

Saint Agnes Hospital

Community Health Needs Assessment & Implementation Strategies
June 2016

Approved by Board of Directors June 24, 2016

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Executive Summary

Introduction & Background:

Beginning in 1862, and continuing over the last 154 years, Saint Agnes Hospital has been dedicated to the art of healing by providing exceptional care to the Greater Baltimore area. Built on a strong foundation of excellent medical care and compassion, Saint Agnes and the associates and physicians who practice here are committed to providing the best care for our patients for many years to come.

Today, Saint Agnes Hospital is a 251-bed, full-service teaching hospital with residency programs in a number of medical and surgical specialties. Saint Agnes completed a \$200+ million expansion that emphasizes patient safety in a high quality healthcare environment. The expansion includes a new patient tower, the new 80,000-square-foot Angelos Medical Pavilion which is home to a variety of specialties, including an expanded Cancer Institute, a new parking garage, and the Hackerman-Patz House for families of patients being treated for long-term ailments. We believe that healthcare is about more than healing the sick; it is also about encouraging the growth and vitality of our community. To this end, Saint Agnes is committed to sharing the talents of our skilled physicians and associates as widely as possible, with a dedication to moving beyond the campus and into the communities we serve. We have demonstrated this commitment with our investment in our campus, Route 40, and Gibbons Commons, as well as our founding involvement in community partnerships which increase access not only to clinical services, but to jobs and opportunities as well.

Saint Agnes was founded on a mission of service to the community, particularly those who struggle, and our community outreach programs continue to expand that mission today. Based on the Saint Agnes' FY 13 Community Health Needs Assessment, the hospital has launched a broad range of community initiatives to address our highest health need priorities in cardiovascular disease, obesity and related chronic conditions, and to improve access to primary care, especially for the poor and vulnerable. As a result, in Fiscal Year 2015, Saint Agnes provided \$28.2M in charitable giving to the community. In addition to measuring the financial contributions of our community health and charity care services, the leadership team via the Community Health Advisory Council has implemented a Community Health Outcomes Dashboard to track progress of community health initiatives and impact on improving health status.

Source: http://www.stagnes.org/wp-content/uploads/2014/09/Saint-Agnes-Fact-Sheet-15.pdf

Our Mission

At Saint Agnes Hospital, we commit ourselves to spiritually-centered healthcare which is rooted in the healing ministry of Jesus.

In the spirit of St. Elizabeth Ann Seton, and in collaboration with others, we continually reach out to all people in our community, with a special concern for those who struggle.

As a Catholic health care ministry and member of Ascension Health, we are dedicated to the art of healing to sustain and improve the lives of the individuals and communities we serve. We are also called to advocate for a just society.

Through our words and deeds, our ministry is provided in an atmosphere of deep respect, love and compassion.

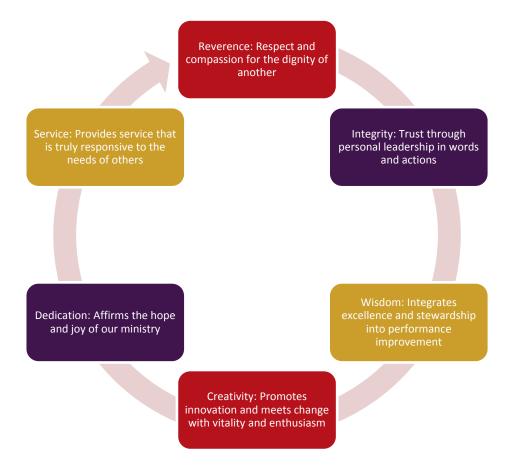
Our Vision

Patients are our passion. Our physicians and associates are our pride. Healing is our joy.

We will be widely known for the way our physicians, nurses and associates combine sophisticated medical technology with spirituality and compassion. Shoulder-to-shoulder, we stand united in our community to care for those in need. We will be a leader in service excellence.

Source: http://www.stagnes.org/about-us/mission-and-values/

Our Core Values



Our Community Health Improvement Mission

Saint Agnes Hospital is dedicated to the art of healing to sustain and improve the lives of the individuals and communities we serve. We are committed to the health and well-being of our entire community. Through expanding outreach and community integration services our dedicated team strives to enhance the social and physical environments that promote good health for all.

I. CHNA: Purpose and Scope

The 2016 Community Health Needs Assessment process is about improving health - the health of individuals, families, and communities. The objective of the assessment is to evaluate the health status of the people residing in the communities served by Saint Agnes Hospital and to highlight the geographic regions and populations within the community benefit service area that have greater health needs and determine how Saint Agnes might best respond to identified health need priorities.

In accordance with IRS requirements and the enactment of the Affordable Care Act in March of 2010, hospital facilities with a tax-exempt status must complete an assessment of the health needs of the community every three years. Additionally, the assessment must include the input from persons who represent the broad interests of the community, including those with special knowledge of or expertise in public health. Hospital services and health improvement programs are to be linked to the prioritized needs identified in the assessment process. Improvements in community health are to be tracked and demonstrated through measurable outcomes metrics.

The needs present in the Saint Agnes Hospital Community Benefit Service Area (CBSA) are highly variable from community to community. This assessment highlights each community individually, identifying the risk factors and health needs that are unique to that specific population. For the FY 16 CHNA, Saint Agnes expanded the level of community input from the FY 13 assessment methodology conducting six focus groups across the four most vulnerable communities identified in the FY 13 assessment.

The FY 16 community health needs assessment update follows two seminal events in the health care environment. The first is the dramatic changes in Maryland's health care system reimbursement as part of the waiver modernization and implementation of value-based global revenue reimbursement model with focus on population health. Second, and more importantly, the civil unrest that occurred in Baltimore City, particularly West Baltimore illustrated the outcry of the community in part due to the decades of neglect to address social determinants of health that are vital to a healthy community. The refocusing of the health care system to population health further heightens the need for health care systems to be engaged and collaborating with community-based organization and the private sector to respond to and address the significant social needs in West Baltimore.

The assessment process involved both quantitative and qualitative components. See Figure 1. Saint Agnes engaged the participation of the general public as well as key internal and external stakeholders who represent the broad interest of the communities served by Saint Agnes to review the

quantitative analysis. The public provided input through a structured online survey and via focus groups across the assessment process during Fiscal Year 2016. The internal and external stakeholders were individuals with expertise in provision of health care services and public health and included community leaders, physicians, nursing, social work, pastoral care, care management, emergency



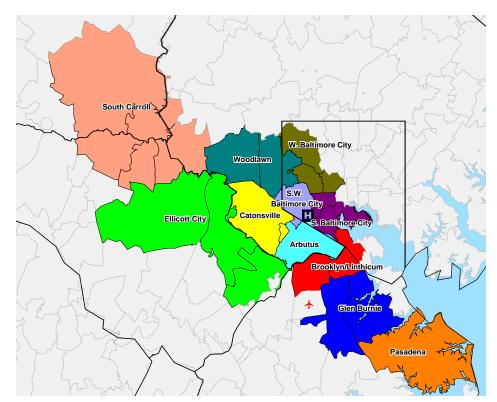
outpatient and management representatives and a broad range of community organizations.

Figure 1 - FY 16 CHN Assessment Methodology

Community Benefit Service Area

Due to its location in the southwest segment of the Baltimore Metropolitan Area, Saint Agnes serves a diverse patient population. Saint Agnes' community benefit service area (Southwest Baltimore City and Baltimore County, Northern Anne Arundel County, Eastern Howard County, and Southern Carroll County) has a population of approximately 766,900 and represents the zip codes that comprise 80% of Saint Agnes Hospital patient population. A map of the communities Saint Agnes serves can be seen in Figure 2. Within the community benefit service area (CBSA), Saint Agnes has defined eleven communities based on grouping zip codes that have similar demographic characteristics and considering various geographic boundaries. A brief overview description of each of the individual community's is provided in Appendix 1.

Figure 2 - Saint Agnes Community Benefit Service Area Communities(CBSA)



II. FY 16 Community Health Needs Assessment

<u>Community Service Area – Electronic Survey</u>

A quantitative assessment was conducted using a survey administered electronically and on paper to gain broad public input. A copy of the survey is included as Appendix 2. The survey had three components. First, participants were asked to rate their perception of their own personal health as well as the perception of the health of the community. Second, participants were asked to identify their three top health concerns out of a list of 26 health needs and social determinants of health. Finally, participants were asked about perceived barriers to health care access.

Survey Methods

Multiple approaches were utilized to reach the largest number of residents within the 21 zip codes in the defined community benefit service area.

- The Family Research Center was engaged to acquire email addresses for households within the CBSA. The Family Research Center conducted three email waves over a 9 week period.
- Email addresses were obtained from patients of Saint Agnes Hospital who were discharged within the last year and reside within the CBSA.
- The survey was posted on the Saint Agnes website and promoted via the hospital's social media channels as well as at community outreach events by paper copy.
- Baltimore Medical Systems, a campus-based FQHC, surveyed patients for a two week period in January 2016.
- Total number of respondents was 823 with 801 residing in the CBSA. The distribution of respondents by community is shown in Figure 3.

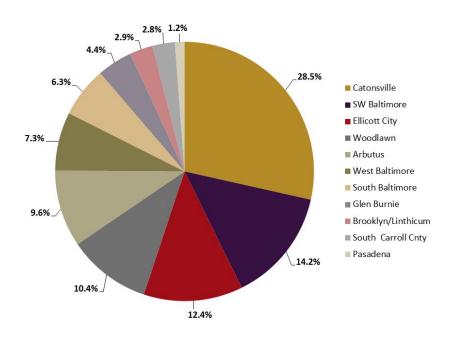


Figure 3 - Percent Survey Respondents by CBSA Community

Not unexpected, the highest number of responses came from those areas closest to Saint Agnes Hospital. However, there was good representation from urban communities that were identified as vulnerable in the Saint Agnes FY 13 Community Health Needs Assessment. The overall composition of the survey participants was 75% female, 75% age 50 or above, 30% African American, 58% Caucasian and 5% Hispanic.

The perceptions of community and personal health were segmented to compare the urban and suburban communities and results are shown in Figures 4 and 5. Urban respondents generally rated their own personal health higher than the health of their community.

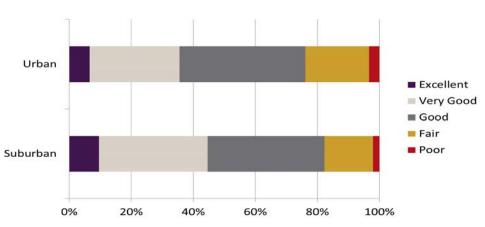
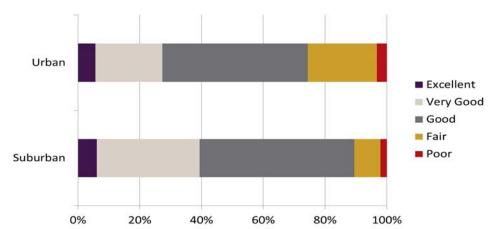


Figure 4 - Perception of Personal Health Status

76% of urban residents

reported their personal health as excellent, very good or good while 74% reported their community health as excellent, very good or good. 82% of suburban respondents reported their personal health as excellent, very good or good and 90% reported their community health as excellent, very good or

good. Urban residents perceived their own health as better than that of their community and suburban residents perceived their community health to be better than their own health. Despite the vulnerability of the urban communities, 76% rated their personal health to be



excellent, very good and good; this was not much lower than the

Figure 5 - Perception of Community Health Status

82% rate of those from more stable suburban communities.

Figure 6 highlights respondents top three health concerns from a list that was comprised of social determinants of health, social issues, and a variety of chronic and acute diseases. Consistent with the Saint Agnes FY 13 community health need priorities, Obesity and Diabetes along with Cardiovascular Disease ranked as the top two health concerns. However, new in the FY 16 assessment Behavioral Health and Socio-Economic Conditions ranked among the top four concerns. Behavioral Health includes Alcohol and Drug Abuse and Mental Health Issues. Socio-Economic *

Conditions represent some of the social determinants of health. These are defined as *conditions in the environments in which people are born, live, learn, work, play, worship and age that affect a wide range of health, functioning and quality-of-life outcomes and risks (Source: https://www.healthy.people.gov/2020/topics-objectives/topic/social-determinants-of-health)*. This includes but is not limited to poverty, employment opportunities and affordable housing.

Top Health Concerns

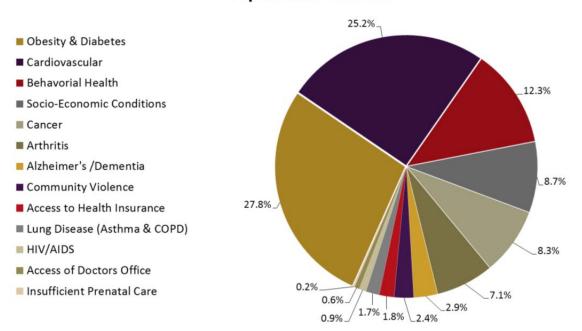


Figure 6 - CBSA Electronic Survey Top Health Concerns

The survey respondents chose from a list what they experience as barriers to primary health care for residents of their community. The types of access were related to financial issues, geographic issues, insurance issues, etc. Figure 7 illustrates these reasons.

The top reason chosen for not having Primary Health Care was affordability, this included co-pays and deductibles. The high cost of health care was seen as the greatest deterrent for people having regular, stable health care. A little over one quarter of the respondents cited a lack of health insurance as an important reason as well. Other barriers chosen were transportation issues and wait time for appointments.

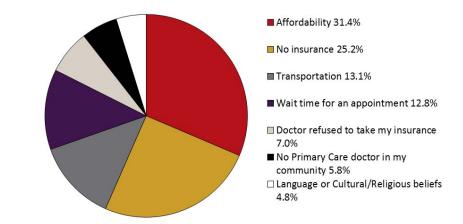


Figure 7 - Top Health Care Access Barriers

Key Findings – Electronic Survey

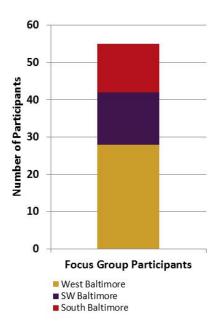
Obesity & Diabetes, Cardiovascular Disease and Behavioral Health & Socio-Economic Factors were cited as the top concerns facing the community according to the data from the electronic surveys. Although residents in these communities did not see their neighborhoods in a poor light, they still struggle to afford health care to stem the effects of these chronic health conditions.

Community Service Area – Focus Groups

A qualitative assessment was conducted using focus groups facilitated by Observation Baltimore; a division of The Research Group/Family Research Center. Six focus groups were conducted for Saint Agnes Hospital to better understand the healthcare needs of the medically underserved, lowincome, and minority populations in the most vulnerable communities identified in the FY 13 assessment. The composition of the focus groups was recruited to match the demographic composition of the community's survey. Participants were also included by either a personal history or family history of chronic disease with a consideration of environmental risks [specifically smoking tobacco, drinking alcohol daily or occasionally, and use of non-prescription drugs]. The Hispanic population was also targeted to ensure input from all ethnicities. Participants were paid a stipend and transportation was provided, if needed.

Figures 8-10 illustrate the demographic composition of the focus group participants on race/ ethnicity, household income and CBSA community for the total 55 participants.

The focus groups were conducted in three segments. The first segment was completion of a questionnaire on Top Health Concerns consistent with the electronic survey. Second, there was a



experiences, health care providers and concerns with preventive health needs. The third segment was a structured exercise to identify and prioritize needs related to experiences with the health care system.

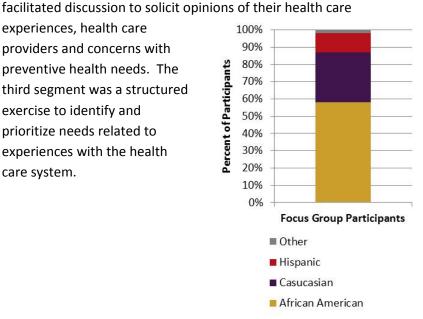


Figure 9- Focus Group Participants by Race/Ethnicity

Figure 8 - Focus Group Participants by Community

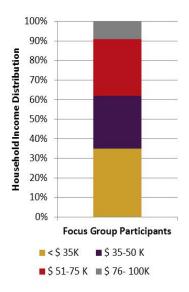


Figure 10 - Focus Group Participants by HH Income

Figure 11 shows the results of the questionnaire of focus group participants top health concerns. The top four concerns of the focus group participants were consistent with the CBSA survey. Similar to the broader CBSA survey Obesity and Diabetes ranked the highest health concern. However, as might be expected given the urban communities that comprised the groups, Behavioral Health was the second highest concern. Cardiovascular and Socio-Economic Conditions rounded out the top four concerns.

The focus groups began with a facilitated top-of-mind discussion about health care in their communities. A copy of the 90 minute discussion guide is included in Appendix 3. The topics discussed included self-care and preventive health needs, where they went for health care services, where they learned about health care issues and their general experiences within health care. Participants also discussed barriers they experience with maintaining healthy lifestyle habits, and

accessing health care services. Figure 12 is a word cloud diagram that illustrates the key themes that emerged during the facilitated discussion.

Top Health Concerns

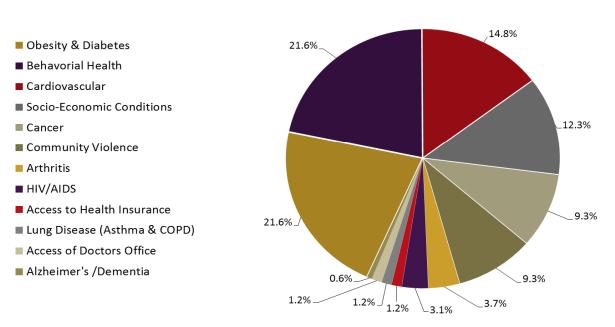


Figure 11- Focus Group Participants Top Health Concerns

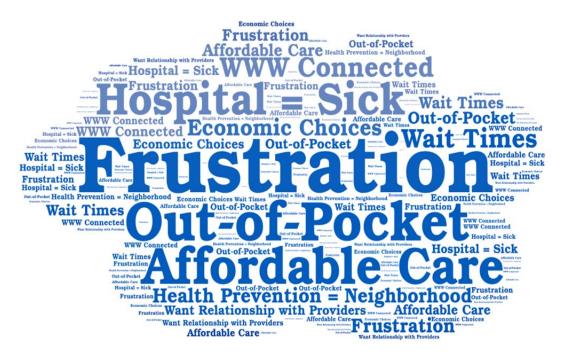


Figure 12 - Focus Group Key Themes from Facilitated Discussion

- Frustration Strong expressions of frustration with many aspects of the health care system
 including complexities with insurance, access to care, appointment availability, wait times,
 provider turnover, inadequate time spent with providers, and understanding diagnosis and
 treatment.
- Out-Of-Pocket Expenses While having insurance coverage participants struggle with copays and deductibles and economic impacts, particularly related to prescriptions.
- Affordable Care Participants describe struggles by themselves or family members on fixed or limited incomes to balance choices between health care expenses and those necessary for daily living.
- Want Relationship with Providers Inadequate time with providers and or high provider turnover were cited as limitations to establish meaningful, trusting relationship that support preventive health care.
- WWW Connected Participants were very well connected to the digital world, especially social media. Most have access to smart phones and note that those devices would be good mechanism to better connect with the health care system.
- Hospital = Sick Given the new waiver and incentives for hospitals to maintain health of
 population, participant related hospitals as places to go when sick and need care. Health
 prevention initiatives are preferred in the neighborhood.

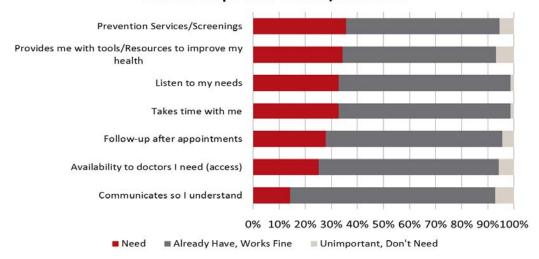
Following the top-of-mind discussion, the groups participated in a structured evaluation and prioritization of specific aspects of the health care system and their experiences. The aspects probed were Relationships with Doctors and/or Clinicians, Self-Care/Follow-up Care, and

Accessibility to a Community Health Care Facility. They were asked to rank attributes within each area into three categories, 1- this is something they have already and it is working well, 2- aspect is a need and/or there is need of improvement or 3- this is unimportant and/or not needed for their care experiences. The results are shown in Figure 13. There was an overall frustration with trying to balance work & family life with the available health care. This was described by problems getting time off work to go to appointments or take others to appointments as well as arranging and paying for the transportation to get there. This would be further complicated if they had to go multiple places to get prescriptions, lab work, x-rays, etc. The focus group participants ranked the attributes lacking in their health care in line with the key ideas from the facilitated top-of-mind discussion. One third would like a more focused relationship with their doctor. They were lacking adequate time to discuss their individual needs with their doctors about preventions and screenings. Over one third expressed a need for more personalized information and education on prevention and screenings needed to stay healthy. The greatest needs were in the facility aspect. Over half of the participants cited a need for reasonable wait times, same day appointments and the ability to take care of all of their needs in one visit and one location.

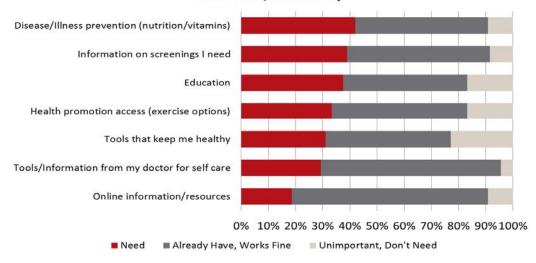
Key Findings – Focus Groups

The top four health concerns identified by participants were consistent with the CBSA community survey and included Obesity and Diabetes, Behavioral Health, Cardiovascular Disease, and Socioeconomic conditions. Top-of-mind discussion surfaced concerns impacted by the social determinants of health. In terms of experiences with the health care system, participants cited needs for health care sites within the community that provide easy access defined as same day appointment with limited wait times and multiple services (pharmacy, imaging, etc.) in a singular location. Participants also expressed need for stronger relationship with providers that afford more time in appointments and listening to their needs.

Relationships with Doctor/Clinicians



Self-Care/Follow-Up



Accessibility to a Community Health Care Facility

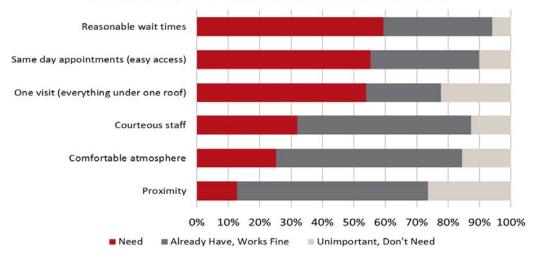


Figure 13- Focus Group Needs to Improve Health Care Experience

Service Area Community Health Rankings

A quantitative assessment was conducted by updating Community Health Rankings that were used for the FY 13 assessment. Saint Agnes has used this methodology for its community health needs assessment prior to the ACA requirements and consistently over the last 12 years. The analysis was modeled after Maryland's Department of Health and Mental Hygiene legacy Primary Care Access Plan. The approach also mirrors later methodologies such as the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute in their *County Health Ranking* project. The analysis utilizes secondary data sources and includes 26 health metrics which were grouped into 4 major categories and determined areas of health need vulnerability:

- Demographic and socio-economic characteristics (Socio-Economic/Vulnerable Population)
- Lifestyle & behavioral factors
- Co-morbid precursor diagnoses
- Major disease diagnoses

For the analysis each metrics within each community in the Saint Agnes CBSA was compared to results for Central Maryland and expressed as an index score. The Index scores were calculated to show the health need gaps. An index score of 1, or close to 1, meant the need was the same or similar to the overall need in Central Maryland. If the index score was above 1 it was an indication of health need vulnerability. The overall health index scores by community are shown in Table 1. Detailed information on the individual health indicators and each service area can be found in Appendix 4.

As part of the assessment a comparison of the CBSA index scores data to the National SocioNeeds Index from The Healthy Communities Institute was conducted to verify findings. As shown in Table 1 the CBSA index scores were positively correlated to the Healthy Communities Institute index results. The sources of the secondary data utilized in the CBSA community health rankings included:

- Sg2 The Nielsen Company, LLC 2016 Maryland Market Demographics
- MSAWeb+ 2015; Market Share Analyst, St. Paul Computer Center
- Healthy Communities Institute SocioNeeds Index

As in the FY 13 assessment, the urban areas of Baltimore remain adversely affected by the social determinants of health. These areas contain a more vulnerable population as defined by age (under 5 or over 65), a lower education level, and more families living below the poverty level. There was also a greater proportion with negative lifestyle/behavior index score for substance abuse, obesity and HIV. These indicators lead to higher co-morbid conditions and higher ambulatory sensitive admissions as well as a higher number of mental health issues. All of these factors lead to higher major disease index scores for cancer, infant mortality and Cardiovascular Disease as examples.

FY 16 Service	e Area Community H	lealth Rankings			
Community	Overall Score	Benchmark to FY 13	AVG Socio Need Index*		
West Baltimore City	2.01	Worse	92.6		
South Baltimore City	1.78	Worse	70.3		
Brooklyn/Linthicum	1.58	Worse	59.3		
Southwest Baltimore City	1.58	Worse	75.7		
Woodlawn	1.16	Same	50.2		
Arbutus	1.02	Same	61.2		
Glen Burnie	1.03	Same	38.4		
Catonsville	0.79	Better	12.4		
Pasadena	0.73	Worse	11.0		
Southern Carroll County	0.48	Better	2.4		
Ellicott City	0.47	Better	2.1		

Table 1 - Saint Agnes CBSA Community Health Ranking

* Healthy Communities Institute SocioNeeds Index is a measure of socioeconomic need that combines multiple socioeconomic indicators into a single composite value that is correlated with poor health outcomes.

Key Findings – Service Area Community Health Rankings

In comparison to the FY 13 assessment there is little or no change to the CBSA Community Health Index Scores in FY 16. The urban communities of West Baltimore, SW Baltimore, South Baltimore, and Brooklyn/Linthicum remain the most vulnerable. The comparison of CBSA Community Health Rankings to the National Healthy Communities Institute SocioNeeds Index benchmark shows a high degree of similarity between local results of this assessment and a nationally recognized methodology.

West Baltimore High Need Patient Analysis

In collaboration with the University of Maryland Medical Center, UM – Midtown Hospital and Bon Secours Hospital, the Berkley Research Group conducted a comprehensive review of inpatient, observation and emergency department utilization to identify and profile high need patients* (admitted to acute care bed >=3 times in 12 months). This collaboration was developed to strengthen the health care system, improve access to care and reduce persistent and profound health disparities in a large section of West Baltimore. As shown in Table 2, there were nearly 136K unique patients identified for calendar year 2014 with \$1,700.9M in total health care charges and

approximately 253K episodes of care. Of these patients, 3,606 were identified as high need patients.

The high need patient population had a total of 26.3K encounters at a cost of \$326M which averages to 7.3 encounters per person at \$90.4K for each person. 64% of these patients used two hospitals and 27% used three hospitals. The cost for treatment attributed to the high need patients falls largely on government programs such as

	All Patients	High Need Patients*
Unique Patients	135,830	3,606
Total Charges	\$1,700.9M	\$321.6M
Total Encounters	252,986	26,382
IN Visits	60,028	12,632
INO (Observation) Visits	17,077	3,475
ED Visits	175,881	10,275

Table 2 - High Need Patient Utilization

Medicare and Medicaid. They account for \$265.9M of the total high need expenses for 3,122 unique patients.

As noted in Figure 14 and Table 3 the documented coded EMR diagnosis data of the high need patients demonstrates that 8% of patients had diagnoses of 7-10 chronic conditions with an average of \$140K in annual acute care charges per person, 75% with 2-6 chronic conditions with average acute care charges of \$87.3K per person annually. The majority of these conditions are ambulatory sensitive admissions which could potentially be avoidable with better access and coordination of care in community based settings. The study finds that Hypertension,

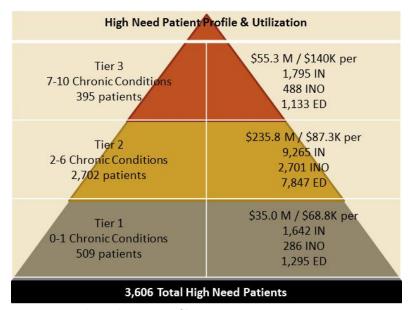


Figure 14 - High Need Patient Profile

Diabetes, Chronic Obstructive Pulmonary Disease (COPD) and Congestive Heart Failure (CHF) rank among the most prevalent chronic diseases in this patient population.

Chronic Disease Prevalence	Percent Patients Primary Diagnosis	Percent Patients Any Diagnosis
Hypertension	9%	82%
Diabetes	8%	48%
Chronic Obstructive Pulmonary Disease (COPD)	13%	43%
Congestive Heart Failure (CHF)	13%	40%
Chronic Kidney Disease	1%	36%
Coronary Artery Disease (CAD)	3%	33%
Obesity	0%	29%
Pneumonia	9%	28%
Septicemia	15%	25%
Hepatitis	1%	21%
Note: Conditions identified are based on AHRQ CCS level 3 classificate	ion.	

Table 3 - High Need Patient Chronic Disease Profile

Of the total number of High Need patients, 78% (2,805 or 3,606) have been diagnosed with mental health and/or substance abuse issues. Of those patients, 71% had substance abuse disorder documented. This finding correlates with the well documented and discussed significant opioid and other substance addictions that permeate our communities and impact the health care system, particularly the emergency departments. There were only 801 patients, 22%, without one of these diagnoses. Figure 15 shows the prevalence and overlap of mental health and substance abuse issues.

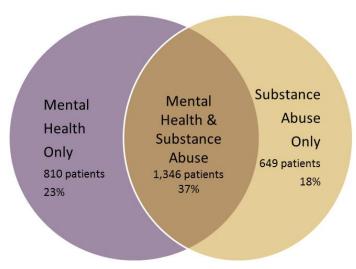


Figure 15 - High Need Patient Profile Behavioral Health Profile

Key Findings – West Baltimore High Need Patient Analysis

Chronic disease prevalence and behavioral health diagnosis are key drives for health care utilization in identified high need patients. The significant degree of chronic disease and behavioral health is likely attributable to impact of social determinants of health.

III. CHNA: Community Engagement

Once the data collection and analysis was complete, we engaged the input from persons who represent the broad interests of the community, including those with special knowledge of or expertise in public health. Internal and External participants are listed in Appendix 6. Internal Stakeholders were identified as those within Saint Agnes Hospital with the community knowledge and resources to help implement strategic plans to address the identified health needs. Internal Stakeholders were asked to complete a short survey and prioritization ranking (Appendix 7) prior to focus group sessions.

The survey was designed to prioritize the health needs and was divided into two sections, the first asked for Top-of-Mind health needs facing the Saint Agnes Hospital service area communities. The second asked for a ranking each of health need against the other. This forced ranking gave more detailed results. The Top-of-Mind section resulted in the following top needs:

- Obesity & Diabetes
- Mental Health/Behavioral Health Issues
- Access to Care
- Cardiovascular, Heart Disease, Hypertension

The forced ranking results showed several Social Determinants of Health coming to the top of the list but also similarities.

- Poverty
- Depression/Anxiety/Mental Health Issues
- Alcohol/Drug Abuse
- High Blood Pressure
- Access to Nutritious Food
- Heart Disease
- Diabetes
- Obesity
- Homicide/Violent Crime
- Employment Opportunities

It was noted that Social Determinants of Health such as poverty and access to nutritious food rose higher on the list when the respondent was forced to rank one need against each of the others.

Obesity & Diabetes, mental health/behavioral issues and cardiovascular issues remained a high priority for both methods of selection.

Saint Agnes engaged the support and participation of community-based academic, advocacy, government health, and social service organizations (external stakeholders) in one-on-one interviews. Participants were provided with a summary overview discussion guide that highlighted key findings of the assessment as well as priority health needs. The interviews were structured to solicit feedback on findings of the CHNA analysis as well as broaden the context of the analytics within the knowledge base of each organizations experience with the community. A summary of key themes includes:

- General consensus on the health needs identified through the CHNA analysis.
- Behavioral health is significant issue within the community.
- Life trauma and community violence exposure are key drivers of individuals health status and onset of comorbid conditions and risk for substance abuse disorder.
- Social determinants of health, particularly those related to nutrition, exercise, job training, and housing have significant impact on individual health status.
- Health providers should utilize broader range of screening and assessment tools to identify trauma and social determinants risk factors that impact health status and drive utilization to guide care management initiatives.
- Broad recognition of the generation-to-generation culture that drives individual and community health status, particularly in vulnerable communities impacted by poverty, racial disparities, social injustice, and decades long neglect of key social determinants of a healthy community. As health systems and others prepare to address population health, they must understand the full magnitude of community health improvement required.
- Social institutions of government, health, business, and academia must forge meaningful
 partnerships in the common interest in addressing and improving the health status of the
 community.
- Broad and collaborative partnerships across social institutions will result in the most
 efficient use of resources, ability to impact policy, system or environmental change, and
 ultimately the greatest ability to have meaningful improvement in community health status.

IV. CHNA Priorities

After using both primary and secondary research methods to assess the health needs of the community and taking into account the input received from persons who represent the broad interests of the community, including those with special knowledge of or expertise in public health, the Community Health Advisory Council prioritized the top three health needs as a result of the assessment.

- 1) Address Obesity and Diabetes Prevalence
- 2) Reduce Cardiovascular Disease Burden

3) Create Person-Centered Healthy Neighborhoods

The FY 16 assessment priorities retain two of the priorities of the FY 13 assessment and Saint Agnes will continue to expand and enhance its work to address obesity and diabetes and cardiovascular disease. The third priority for FY 16 is a broader objective than that in FY 13 to increase access to primary care to Create Person-Centered Healthy Neighborhoods. This current objective looks to address a wider variety of the Social Determinants of Health including affordable housing, creating green space and more nutritious food options to job training and small business encouragement.

National, State and Local health policies and objectives were used to validate and align our priorities and objectives. The identified priorities are highly aligned with local, state and national priorities as found in Healthy Baltimore 2015, State of Maryland State Health Improvement Plan (SHIP) Vision Areas and Healthy People 2020 (See Table 4).

Table 4- CHNA Priority Alignment with Local, State and National Health Initiatives

Saint Agnes CHN Priorities	Healthy People 2020 (National)	Maryland S.H.I.P. (State)	Healthy Baltimore 2015 (City)
Obesity and	Reduce the proportion of adults who are obese. NWS-9	Reduce the proportion of adults who are obese.	Decrease the percent of adults who are obese.
Diabetes Cardiovascular Disease Burden	Reduce the diabetes death rate. D-3	Reduce the proportion of adults diagnosed with diabetes.	Decrease the hospitalization and ER rates for diabetes.
	Reduce the proportion of adults with hypertension. HDS-5.1	Reduce ED visits due to Hypertension.	Increase % of adults with high blood pressure on medication.
	Increase cardiac rehab referrals for heart attack survivors. HDS-22	Reduce Age-Adjusted Mortality from Heart Disease	Decrease rate of premature deaths from cardiovascular disease.
	Increase the number of community based organizations providing prevention services for chronic diseases. ECBP-10.7		Decrease percent of adults who currently smoke.
	Increase the proportion of persons who have access to rapidly responding prehospital emergency medical care. AHS-8	Decrease uninsured ED visits.	Decrease hospitalization rate for ambulatory sensitive indicators.
Person-Centered Healthy Neighborhoods - Become a	Increase the proportion of adults with ongoing health care. AHS-5	Increase the percentage of persons with a Usual Primary Care Provider	Decrease rate of ED visits for ambulatory sensitive indicators.
Community Partner			Decrease the percent of adults with unmet mental health care needs.
	Decrease the proportion of households that experience housing cost burden. SDOH-4.2	Increase the percentage of affordable housing.	Decrease the density of vacant buildings.
Person-Centered Healthy	Reduce the percentage of household food insecurity. NWS-13	Increase the percentage of people reporting physical activity.	
Neighborhoods - Gibbons Commons	Increase policies for built environment that enhance access to and availibility of physical activity opportunities. PA-15.1		
	Decrease the proportion of households living in poverty. SDOH-3.1		

Needs that Will Not Be Addressed

While Saint Agnes Hospital will focus the majority of our efforts on the identified strategic programs outlined in the table below, we will review the complete set of needs identified in the CHNA for future collaboration. These areas, while important to the health of the community, will be met though either existing clinical programs or though collaboration with other health care organizations as needed. The unmet needs not addressed specifically by Saint Agnes Hospital, will continue to be addressed by key governmental agencies and existing community-based organizations. The Saint Agnes identified core priorities target the intersection of the identified community needs and the organization's key strengths and mission.

V. Documenting and Communicating Results

The completion of this community health needs assessment marks a milestone in community involvement and participation with input from community leaders, the general public, Saint Agnes Hospital administration, and health experts. This report will be posted on the Saint Agnes website. Reports and data will also be shared with our community partners and community leaders as we work together to make a positive difference in our community by empowering and building healthy communities.

VI. Planning for Action and Monitoring Progress

After using both primary and secondary research methods to assess the health needs of the community and taking into account the input received from persons who represent the broad interests of the community, including those with special knowledge of or expertise in public health, the next step in the process identified and prioritized the top three health needs to be concentrated on in the next fiscal year(s). As noted in earlier sections, certain chronic diseases and lifestyle/behavioral issues were ranked as a high need by the community being served and experts in the public health field within our community. Table 5 lists health needs that have been identified and prioritized with corresponding target population and objectives.

Table 5 – CHNA Priorities & Implementation Plan

PRIORITIZED NEED #1: Obesity and Diabetes

GOAL: Increase awareness of and access to medical and surgical options for reducing obesity and diabetes, particularly for the vulnerable population.

STRATEGY 1: Provide increased outreach, education and medical intervention when appropriate to patients suffering from the physical & mental effects of morbid obesity and seeking a change in their health status.

Target population: Patients experiencing health problems due to obesity and/or diabetes, particularly the vulnerable population with limited access to primary care, care management and education.

Objective I. Decrease the proportion of adults with comorbidities associated with obesity through effective education, outreach, and medical intervention.

Objective II. Within one year of intervention decrease BMI by 20% for patients engaging in medical weight loss techniques and/or bariatric surgery.

PRIORITIZED NEED #2: Cardiovascular Disease Burden

GOAL: Reduce the incidence and burden of cardiovascular disease in the community.

STRATEGY 1: Continue to offer and promote a series of community based programs providing education, screening and case management to reduce the incidence and burden of cardiovascular disease.

Target population: People at risk for experiencing health problems due to cardiovascular disease, particularly the most vulnerable with limited access to medical services and education and support in reducing the causes of cardiovascular disease.

Objective I. Increase by a percentage the implementation of effective community based education programs, screening, and case management for cardiovascular disease for the target population.

Objective II. Decrease the rate of inpatient and ED use by cardiovascular patients as measured by a decrease in Prevention Quality Indicator discharges.

PRIORITIZED NEED #3: Person-Centered Healthy Neighborhoods

GOAL:

- Collaborate with community agencies to provide health education and care management for populations that have the greatest needs and least resources.
- Become a community partner to create healthy, thriving neighborhoods with a visible presence where the community needs us the most.

STRATEGY 1: Collaborate with community agencies to provide health education and care management for populations that have the greatest needs and least resources.

Target population: Focus on high need patients (high utilizers) in our service area that lack connection to community programs that would address medical and social determinants of health to improve quality of life, particularly in West Baltimore.

Objective I. By 2020, increase the proportion of adults who have a primary health care provider.

Objective II. Decrease acute care utilization (IN, INO, ED), particularly potentially avoidable utilization by high needs patients through community-based care management initiatives.

STRATEGY 2: Transform the 32 acre former Cardinal Gibbons High School and create Gibbons Commons, a healthy neighborhood with housing, retail, recreation, and support services in Southwest Baltimore.

Target population: Southwest Baltimore residents lacking a safe and health place to live, work, play and learn.

Objective I. Have at least 100% of the apartments under rental contracts by 2017.

Objective II. Provide indoor and outdoor space for physical activity that is safe and affordable by 2018.

Objective II. In conjunction with the Caroline Center, provide education and job training to community residents by 2016.

Appendix 1 – Community Profiles

Arbutus (Zip Code 21227):

Arbutus is an older suburban community, located south of Caton and Wilkens Avenues, and has a population of 34,245. The traditionally blue collar community is part of the Baltimore County Health Jurisdiction. Saint Agnes Hospital is the primary hospital provider best positioned to address the specific health needs of this community.

Brooklyn-Linthicum (Zip Codes 21090, 21225):

Brooklyn-Linthicum is an older urban/suburban community, located southeast of Caton and Wilkens Avenues, and has a population of 43,816. The industrial and blue collar community has seen an increase in the uninsured population and is part of both the Baltimore City and Baltimore County Health Jurisdictions. Harbor Hospital is the primary hospital provider best positioned to address the specific health needs of this community.

Catonsville (Zip Code 21228):

Catonsville is an older suburban community, located west of Caton and Wilkens Avenues, and has a population of 49,586, with a growing proportion of seniors. The traditionally white collar community is part of the Baltimore County Health Jurisdiction. Saint Agnes Hospital is the primary hospital provider best positioned to address the specific health needs of this community.

Ellicott City (Zip Codes 21042, 21043, 21075):

Ellicott City is a growing suburban community, located west/southwest of Caton and Wilkens Avenues, and has a population of 119,615. The predominantly white collar community is part of the Howard County Health Jurisdiction. Howard County General Hospital is the primary hospital provider best positioned to address the specific health needs of this community.

Glen Burnie (Zip Codes 21060, 21061):

Glen Burnie is an older suburban community, located west/southwest of Caton and Wilkens Avenues, and has a population of 87,752, with a growing proportion of seniors. The traditionally blue collar community is part of the Anne Arundel County Health Jurisdiction. Baltimore Washington Medical Center is the primary hospital provider best positioned to address the specific health needs of this community.

Pasadena (Zip Code 21122):

Pasadena is a suburban community, located southeast of Caton and Wilkens Avenues, and has a population of 62,625, with a growing proportion of seniors. The growing community is primarily served by Baltimore Washington Medical Center and is part of the Anne Arundel County Health Jurisdiction. Baltimore Washington Medical Center and Anne Arundel Medical Center are the primary hospital providers best positioned to address the specific health needs of this community.

Appendix 1 – Community Profiles

South Baltimore City (Zip Code 21223, 21230):

South Baltimore City is an older urban community, located east/southeast of Caton and Wilkens Avenues, and has a population of 60,356. The urban community is projected to experience population declines. South Baltimore City is part of the Baltimore City Health Jurisdiction. Baltimore Washington Medical Center is the primary hospital provider best positioned to address the specific health needs of this community.

South Carroll (Zip Codes 21104, 21163, 21784):

South Carroll is a suburban community, located northwest of Caton and Wilkens Avenues, and has a population of 52,609, with a growing proportion of seniors. The traditionally rural community has transitioned to a growing suburb of the Metro Baltimore Region. South Carroll is part of Carroll County Health Jurisdiction. Carroll County General Hospital and Northwest Hospital are the primary hospital providers best positioned to address the specific health needs of this community.

Southwest Baltimore City (Zip Code 21229):

Southwest Baltimore City is an older urban community, located at Caton and Wilkens Avenues, and has a population of 44,997. Similar to other urban areas, Southwest Baltimore is projected to experience population declines. Southwest Baltimore City is part of the Baltimore City Health Jurisdiction. Saint Agnes Hospital is the primary hospital provider best positioned to address the specific health needs of this community.

West Baltimore City (Zip Code 21215, 21216, 21217):

West Baltimore City is an older urban community, located north of Caton and Wilkens Avenues, and has a population of 126,744. Similar to other urban areas, West Baltimore is projected to experience population declines. West Baltimore City is part of the Baltimore City Health Jurisdiction. Sinai Hospital, University of Maryland and Bon Secours Hospital are the primary hospital providers best positioned to address the specific health needs of this community.

Woodlawn (Zip Code 21207, 21244):

Woodlawn is a suburban community, located northwest of Caton and Wilkens Avenues, and has a population of 84,545, with a growing proportion of seniors. Woodlawn is part of the Baltimore County Health Jurisdiction. Northwest Hospital is the primary hospital provider best positioned to address the specific health needs of this community.

Appendix 2 – Community Health Needs Assessment Survey – Tool

About	you				
1.	What is your zip code?				
2.	Are you male or female?	Male	☐ Female		
3.	What is your race/ethnicity?		п		
	African American/Bl		☐ Native Ame		
	☐ Asian/Pacific Islande		☐ White/Cauc		
4	Hispanic/Latino		☐ Other/more	than one rac	e/ethnicity
4.	What is your age group?	П	□ ₆₅₋₇₄		
		□ 40-49 □			
		50-64	□ ₇₅₊		
5.	Are there children under 18 living	g with you?	□ No		
About	the Health of your Community				
1.	How is the overall health of your	community?			
	□Excellent □Very {	good 🗆 Good	I	□Fair	□Poor
2.	Check the 3 most important prof Alzheimer's/Dementia Arthritis Cancer Diabetes/sugar Heart disease High blood pressure HIV/AIDS Mental health issues Overweight/Obesity	Lung disease/Asth Stroke Availability/Access Poverty Affordable Housin Employment Oppo Child abuse/negle Domestic violence Dropping out of so	nma/COPD sto Dr. office ag ortunities ect chool	Alcohol/ Homicide Lack of e Insufficie Access to Access to Smoking Depress	/Drug abuse e/violent crime exercise ent prenatal care o nutritious food o health insurance g/tobacco use ion/Anxiety
3.	Check the 3 most important reas Cost – couldn't afford co- Had to wait too long for a No insurance No Primary Care doctor in	pay/deductible in appointment	munity do not g Doctor ref Transport Cultural/R Language	fused to take i ation Religious belie	my insurance

Appendix 2 – Community Health Needs Assessment Survey – Tool

About your Personal Health 1. How is your health? (Circle one) Excellent			
Do you have one doctor you see for check-ups (a personal doctor)? Yes No Have you seen this doctor in the last 12 months? Yes No Do you get a check-up (wellness visit) at least once a year? Has a doctor ever told you that you have any of the following conditions? (Check all that apply.) Alzheimer's/Dementia HIV/AIDS Arthritis, joint/back pain Cancer Mental health issues Diabetes Depression/Anxiety Heart disease Lung disease/Asthma/COPD		ut your Personal Health	Abouty
3. Have you seen this doctor in the last 12 months? 4. Do you get a check-up (wellness visit) at least once a year? 5. Has a doctor ever told you that you have any of the following conditions? (Check all that apply.) Alzheimer's/Dementia Arthritis, joint/back pain Cancer Diabetes Depression/Anxiety Heart disease Lung disease/Asthma/COPD		□Excellent □Very good □Good	1.
4. Do you get a check-up (wellness visit) at least once a year? Yes No 5. Has a doctor ever told you that you have any of the following conditions? (Check all that apply.) Alzheimer's/Dementia	doctor)? Yes No	Do you have one doctor you see for check-ups (a personal d	2.
5. Has a doctor ever told you that you have any of the following conditions? (Check all that apply.) Alzheimer's/Dementia	Yes No	3. Have you seen this doctor in the last 12 months?	3.
□ Alzheimer's/Dementia □ HIV/AIDS □ Arthritis, joint/back pain □ Kidney disease □ Cancer □ Mental health issues □ Diabetes □ Depression/Anxiety □ Heart disease □ Lung disease/Asthma/COPD	Yes No	I. Do you get a check-up (wellness visit) at least once a year?	4.
	HIV/AIDS Kidney disease Mental health issues Depression/Anxiety	□ Alzheimer's/Dementia □ □ Arthritis, joint/back pain □ □ Cancer □ □ Diabetes □ □ Heart disease □	5.
 6. Has a doctor ever spoken to you about or do you have concerns about any of the following for your health? (Check all that apply.) Alcohol or drug intake Obesity or being overweight 7. Check your health insurance status. No insurance Medicare 	Diabetes or pre-diabetes Smoking	health? (Check all that apply.) Alcohol or drug intake Obesity or being overweight Check your health insurance status.	
Commercial insurance through a job	Medicaid Other government program her hospitals in your area to help improve	Commercial insurance through a job Health exchange Do you have any ideas or suggestions for Saint Agnes or oth	8.

Appendix 3 – Discussion Guide – CHNA Focus Groups

Study Objectives:

- ✓ Explore general health care habits
- ✓ Understand health priorities by health risk and define related quality of care
- ✓ Evaluate access to care and characterize services
- ✓ Identify how health care needs are currently met and gather suggestions to improve health overall

Composition:

Medically Underserved/Low Income/Minority Communities, including Southwest and West Baltimore City zips: 21215, 21216, 21217, 21223, 21229, and 21230

I. **INTRODUCTION** [10 minutes]

Purpose: *Understand the health care needs of your community.*Logistics: Outside consultant, permission to disagree, equal airtime.

Disclosures: Microphone/recording/observers.

Introductions

- First name only (for confidentially purposes);
- Who or what lives with you;
- How do you learn about new things?

II. Advertising Recall and Health Information Resources [15 minutes]

Objective: Understand consumers' information resources, influencers of health care decisions, and provide an opportunity for participants to become comfortable in the setting.

1. How helpful is advertising to learn about new services or products? [TV, Print, Billboard, Mail, Radio... these are all forms of advertising.] [Distribute response forms]

- 1. List one of your favorite advertisements.
- 2. List two advertisements you remember about health or health care.
 - 2a. what specifically stands out about those two advertisements?
- 2. {Discussion}
 - a. Please tell me about the ads you remember about health or health care?
 - b. What about those ads make them memorable?
- i. When a sponsor is telling you about health or health care, what is most important about the approach?

Moving on... tell me about you.

- 3. Who do you trust most when it comes to your health? Doctors? Hospitals?
- 4. What do you currently do to stay healthy? [LIST]
 - a. What are the THREE most important habits to staying healthy?
- 5. What health services do you have available that keep you healthy?
 - a. Hospitals? How do they contribute to you staying healthy?
 - i. Newsletters from hospitals? Seminars? Events?
 - ii. What is most motivating to get you to act on a screening, seminar,

health fair, event, etc.?

III. Needs by Aspects of Health Care [45-60 minutes]

Objective: Understand health care needs in the community, and identify areas where SAH can have the most impact.

[Priority Exercise]

- 1. In front of you, you have three post-its, one of each: GREEN, BLUE, and PINK. In the middle are [COLOR].
 - a. I want to learn about the **health care services** you and your family Need, Already Have, or Do Not Need.
 - b. Please think about what is currently available to you and your family, and consider about the doctors, clinics, hospitals, and health-oriented services that will be most beneficial to you staying healthy:

What you **Need** (this includes services, people, or things you do not have now, or may need additional services, or improvement)

What you **Already Have** [Satisfied with this]

What you **Do Not Need** [Not important]

[LIMIT TO 5 'SERVICES'/CARE AREA].

Green = Doctors/Clinicians

Availability (access) to doctors I need

Communicates so I understand

Takes time with me

Listens to my needs

Provides me with Tools/Resources to improve my health

Prevention Services / Screenings

Follow-up after appointments...

Blue = Self-Care / Follow-Up

Education

Information on screenings I need

Tools/information from my doctor to take care of myself after doctor's appointment Online information/resources

Information on disease/illness prevention (nutrition/vitamins)

Access to tools that keep me healthy (blood pressure monitors/diabetes blood meter/oxygen)

Health promotion access (exercise options)...

Pink = Facilities

Proximity

Easy access—same day appointments

Everything under one roof—one visit

Reasonable wait times

Comfortable atmosphere

Courteous staff...

[COLOR] – These are here in case I forgot to include something you think is important and you feel I need to include here. Please write ONE aspect of care per post-it. Use as many post-its as you need.

REVEAL CHARTS:

Need Do Not Need Already Have

- 6. Please place your post it on the chart you feel best represents where that care area belongs considering what is currently available to you.
 - a. For example, if you feel 'Comfortable Atmosphere' is something you need, place it here [Need] or if you feel like the place you go for health care already has it, place it here [Already Have], or if you feel you can do without a 'Comfortable Atmosphere' put it here [Do Not Need].

Any questions?

[Participants place post-its on charts] {Discussion}

b. Let's begin with *Need...*

[Probes:

- 1. Please tell me about... [care area].
- 2. Please describe your experiences.
- 3. What specific types of care/services/amenities do you need around [care area] that you currently do not have?
 - 4. What else is important for me to learn about [care area], specifically what is and is not currently available to you?
 - C. Repeat for: Already Have & Do Not Need

III. Image Perceptions [30 minutes]

Objective: Understand Saint Agnes' image among competitive options in supporting wellness, primary care behaviors, and understand the value of Ascension Health.

1. What happens when you or a family member are sick and need a doctor? Reasons?

- a. Do you have a regular (primary care) doctor?
- b. How do you decide where to go when? ED vs. PCP?
 - i. What (criteria) enters into the decision of where to go for care?
- 2. How does a hospital help you stay healthy?
 - a. What can they do to help you stay healthy?
- 3. Let's list all the hospitals you have available to you.
 - a. For these three of hospitals: SAH [vary competitive options: MS Harbor, UM Medical Center, Mercy, Sinai].

Apples to Apples Cards: Words appear on each of these cards.

Green=Adjectives/Adverbs – Red=Nouns. For each of the three hospitals, select one word that for whatever reason belongs to that hospital. You will end with three cards, one for each hospital.

- a. For what reasons does [word] belong [hospital]?
- b. What else about hospital causes you to select [word]?
- c. Could [word] also describe [other hospitals]? Reasons?
- 4. In summary, [SAH, competitive options] is best known for? Specialty?
 - a. What is [hospital's] reputation? Quality? Patient centered?
 - b. When you choose a hospital, what is the most important thing to you? Quality? Convenience? Familiar?
- 5. How important is it to you that a hospital is affiliated with a larger entity?
 - a. What examples come to mind?
 - b. [Index card:] What is Ascension Health?
 - c. What hospital is affiliated with Ascension Health?

Saint Agnes Hospital is a hospital within the Ascension health system:

The largest nonprofit health system in the United States and the world's largest Catholic health system, Ascension Health is dedicated to spiritually-centered, holistic care that sustains and improves the health of the individuals and communities we are privileged to serve.

More than 150,000 associates and 40,000 employed and affiliated providers serve in 1,900 sites of care – including 131 hospitals and more than 30 senior care facilities – in 24 states and the District of Columbia. Our facilities and services are building or participating in regional clinically integrated systems of care to better meet health needs across the entire continuum of care.

Thoughts? New information?

- a. What makes this affiliation important?
- b. When a hospital has an affiliation, like MedStar or Hopkins, how does it impact how you feel about that hospital?
 - i. If one hospital has an affiliation and one does not, what's the difference?

IV. Closure [10 minutes]

Objective: Gather client questions.

I'm going to excuse myself for a few minutes. While I'm gone: As a group, please use the flip chart to create:

Option #1: A wish list for health care services in your community.

Option #2: A list of advice for Saint Agnes Hospital so they can become a partner in staying healthy for you and people in your community.

[REQUEST VOLUNTEER] [GATHER CLIENT QUESTIONS]

[REVIEW EXERCISE - POSE CLIENT QUESTIONS].

Thank you, you've been extremely helpful!

Appendix 4 – Community Health Indicators, Definitions & Sources

ı. **Socio-Economic/Vulnerable Population**

What degree of vulnerability exists with regards to greater health care needs, or greater disparities in access to health care? These indicators identify vulnerable populations, such as age groups which have a higher propensity to utilize healthcare, as well as those which are more likely to experience financial barriers and disparities in access to health care.

a. Age Under 5

d. Uninsured

f. Families living below the

b. Age 65+

e. High School Diploma

poverty level

c. Diversity

or less

II. Lifestyle/Behavior

How prevalent are certain lifestyle choices and behavior patterns, which are highly correlated to increased risk of developing health-related complications and co-morbid conditions? These indicators identify lifestyle choices and behavioral patterns which increase the risk of developing co-morbid conditions. Metrics such as behavioral health, substance abuse and HIV can be predictive of overall health status.

a. Obesity

c. Insufficient Prenatal Care e. Tobacco Use

b. HIV Positive

d. Substance Abuse

III. **Co-Morbid Conditions**

How prevalent are co-morbid conditions, which indicate greater risk of developing major disease, and how well those conditions are managed? These indicators identify the prevalence of co-morbid conditions which are often precursors to major disease. High ambulatory sensitive admission rates may indicate poor access or inadequate health care management.

a. Arthritis

d. Heart Disease

g. Ambulatory Sensitive

b. Joint & Back Pain

e. Diabetes

Admissions

c. Asthma

f. Hypertension

h. Mental Health Issues

IV. **Major Disease**

How prevalent are major diseases, which require high levels of care and intensive health services? These indicators identify the prevalence of major disease which requires high levels of care and intensive health services. A high prevalence of major disease represents a significant degree of health need in a community.

a. Cancer

c. Stroke

e. Infant Mortality (in hospital)

b. Cardiovascular

d. Joint & Spine Procedures

f. Cancer - GYN

Appendix 4 – Community Health Indicators, Definitions & Sources

Socio-Economic/Vulnerable Pop. Definition

Age Under 5 Sg2 - The Nielsen Company, LLC 2016 Maryland Market Demographics*

Age 65+ Sg2 - The Nielsen Company, LLC 2016 Maryland Market Demographics*

High School Diploma/Less Highest achieved education for population age 25+*

Diversity Non-Caucasian population*
Uninsured Households Uninsured households*

Low Income Families Families below the poverty level

Lifestyle/Behavior Index

Obesity Maryland IN & OP Data, ICD-9 Dx Codes 278-278.03 excluding 278.02**

HIV Positive Maryland IN & OP Data, ICD-9 Dx Codes 42 & 79.53; APR-DRG Codes 890-894**

Insufficient Prenatal Care Maryland IN & OP Data, ICD-9 DX Code V23.7**

Substance Abuse Maryland IN & OP Data, MDC 20, APR-DRG Codes 770-776**

Tobacco Use Maryland IN & OP Data, ICD-9 Dx Code 305.1**

Co-Morbid Conditions Index

Arthritis Maryland IN & OP Data, ICD-9 Dx Codes 714-716.9**

Back and Joint Pain Maryland IN & OP Data, ICD-9 Dx Codes 719.4-719.49, 724.1-724.3**

Asthma Maryland IN & OP Data, ICD-9 Dx Codes 493-493.92**
Chronic Bronchitis Maryland IN & OP Data, ICD-9 Dx Codes 491-491.2**
Diabetes Maryland IN & OP Data, ICD-9 Dx Codes 249-250.93**
Hypertension Maryland IN & OP Data, ICD-9 Dx Codes 401-45.99**

Ambulatory Sensitive Admissions Maryland IN & OP Data, Asthma, Diabetes and Hypertension**

Mental Health Issues Maryland IN & OP Data, MDC20, APR-DRG Codes 740-760**

Major Disease Index

Cancer Maryland IN & OP Data, ICD-9 Dx Codes 140-239**

Cardiovascular Maryland IN & OP Data, Product Lines Cardiac Surgery, Cardiology & Vascular Surgery**

Stroke Maryland IN & OP Data, ICD-9 Dx Codes 433-436**

Joint & Spine Procedures Maryland IN & OP Data, ICD-9 Proc Codes .7-.87, 3.09, 80.51, 81-81.08, 81.3-81.39, 81.5-81.55, 81.6-81.64**

Infant Mortality Maryland IN & OP Data, ICD-9 Dx Codes 656.4**

Cancer - Gyn Maryland IN & OP Data, ICD-9 Dx Codes 179-184**

Sources

^{*}Sg2 Market Demographics - The Nielsen Company, LLC 2016

^{**}MSAWeb+ 2015; Market Share Analyst, St. Paul Computer Center

^{*}Sg2's market demographics module is powered by Nielsen Pop-Facts® which relies on rich data input from public and private agencies as well as national compilers and service bureaus. Nielsen's methodology incorporates knowledge gained through the decennial Census, the American Community Survey (ACS) and the Bureau's Current Population Survey (CPS).

Appendix 5 – Service Area Health Risk by Community

Indicators	Maryland Average	Arbutus	Brookly n/ Linthicum	Catonsville	Ellicott City	Glen Burnie	Pasadena	Baltimore City	South Carroll	Baltimore City	Baltimore City	Woodlawr
Socio-Economic / Vulnerable	Percent of											
<u>Pop.</u>	<u>Population</u>											
Age Under 5	6.06%									<u> </u>		0
Age 65+	14.66%											
High School Diploma/Less	25.33%											
Diversity	42.26%											
Uninsured	2.24%	Ŏ							Ŏ	Ö		Ŏ
Families under the Poverty Level	2.02%	Ŏ	Ŏ		Ŏ		Ŏ	Ŏ	Ŏ	Ŏ	Ŏ	Ŏ
Overall Index Score		Ō	Ō			<u> </u>		•		•		
,												
l ifa atala (Balancia - ta dan	Rate per 1,000											
Lifestyle/Behavior Index	<u>Population</u>											
Obesity	45.22						0					
HIV Positive Insufficient Prenatal Care	7.89 0.94											
Substance Abuse	25.26											
Tobacco Use	74.44											
Overall Index Score	14.44	ŏ	Ŏ	Ŏ	Ŏ	ŏ	Ŏ	Ŏ	ŏ	ŏ	ŏ	Ö
Co-Morbid	Rate per 100											
Conditions Index	Population											
Arthritis	4.52											
Back and Joint Pain	7.83											
Asthma	6.27											
Diabetes	11.12											
Hypertension	20.19											
Ambulatory Sensitive Admissions	37.58	<u> </u>	0	•	•	<u> </u>	•	0	•	0	<u> </u>	
Mental Health I ssues	8.84	<u> </u>	<u> </u>	•	<u> </u>	<u> </u>	•	0	<u> </u>	<u> </u>	<u> </u>	0
Overall Index Score						0	•	•		•	•	•
	Rate per 100											
Major Disease Index	Population											
Cancer	10.09					•	•			•		
Cardiovascular	10.52						•			O		
Stroke	0.91	<u> </u>	<u> </u>	<u> </u>	•	<u> </u>	<u> </u>	<u> </u>	•	0	<u> </u>	0
Joint & Spine Procedures	11.54	•	•	•	<u> </u>	•	•	0	•	0	<u> </u>	0
Infant Mortality	0.60	0	0	0	0	0	0	0	0	0	0	0
Cancer - Gyn	0.59	0	0	0	0	0	0		0		0	0
Overall Index Score								•				•
		I	1				1	1			I	1
Summary Need Index												

Index Definition

A community health indicator which measures exactly at the Central Maryland average is represented by an index score of 1.00. The extent to which a community health indicator is favorable, or unfavorable, to the Central Maryland average is represented by an index score below 1.00, or above 1.00, respectively. The "stoplight" signals correspond to index scores as noted to the right.

Appendix 5 – Service Area Health Risk by Community

Health Index Sum	mary									
Community	Zip Codes	Population	SAH Market Share	SAH Dependence	Vulnerable Population Index	Lifestyle Behavior Index	Co-Morbid Conditions Index	Major Disease Index	Overall Health Index	
West Baltimore City	21215, 21216, 21217	126,744	5.8%	7.3%	1.70	2.74	2.07	1.52	2.01	
South Baltimore City	21223, 21230	60,386	15.1%	7.7%	1.42	2.53	1.92	1.25	1.78	
Brooklyn/Linthicum	21090, 21225	43,816	6.6%	2.8%	1.46	2.23	1.61	1.04	1.58	
Southwest Baltimore City	21229	44,997	40.9%	15.8%	1.45	1.81	1.74	1.34	1.58	
Woodlawn	21207, 21244	84,545	12.5%	7.8%	1.27	1.05	1.11	1.20	1.16	
Glen Burnie	21060, 21061	87,752	4.2%	2.7%	1.04	1.17	1.02	0.89	1.03	
Arbutus	21227	34,225	45.4%	11.1%	1.13	1.11	0.98	0.85	1.02	
Catonsville	21228	49,586	49.0%	15.8%	0.89	0.46	0.80	1.00	0.79	
Pasadena	21122	62,625	3.4%	1.2%	0.70	0.73	0.72	0.77	0.73	
South Carroll	21104, 21163, 21784	52,609	4.2%	1.1%	0.62	0.27	0.45	0.57	0.48	
Ellicott City	21042, 21043, 21075	119,615	10.3%	5.6%	0.70	0.23	0.39	0.55	0.47	

The communities included in this health needs assessment represent the Saint Agnes Hospital primary and secondary service areas. The assessment compares 35 community specific health indicators, against Central Maryland averages. The extent to which a community is at higher than average risk, for a specific indicator, the index score will exceed 1.00. The inverse is true for an index scores below 1.00, which indicates a comparatively lower level of health risk.

The overall health index, which is an average of all community need indices, highlights those communities with the greatest healthcare needs in the Saint Agnes Hospital service area. This assessment has identified that the more urban based communities of West Baltimore City, South Baltimore City, Brooklyn/Linthicum and Southwest Baltimore City represent the greatest healthcare needs, each with overall indices exceeding 1.50. The suburban communities of Pasadena, Ellicott City and South Carroll have comparatively fewer healthcare needs, as determined by this assessment. Community needs, market share and community dependence rates, suggest that Saint Agnes Hospital can make the greatest impact in West Baltimore City.

Appendix 6 – Internal & External Stakeholders

Internal Stakeholders - Saint Agnes Hospital:

Shadi Barakat, MD, Medical Director Diabetes Center

Pinar Miski, MD, Chief of Psychiatry

Richard Pomerantz, MD, Chairman Department of Medicine

Michael Burke, MD, Chairman Department of Pediatrics

James Richardson, MD, Section Chief Geriatric Medicine

Nancy Hammond, MD, Interim Chairman Department of OB/GYN

Kirstan Cecil, Director of Marketing & Communications

Allison Mackenzie, Director Maryland Metabolic Institute

Sharon Berry, MNPM, Nursing Director Maternal Child Health

Lori Franklin, Director Managed Care and Government Relations

Anne Buening, Vice President Mission Integration

Patrick Mutch, Executive Vice President, Physician and Population Health Services

Mary Austin, Assistant Vice President Cancer Institute

Carolyn Moore, Director Rehabilitation Services

Jane Hofherr, RN, Director Care Management

Jennifer Broaddus, LCSW-C, OSW-C, Social Worker Cancer Institute

Susan Mathers, RN, Nursing Director Emergency Department

Kabir Yousuf, MD, Cardiologist

Shannon Winakur, MD, Director Women's Heart Center

Jenene Washington, MD, Chief Medical Officer, Baltimore Medical System

External Stakeholders:

American Diabetes Association – Maryland Area

David McShea, Executive Director

Tracy Newsome, Director, Community Health Strategies

Baltimore City Health Department

Sonia Sarkar, Chief Policy and Engagement Officer

Darcy Phelan-Emrick, Chief Epidemiologist

Baltimore Medical Systems, Inc.

Shirley Sutton, President/CEO

Catholic Charities

William J. McCarthy, Jr., Executive Director

Equity Matters

Michael P. Scott, Chief Equity Officer/President/Co-Founder

Green & Healthy Homes

Ruth Ann Norton, President/CEO

HealthCare Access Maryland

Traci, Kodeck, MPH, Interim CEO

The Caroline Center

Patricia McLaughlin, SSND, Executive Director

University of Maryland School of Nursing

Katherine Fornili, MPH, RN, CARN, Assistant Professor, Department of Family & Community Health Michelle R. Spencer, MS, RN, Clinical Instructor, Department of Family & Community Health

University of Maryland School of Social Work

Wendy E. Shaia, Ed.D., MSW, Clinical Assistant Professor and Executive Director Social Work Community Outreach Service

Tanya L. Sharpe, PhD., MSW, Associate Professor

Stacey Stephens, Director, B'More for Healthy Babies, Upton/Druid Heights

Frederick Strieder, Ed.D., MSW, Clinical Associate Professor and Director, Family Connections Lane Victorson, MSW, Clinical Field Instructor, Neighborhood Fellows / Peace Corps Fellows

West Baltimore Maha Sampath, MHSA | Director Care (Health Enterprise Zone)
Maha Sampath, MHSA | Director

Appendix 7 – Internal Stakeholder Survey

1.	Based on your experience with patients in the community, what do you see as the greatest health need facing the population in the Saint Agnes service area?
2.	Based on your experience in the community, please list the next three greatest health concerns facing the population?
	1)
	2)
	3)

Appendix 7 – Internal Stakeholder Survey

Community Health Needs Assessment - Concerns for the Community

		A	В	С	D	E	F	G	н	- 1	J	к	L	M	N	0	P	Q	R	s	т	U	v	w	x
						-	-		"	Depression/	,			M			-		, n	,			•		
		Access to Health Insurance	Access to Nutritious food	Affordable Housing	Alcohol/ Drug abuse	Alzheimer's/ Dementia	Arthritis	Availability /Access to Doctors Office	Cancer	Anxiety Mental Health Issues	Diabetes	Domestic Violence Women & Children	Adequate Education	Employment Opportunities	Heart Disease	High Blood Pressure	HIV /AIDS	Homicide/ Violent Crime	Insufficient Prenatal Care	Lack of Exercise	Lung Disease/ Asthma /COPD	Obesity	Poverty	Smoking/ Tobacco Use	Stroke
x	Stroke																								
w	Smoking/ Tobacco Use																								
v	Poverty																								
Y	Obesity																								
т	Lung Disease/ Asthma /COPD																								
s	Lack of Exercise																								
R	Insufficient Prenatal Care																								
Q	Homicide/ Violent Crime																								
P	HIV /AIDS																								
o	High Blood Pressure																								
N	Heart Disease																								
м	Employment Opportunities																								
L	Adequate Education																								
K	Domestic Violence Women & Children																								
1	Diabetes																								
1	Depression/ Anxiety Mental Health Issues																								
н	Cancer																								
G	Availability /Access to Doctors Office																								
F	Arthritis																								
E	Alzheimer's/ Dementia																								
D	Alcohol/ Drug abuse																								
c	Affordable Housing																								
В	Access to Nutritious food																								
А	Access to Health Insurance																								