median household income of \$36,106. Unemployment of those 16+ is at 9.9% compared to the state rate of 6.6%. Medicaid insures 31% of our population. *(Source: US Census Quick Facts and SHIP data)*.

The 2014 Community Needs Assessment found that 59.6% of those surveyed reported their physical health was "not good". It also found that transportation and employment challenges were the biggest barriers to health care. When comparing the 2009 assessment, the general health rating for those reporting 'excellent' or 'very good' health was much lower (33.3% vs. 58.3%).

According to the Maryland Vital Statistics, the life expectancy at birth of a Somerset County resident is 77.2 years slightly less than the state expectancy of 79.6 years. Smoking rates have declined but uninsured Emergency Department visits, diabetes and unhealthy weight rates all surpass the State Health Improvement Plan goal and the Healthy People 2020 goal. (Source: SHIP website at dhmh.maryland.gov/ship)

Somerset County is designated by the U.S. Department of Health and Human Services, Health Resources and Services Administration, as a medically underserved area. The rate of Primary Care providers (per 100,000) is 38.0 compared to the state rate of 117.8. McCready is the closest hospital available to those living in the remote crabbing/fishing communities of Smith and Tangier Islands in the Chesapeake Bay and is accessible by boat and air.

2.b. Table II Somerset County Demographic Characteristics

	Somerset County
Median Household Income within the CBSA SHIP 2013 data	\$36,106
Percentage of households with incomes below the federal poverty guidelines within the CBSA SHIP 2013 data (State is 10.1%)	21.2%
Percentage of uninsured people by County within the CBSA American Community Survey/2009ACS data	14% 2,489 persons
Percentage of Medicaid recipients by County within the CBSA.	41.7%
Life Expectancy by County within the CBSA (including by race and ethnicity) SHIP data	77.2 Black 77.4 White 76.3
Mortality Rates by County within the CBSA (including by race and	All causes of death 965.2 White 966.4 Black

ethnicity)	
Access to boolthy food, transportation and education, bouging quality	Access to healthy food 27%
Access to healthy food, transportation and education, housing quality and exposure to environmental factors that negatively affect health status by County within the CBSA.	In Crisfield (21817) there is 1 grocery store
Ship data unless otherwise noted	providing access to fresh foods.
	There are 2 national fast food chains in Crisfield. (Subway and McDonalds)
	College degree - 14.3% (State rate is 37.1%)
	Adult smokers = 13%
	Transportation remains an issue; limited public transportation is available via Shore Transit or a local taxi service.
	Unemployment of those 16+ is 9.9% vs. the state rate of 6.6%
	The rate of Primary Care providers (per 100,000) is 38.0 vs. the state rate of 117.8

Available detail on race, ethnicity, and language within CBSA. Ship data unless otherwise noted	7.5% of households do not speak English Spanish is spoken in 3.3% of households
	County has a large migrant population May – October. Rural migrant camp is approx. 20 mi. from hospital.

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?
 - ___X__ Yes Provide date here. <u>10/01/2014</u> It is attached as a pdf document
 - ____ No
- 2. Has your hospital adopted an implementation strategy that conforms to the definition detailed on page 5? ____ Yes It is attached as a pdf document
 - _X__ No

III. Community Benefits Administration

a. Is Community Benefits planning part of your hospital's strategic plan?

___Yes

- 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. _x__CEO
 - 2. _x__CFO
 - 3. __x__Other (please specify) Community Relations Director, Chief Nursing Officer

The Community Relations Director collects all the data and completes the required narrative report based on the information received. The Chief Nursing Officer, along with 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. _x__Nurse
 - 3. ____ Social Worker
 - 4. x___ Other (please specify) Director of Quality, Department Supervisors, Financial Office

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. The Finance Office provides needed numeric and financial data needed for this report.

iii. Community Benefit Operations

- 1. __x_Individual (please specify FTE) Director of Community Relations, 1.0 FTE
- 2. ___ Committee (please list members)
- 3. ____ Department (please list staff)

_X__No

- 4. ____ Task Force (please list members)
- 5. ____ Other (please describe)

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	xyes	no	Report is reviewed by the CEO and CFO prior to submission
Narrative	xyes	no	

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

Spreadsheet ____yes __x__no
Narrative ____yes __x__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:
 - ___x___ Other hospital organizations
 - ___x___ Local Health Department
 - ___x___ Local health improvement coalitions (LHICs)
 - ___x___ Schools
 - ___x___ Behavioral health organizations

_____ Faith based community organizations

___x___ Social service organizations

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

Organization	Name of Key Collaborator	Title	Collaboration Description
Somerset County Health Dept.	Craig Stofko	Health Officer	Together with our CEO, determined strategies needed to provide the most accurate and thorough data for our county.
George Washington University	Cherise B. Harrington, PhD, MPH	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.

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 __x___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?

__x__yes ____no

Identified Health Need	Implementation Strategy
Access to Care	1. Added a full-time surgeon and anesthesiologist. Now able to provide services daily.
	2. Added part-time Gynecologist to our outpatient center.
	3. Continue to recruit new providers and research specialty service options.
	4. Continue to offer our Care-a-van free transportation service for appointments.
	5. Link uninsured patients to resources including MD Health Insurance Exchange.
	6. Opening new Immediate Care Center in Nov. 2015 to serve the upper county and
	improve access to care.
Diabetes	1. Continue partnership with the 3 area health departments to refer all diabetes patients
	to a case management program to reduce the reoccurring diabetes related ED visits
	2. A member of the Tri-County Diabetes Alliance – a coalition of local health
	departments, hospitals and other health agencies to collectively address this issue.
Obesity	1. Continue to offer the Mozelle Saltz Fitness Center to the public and staff.
	2. Partnered with Healthy Somerset agencies at a Community Field day, April 2015.
	Over 1,000 people of all ages attended. It included a walk, free info and food.
Transportation	1. Facility's van transports patients to and from their appointment.
	2. Shore Transit has a bus stop at our campus.

V. Hospital Community Benefit Program and Initiatives

ldentified Need	Hospital Initiative	# of People within the target populatio n	# of Peopl e reach ed by the initiati ve	Primary objective of the Initiative	Single or Multi year time period	Key Partners	Impact/ Outcome	Evaluation of Outcomes	Continuat ion of Initiative	Expense
Access to Care	Recruit new providers	25,000 residents in county	282 surger ies 73 appts	To increase # of providers	Single	Local providers	1 surgeon, 1 anesthesiolog ist, 1 PT gynecologist added 2015. Significant time to	New staff hired to address limited providers access in area	yes	Advertising, meetings \$5,000

		for Gyn.				advertise and recruit midlevels for new Immed care center			
Access to Care and Transpor- tation	Patient transport		Eliminate barrier to services	Single	Community, media, other providers	1821 people served 2212.4 staff hrs.	Increase in use of service	Yes	\$19,912 staff salary
Access to Care	Health Insurance resource		To increase # of people with insurance	Single	MD Lower Shore Health Exchange	Hth. Exchange staff were on-site to answer questions, assist with insurance sign-up. 384 hrs. servicing 130 people. hosted 1 community events reaching 30 persons	Increase in # of persons obtaining insurance.	Yes	\$300 for staff time, + In-kind room space
Diabetes	Awareness Education and coalition member- ship		To increase awareness of diabetes and links to care	Single	Providers, Area Health Depts., Tri- Co. Diabetes Alliance	Attended 2 mtgs.	Staff left agency during FY.	Yes with new staff.	\$200 salary

Obesity	Community Field day	25,000	1,000	To focus on issue, provide resources for residents	Single	Healthy Somerset Coalition	Over 1000 attended 4 planning meetings by 1 staff. prep for event. 2 staff at event		Yes	\$400
Access to Care	Personal Care			Provide in- home care for CBSA residents who cannot leave home	Single	SCHD	Personal Care coordinator made 120 + home visits to 60 Clients	Program ended in the community.	Yes	\$6,720 salary
Access to Care/ Uninsured	Charity Care			Provide financial assistance	Single	LS Health exchange, Dept. of Social services	Approved 170 applications for financial assistance	Less applications due to increase in coverage by Health Exchange	Yes	N/a
Other (Training)	Interns / Mentor	42	1220	Provide learning opportunity for future health care workers	Single	UMES, Wor-Wic College	42 interns, 1220 staff hrs. in the PT, Lab and Pharmacy	An increase from last year of #s of students and staff time. students are getting extensive hands on training	Yes	\$40,660 salary
Preventa- tive care	Flu Shots		440	Prevent spread of flu	Single	Media	440 people vaccinated	4x increase from last yr. multiple events	Yes	\$10,536 includes salary, vaccine, supplies

Access to Care, Awareness of Resources	Health Fairs	480	To increase awareness and links to services	Single	MAC, Inc. LHD, community	5 events 480 people reached	Additional community events noted in this table.	Yes	\$1,055
Awareness of resources	Educatio nal presentati ons		To increase awareness	Single	SU, Wor-Wic Woodson School, Life Crisis	4 events 224 people educated		yes	\$339 salary + \$100 supplies
Preventive Health care	Health screens		To educate public and link to treatment or services as needed	Single	UMES	64 people screened for glucose and cholesterol		Yes	\$264 Salary and \$624 materials
Coalition and Community Building	Improving communit y		To give agency expertise in planning strategies to improve health and economy	Single	SCHD, Tri- Co, Workforce, Chamber of Commerce, Hunger 413	10 mtgs. Totaling 63 hrs.		Yes	\$4,461 in staff salary
Donations	Donations commun - ity (cash and in- kind)	751	To serve our community and improve health care and access	Single	Crisfield High School, Washington Hi School, Amer. Cancer Soc. Som. Co. 4-H, AA Support group, Chamber of Commerce, Long Term Recovery	Cash to support events. Supplies given to UMES phlebotom y program.	Able to support more partners in the community	Yes	\$2,655 in contributi ons Value of services \$7,500 Supplies \$2,215

	Committee, Safe Hwy. Coalition, MAC Caregivers, Wor-Wic CollegeUse of space 67 times.24 hrs. Volunteer time for events.	
--	-------------------------------------------------------------------------------------------------------------------------------------------------------	--

V. 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, an anesthesiologist on staff full-time. We also have a gynecologist on staff one day per week. We have contracts with several specialty providers including cardiology, podiatry, and gastroenterology. The Emergency Department is staffed by the Eastern Shore Associates group providing doctors 24 a day. The McCready Immediate Care is staffed with Physician's Assistants and supervised by our physicians.

McCready Health does not provide subsidies to 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 whom 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 try 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 onsite 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 Policies are attached.

2. Mission, Vision, Value Statement

Our Mission: We 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 its neighbors caring for neighbors. That quality and tradition has endured for over ninety years.

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.

Table of Contents

EXECUTIVE SUMMARY4
ACKNOWLEDGEMENTS6
LIST OF TABLES
LIST OF FIGURES
INTRODUCTION9
BACKGROUND10
Community Definition and Characterization of Somerset County, Maryland10
Health Needs Assessments11
Design Rationalization: Using in-person community-based sampling12
Rationale12
METHODOLOGY14
Overview14
Primary Population (Part 1) - Self-Reported Questionnaire14
Procedures15
Secondary Population (Part 2) - Interviewer Structured Questionnaire
Advantages and Disadvantages of Interviewer Structured Questionnaire16
Measurement16
Demographics17
Social and Environmental Factors17
Health Behavior17
Health Status
Health Priorities
Perceived Barriers to Care for Self, Family, and Community18
Data Analysis
NEEDS ASSESSMENT: SUMMARY OF SURVEY RESULTS

RESULTS20
Recruitment
Demographics20
Gender and Sexual Orientation20
Age20
Race and Ethnicity21
Education, Employment, and Income21
Marital status22
Household Members22
Ratings of General Health23
General Health (see complete data in appendices Table 11)23
Health and Risk Behaviors24
Health Behaviors (see complete data in appendices, Table 12)
Individual Personal Life and Health Priorities26
Characteristics of Family Life (see complete data in appendices)
Self-report of personal health problems and priorities (see complete data in
appendices)
Physical and Mental Health27
Health Concerns and Priorities (see complete data in appendices)28
Barriers to Care (see complete data in appendices)
Health Information Seeking and Program Interest
Health Information Seeking Sources (see complete data in appendices)
Program/Service Interest (see complete data in appendices)
Perceptions of the Overall Counties' Health Problems, Priorities,
& Barriers to Health Care32
Somerset County Health Problems, Priorities, and Barriers (see complete data in appendices)

Race and Health Care, Incarceration and Reentry, and Community Engagement34
Race and Healthcare (see complete data in appendices)
Incarceration and Reentry (see complete data in appendices)
Community Engagement (see complete data in appendices)
Results: Secondary Analyses35
NEEDS ASSESSMENT: SUMMARY OF COMMUNITY STRUCTURED INTERVIEWS
Community Structured Interviews37
Stakeholders Assessment37
Organization's Health Participation37
Somerset County Health37
COMPARISON WITH CENSUS DATA
COUNTY AND STATEWIDE
Comparison with County and Statewide Census Data40
COMPARISON WITH PREVIOUS NEEDS ASSESSMENT
Comparison with Previous Needs Assessment42
DISCUSSION
Next Steps47
Recommendations for Future Needs Assessments47
Limitations49
Advantages and Disadvantages of Self-Reported Questionnaire
Recruitment49
Conclusion49
REFERENCES
APPENDIX. 1 Complete Findings
APPENDIX 2. Bivariate Analyses86

EXECUTIVE SUMMARY

Background: The Somerset County Health Department and McCready 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 McCready 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 ($X^2 = 33.143 \text{ p} <.01$). Racial groups did not differ significantly on reports of general health status ($X^2 = 14.86 \text{ p} >.05$). And Whites were more likely to earn incomes over \$50,000 ($X^2 = 13.52 \text{ p} <.05$) 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.

Also a special thanks to Dr. Rajiv N. Rimal for his guidance and input.

In addition, an acknowledgement to Mr. Donald Strong for providing the necessary introductions that made this important endeavor possible.

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.

LIST OF TABLES

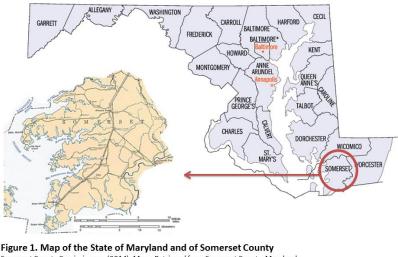
Table 1. Self-reported Health Priority 27
Table 2. Physical & Mental Health Previous 30 days27
Table 3. Percentage of the Sample with a Chronic disease or condition
Table 4. Health Information Seeking Sources 30
Table 5. Services that respondent would be interested in if available
Table 6. Perceptions of Overall County Health Priorities 32
Table 7. Comparison with census data - County and Statewide40
Table 8. Comparison with previous needs assessment42
Table 9. Recruitment Location 52
Table 10. Demographics 53
Table 11. General Health 56
Table 12. Health Behaviors 58
Table 13. Barriers to Healthcare60
Table 14. Worries and Healthcare61
Table 15. Health Information Seeking Sources 64
Table 16. Chronic disease or condition65
Table 17. Chronic Diseases or Conditions and other Health Concerns 66
Table 18. Self-report of personal health problems and priorities 67
Table 19. Physical and mental health during past 30 days 73
Table 20. Services that respondent would be interested in if available
Table 21. Perceptions of county health problems and priorities
Table 22. Awareness of Somerset County community engagement
Table 23. Race and Health Care
Table 24. Incarceration and Reentry
Table 25.Bivariate Analyses: BMI status on perceptions of healthy weight
Table 26. Bivariate Analyses: General Health Status by Income
Table 27. Bivariate Analyses: General Health Status by Race
Table 28. Bivariate Analyses: Income by Race 86

LIST OF FIGURES

Figure 1. Age by Category	20
Figure 2. Income by Category	21
Figure 3: Self-reported General Health Status	23
Figure 4. Body Mass Index	24
Figure 5. Barriers to Health Care	29

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



Somerset County Comissioners. (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 Englishspeaking, 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

Age

responders were

with the smallest

being aged 65 or

older (11%).

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%).

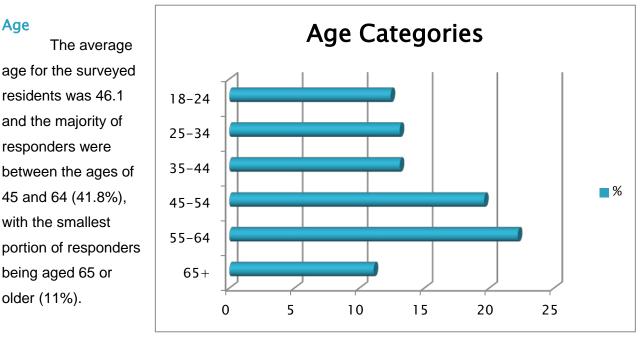


Figure 1. Age by Category

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.

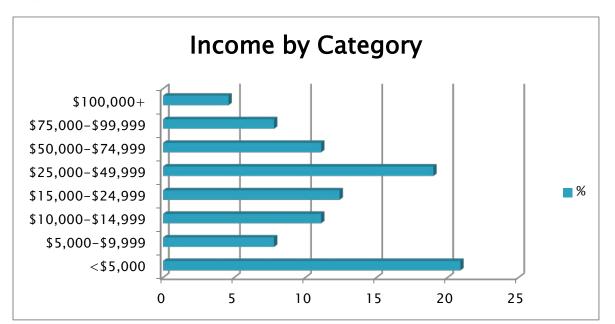


Figure 2. Income by Category

21 | Page

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.

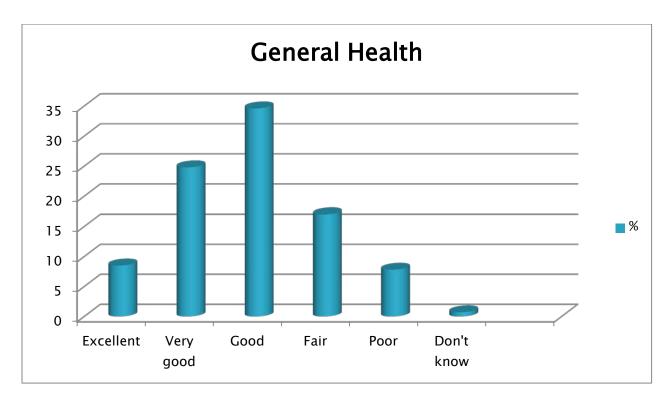
Household Members

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.





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 has healthy.

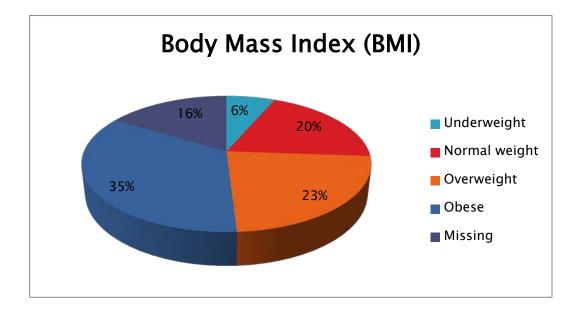


Figure 4. Body Mass Index

Smoking

A series of questions were included about smoking habits and smoking history. Thirtytwo 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 worriers 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	
DURING THE PAST 30 DAYs, HOW OFTEN DID YOU FEEL	%
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
ABOUT HOW OFTEN DURING THE PAST 30 DAYS DID YOU FEEL	
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.

	#	%
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	-	-

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

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%).

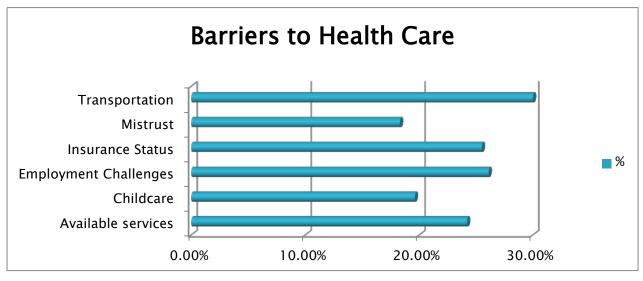


Figure 5. Barriers to Health Care

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 of 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					

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 (X² = 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 ($X^2 = 14.86 \text{ p} > .05$).

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 \text{ 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	d 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
^a Median 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 w	with previous need	s assessme	ent				
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		

	Somerset County 2014 Needs Assessment						
	Mistrust	18.3%	Uncertain	27.1%	26.2		
(Q22) Overall Health Status/ Self-Reported	Excellent	8.5%			6/10 58.3% "excellent or very		
Health Status "Would you say that in	Very Good	24.8%			good"		
general your health is excellent, very good,	Good	34.6%					
good, fair or poor?"	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 12.05 (SD= 10.5)	4.8 d	ays	3.5 days	-	-
Healthy Weight (BMI 18.5-24.9)		23.4%	24.7	%	29.3%	32%	60% +
BMI Based Overweight Status		68.7%	73.9	9%	69.2%	67.4%	
Frequency of Good Mental Health in the	All or Most Of The Time	21.6%	Most Of The Time	83.4%	86.7%	-	
Past Month Q74 (Feel very healthy	Some of the Time	23.5%	Some of the Time	10.7%	8.3%		-
and full of energy)	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%	-	-

	Somerset County 2014 Needs Assessment						
			past year				
Self-Reported	High Blood Pressure	41.2	Arthritis	34.3%			
Prevalence of Chronic Illness	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	9%	16.3%	14.1%	

			Somerset County 20	14 Needs Assessment	
Cigarette Smoking Prevalence					
(Related to Q56) Alcoholism/Binge Drinking		7.8%	20.9%	22.6%	
(Related to Q56) Hypertension		41.2%	45.5%	33.8%	34%
(Related to Q56) Self- Reported Prevalence of High Cholesterol		22.9%	44.6%	36.3%	30.5%
(Related to Q33, 34) Seniors – Flu Vaccinations in the past 5 years	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%	61.2% 19.9%	
(Related to Q36, Q37) Sigmoid or Colonoscopy (age 50+)		34.6%	75.2%	77.5%	64.8%
(Related to Q36) Mammogram in the past 2 years (age 40+)		35.3%	78.3%	84.5%	
(Related to Q36) Pap Smear (age 18 +)		77.5%	74%	80.5%	74.9%
(Related to Q46) Regular Site for Medical Care		77.1%	93.7%	90%	85.1%
(Related to Q32) "Always" wear a Seatbelt – Motor Vehicle Safety		73.2	77.8%	87.9%	83.5%
(Related to Q9) Health Insurance Coverage		79.7%		78.3% (private) 13.3% (govt sponsored)	
(Related to Q9) Lack of Health Insurance		13.1%	9.5%	8.4%	17.7%

45 | P a g e

 Somerset County 2014 Needs Assessment

 20.9%
 25.2%
 13.9%

 ansportation
 17%
 Scheduling
 64.4%

 atting an
 21%
 Inconvenient
 12.9%

lack of insurance prevented physician					
visit in past 2 years (Related to Q77) Reason for Difficulty Getting In To See a Physician	Transportation Getting an Appointment Long wait times Office not open 	17% 21% 15.7% 3.3 		Scheduling Inconvenient Hours Difficulty Finding Doctor Cost/Insurance Uncertain Health Concern Lack of Transportation	64.4% 12.9% 7.6% 5.8% 3.9% 2.8% 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 Internet Television Brochures Family or Friend Health Department Health Magazines Newspapers Classes Videos Other	47.7% 32.7% 22.2% 19.6% 17.6% 13.1% 11.8% 11.1% 3.3% 2.6% 1.3%		Family Doctor Internet Friends/Relatives Other Television Uncertain Work Hospital Pub Insurance Books/Magazines Newspaper	46.6% 13.1% 9.5% 6.9% 5.4% 4.9% 4.8% 2.6% 2.4% 2.2% 1.6%

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

Coverage (18-64) (Related to Q77)

Financial Barriers to Health Care – cost or

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 inperson recruitment, where the presence of a researcher may increase interviewer response bias or hesitance 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 McCready Foundation. A hybrid approach which could combine the two approaches where tablets and inperson 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: <u>http://msa.maryland.gov/msa/mdmanual/01glance/html/county.html</u>. 2014.
- 2. Somerset County Comissioners, Somerset County Maryland. Retrieved from Somerset County Comissioners: <u>http://www.somersetmd.us/</u>. 2014.
- 3. United States Census Bureau, State and County QuickFacts: Somerset County, Maryland. Retrieved from United States Census Bureau: http://guickfacts.census.gov/gfd/states/24/24039.html. 2013.
- 4. County Health Rankings, Somerset Additional Measues. 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 Radio2013.
- 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 Characteristics2010.
- 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 Characteristics2008-2012.
- 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., Somserset County, in County Health Rankings2014.
- 14. Bureau, U.S.C. American FactFinder Table Generator Wicomico County, Maryland. 2010.
- 15. Professional Resarch Consultants, I., 2009 PRC Commity Health Assessment, 2009.
- 16. DHMH, M. Maryland Minority Health Disparities Selected Statewide and Somerset County. 2011 April.
- Connecticut Hospital Association and Connecticut Association of Directors of Health, Guidelines for Conducting A Communit Health Needs Assessment. Wallingford: Connecticut Hospital Association. Retrieved from <u>http://www.cdph.ca.gov/data/informatics/Documents/CT-cha-chna%20guidelines.pdf</u>. 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:*

50 | Page

http://www.orau.gov/cdcynergy/soc2web/Content/phase05/phase05_step03_deeper_qu alitative_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_guestionnaires/*. 1999.
- 26. University of Surrey, The advantages and disadvantages of questionnaires. Retrieved from Introduction to Research: <u>http://libweb.surrey.ac.uk/library/skills/Introduction%20to%20Research%20and%20Man</u> <u>aqing%20Information%20Leicester/page 51.htm</u>. 2004.
- 27. Research Connections, Survey Research and Questionnaires. Retrieved from Child Care & Early Education Research Connections: <u>http://www.researchconnections.org/childcare/datamethods/survey.jsp#advantages</u>. 2013.
- 28. Trueman, C., Structured Questionnaires. Retrieved from History Learning Site: <u>http://www.historylearningsite.co.uk/structured_questionnaires.htm</u>.
- 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%

Table 10. Demographics

	Ν	M (SD)	
Age	140	46.1 (16.21)	Range (18-85)
Years in Somerset	130	27.64 (21.51)	
County		. ,	
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	-	2.0
	Missing	5	4.1
Ethnicity		5	4.1
Ethnicity		3	2.0 (2.4)
	Hispanic or Latino		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)
	Cohabitating	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)

	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
		0	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)
	-	00	

	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)	
County	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

	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
		10	0.0
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

Table 11. General Health

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

	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	
	Wilsoning	10	11.0	
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	
E su Questa l				
Ever Smoked	Yes			
	No	93	60.8	
	Missing	49	32.0	
	IVIISSII IY	11	7.2	
Smoked 100 Cigarettes in Life				
-	Yes	69	45.1	
	No	74	48.4	
	Missing	10		

Table 12. Health Behaviors

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
	INU	12	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
			50.5
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

	M (SD)	#	%
Droklan Droventing access to some		π	78
Problem Preventing access to care			
	Transportation	26	17
	Getting an	21	13.7
	Appointment		
	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	1	
	needs		
	Had to go to	1	
	Baltimore for a		
	specialist		

Table 13. Barriers to 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		Ī		
	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	

Table 14. Worries and Healthcare

	None of the time	45	29.4	
	Missing	22	14.4	
	Wissing			
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				

	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

	#	%
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

-. e 2.

	#	&
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	13	8.5
Attack/Heart Failure		
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

Table 17. Chronic Diseases or Conditions and other Health Concerns

Table 16. Self-report of personal fleatin pr	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

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

	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

	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
D			
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

	Agree	13	8.5
	Neutral	23	15.0
	Disagree	21	13.7
	Strongly disagree	50	32.7
	Missing	32	20.9
			2010
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 Heal	th 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

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

71 | P a g e

	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	

All the time Most of the time Some of the time A little of the time None of the time Missing All the time Most of the time Some of the time All the time Most of the time All the time Most of the time All the time Most of the time None of the time None of the time Missing	22 9 29 15 62 16 13 8 32 16 66	14.4 5.9 19.0 9.8 40.5 10.5 8.5 5.2 20.9
Most of the time Some of the time A little of the time None of the time Missing All the time Most of the time Some of the time A little of the time None of the time	9 29 15 62 16 13 8 32 16	5.9 19.0 9.8 40.5 10.5 8.5 5.2
Some of the time A little of the time None of the time Missing All the time Most of the time Some of the time A little of the time None of the time	29 15 62 16 13 8 32 16	19.0 9.8 40.5 10.5 8.5 5.2
A little of the time None of the time Missing All the time Most of the time Some of the time A little of the time None of the time	15 62 16 13 8 32 16	9.8 40.5 10.5 8.5 5.2
None of the time Missing All the time Most of the time Some of the time A little of the time None of the time	62 16 13 8 32 16	40.5 10.5 8.5 5.2
Missing All the time Most of the time Some of the time A little of the time None of the time	16 13 8 32 16	10.5 8.5 5.2
All the time Most of the time Some of the time A little of the time None of the time	13 8 32 16	8.5 5.2
Most of the time Some of the time A little of the time None of the time	8 32 16	5.2
Most of the time Some of the time A little of the time None of the time	8 32 16	5.2
Some of the time A little of the time None of the time	32 16	
A little of the time None of the time	16	20.9
None of the time		10.5
	00	43.1
Missing	18	
	10	11.8
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
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
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
N4''	23	
Missing	20	15.0
	A little of the time None of the time Missing All the time Most of the time Some of the time A little of the time Missing All the time Most of the time Some of the time A little of the time None of the time	A little of the time22None of the time51Missing21All the time13Most of the time20Some of the time36A little of the time18None of the time39Missing27Image: All the time18Most of the time6Some of the time29A little of the time29A little of the time20

Table 19. Physical and mental health during past 30 days

73 | P a g e

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
Monthless			
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
	l		

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

	#	%	
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		

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

		#	%
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 are 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
	wissing	10	11.0
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

Table 21. Perceptions of county health problems and priorities

	Strongly disagree	11	7.2
	Missing	19	12.4
Perceptions of Somerset County Healt	h Priorities		
Ferceptions of Somerset County health			
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
		<u> </u>	10.1
Sexual and Reproductive Health			
	Strongly agree	27	17.6
	Agree	22	14.4
	Neutral	57	37.3

	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			
Oral Health		10	
	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

Somerset County 2014 Needs Assessment	Somerset	County	2014	Needs	Assessment
---------------------------------------	----------	--------	------	-------	------------

	Neutral		51		33.3
	Disagree		11		7.2
		Strongly disagree			4.6
	Missing				13.1
			20		
Injuries					
	Strongly agre	е	29		19.0
	Agree		35		22.9
	Neutral		50		32.7
	Disagree		10		6.5
	Strongly disa	gree	8		5.2
	Missing		21		13.7
Smoking Cessation					
	Strongly agre	е	45		29.4
	Agree		29		19.0
	Neutral		41		26.8
	Disagree		8		5.2
	Strongly disag	gree	9		5.9
	Missing		21		13.7
Asthma/Respiratory Problems					
	Strongly agre	e	31		20.3
	Agree	-	35		22.9
	Neutral		46		30.1
	Disagree		9		5.9
	Strongly disa	gree	11		7.2
	Missing	0	21		13.7
Perceptions of Somerset County Bar	riers to Obtaining Healt	h Care	9		
Transportation					
	Strongly	46		30.	1
	agree				•
	Agree	37		24.	2
	Neutral	32		20.	9
	Disagree	7		4.6	
	Strongly	14		7.0	
	disagree	11		7.2	
	Missing	20		13.	1

Insurance Status			
	Strongly		
	agree	41	26.8
	Agree	39	25.5
	Neutral	34	22.2
	Disagree	6	3.9
	Strongly	14	9.2
	disagree	14	9.2
	Missing	19	12.4
Employment Challenges			
	Strongly	42	27.5
	agree	72	21.0
	Agree	39	25.5
	Neutral	36	23.5
	Disagree	5	3.3
	Strongly	12	7.8
	disagree		
	Missing	19	12.5
Child Care			
	Otron alu		
	Strongly	36	23.5
	agree	35	22.9
	Agree Neutral	40	26.1
		6	3.9
	Disagree	0	5.9
	Strongly disagree	16	10.5
	Missing	20	13.1
	Wissing	20	10.1
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

	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

		#	%
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 22. Awareness of Somerset County community engagement

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 are 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