

LifeBridge Health

Sinai Hospital

Community Health Needs Assessment

2021

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Executive Summary

Sinai Hospital is a 483-bed acute care facility licensed in the state of Maryland providing acute, primary and specialty care services to residents in various communities in and near north and west side Baltimore. Sinai Hospital is the most comprehensive and largest community hospital in Maryland and is the state's third largest teaching hospital.

Sinai Hospital is part of LifeBridge Health, Inc. which also includes Grace Medical Center in southwest Baltimore, Levindale Hebrew Geriatric Center and Hospital, Northwest Hospital in Baltimore County and Carroll Hospital in Carroll County.

The Baltimore City Health Department and the resident health systems previously collaborated on a Community Health Needs Assessment ("CHNA") in 2017-2018 and have sought to do so again in 2020-21 though in a more limited manner due to the COVID-19 virus. As part of the LifeBridge Health system participation in this collaborative effort, Sinai Hospital has participated in the City-wide survey, focus groups and stakeholder interviews. This CHNA incorporates a variety of secondary data sourced through the Baltimore Neighborhood Indicators Alliance as well as the Baltimore City Health Department's Neighborhood Health Profile.

2021 Community Health Needs Assessment

Approach and Methodology: Similar to the CHNA conducted in 2018, in 2020-21 Sinai Hospital used an inclusive approach to complete the CHNA to ensure that the CHNA was conducted in a way that best identifies north and west Baltimore's health needs and meets the IRS CHNA requirements for not-for-profit hospitals. Sinai Hospital's leadership recognized the importance of continuity with previous CHNAs and the corresponding Implementation Plans (IP). A report on the impact of actions taken under the 2018 Implementation Plan can be found on page 8.

Sinai Hospital utilized its Community Health and Wellness team to conduct the CHNA. As part of the CHNA methodology, Sinai Hospital collected and analyzed both primary and secondary data for seven Community Statistical Areas (CSAs) that comprise the majority of the hospital's service area. The following CSAs make up Sinai Hospital's CHNA Service Area - Cross-Country/Cheswolde, Dorchester/Ashburton, Glen-Falstaff, Howard Park/West Arlington, Mount Washington/Coldspring, Pimlico/Arlington/Hilltop, and Southern Park Heights.

Key Findings from Secondary Data Analysis: The 2020 US Census population estimate for the Sinai Hospital service area is 251,771. This represents a decline of approximately 2,100 residents since 2010. The demographics of the service area commonly reflect Baltimore City as a whole in regard to age (18 percent over 65 and 22 percent under 18), ethnicity (4.7 percent Hispanic/Latinx), race (63 percent Black, 31 percent White, 4 percent Asian), and gender (54/46 percent female/male). With respect to education, residents of the service area have attained higher education levels than the City's overall population (37 percent with bachelor's degree or greater versus 32 percent for Baltimore City).

Within the CHNA service area, the communities of Southern Park Heights and Pimlico – Arlington – Hilltop had health outcomes and socio-economic factors significantly less favorable than other service area communities and Baltimore City as a whole. In particular:

- Life expectancy across the service area ranged from 84.7 years in Cross-Country/Cheswolde to 67.1 years in Pimlico/Arlington/Hilltop and 68.7 years in Southern Park Heights. The city of Baltimore has a life expectancy of 72.7 years.
- The all-cause mortality rate per 10,000 people in the CSAs served by Sinai Hospital range from 44.9 in Cross-Country/Cheswolde to 128.2 for Pimlico – Arlington – Hilltop, nearly 29 percent higher than the Baltimore rate. Southern Park Heights has an all-cause mortality rate of 119.1 per 10,000 people.
- More than 50 percent of households in Southern Park Heights and 41 percent of households in Pimlico-Arlington-Hilltop have incomes less than \$25,000. The city-wide percentage is 28.4.

Community and Stakeholder Involvement: The CHNA team used a multi-pronged approach to solicit input from the Baltimore community regarding their health needs. Data collection methodologies included surveys, stakeholder interviews, and focus groups. Focus groups and interviews included community leaders, associations, as well as expressed demographic groups – those with disabilities, re-entry residents, and Spanish-speaking employees.

Participants highlighted the following themes as **top health concerns**:

- High Blood Pressure, Diabetes, and High Cholesterol
- Mental Health and Illness, Depression, Loneliness
- Drug and Alcohol Addiction, Substance Abuse

The leading **social and environmental barriers** referenced were:

- Unemployment, Poverty, as well as Crime and Trash
- Lack of Transportation

- Safety across the community
- Lack of open space, recreation, and a sense of community
- Language barriers

A web-based and hardcopy survey instrument was distributed in 2020 to collect information from Baltimore City residents regarding their health and social needs. A total of 3,170 surveys were completed in the fall of 2020 across Baltimore City. Six hundred sixty-three of the respondents (21%) were from the Sinai service area.

The most important problems that affect the health of the community are:

- Alcohol/Drug addiction – 60 percent of respondents
- Mental Health (Depression/Anxiety) – 44 percent
- Diabetes/High Blood Sugar – 33 percent
- Heart Disease/Blood Pressure – 31 percent

The most important social/environmental problems that affect the health of the community are:

- Lack of Job Opportunities – 32 percent of respondents
- Housing/Homelessness – 29 percent
- Neighborhood Safety/Violence – 27 percent
- Limited Access to Healthy Foods – 22 percent

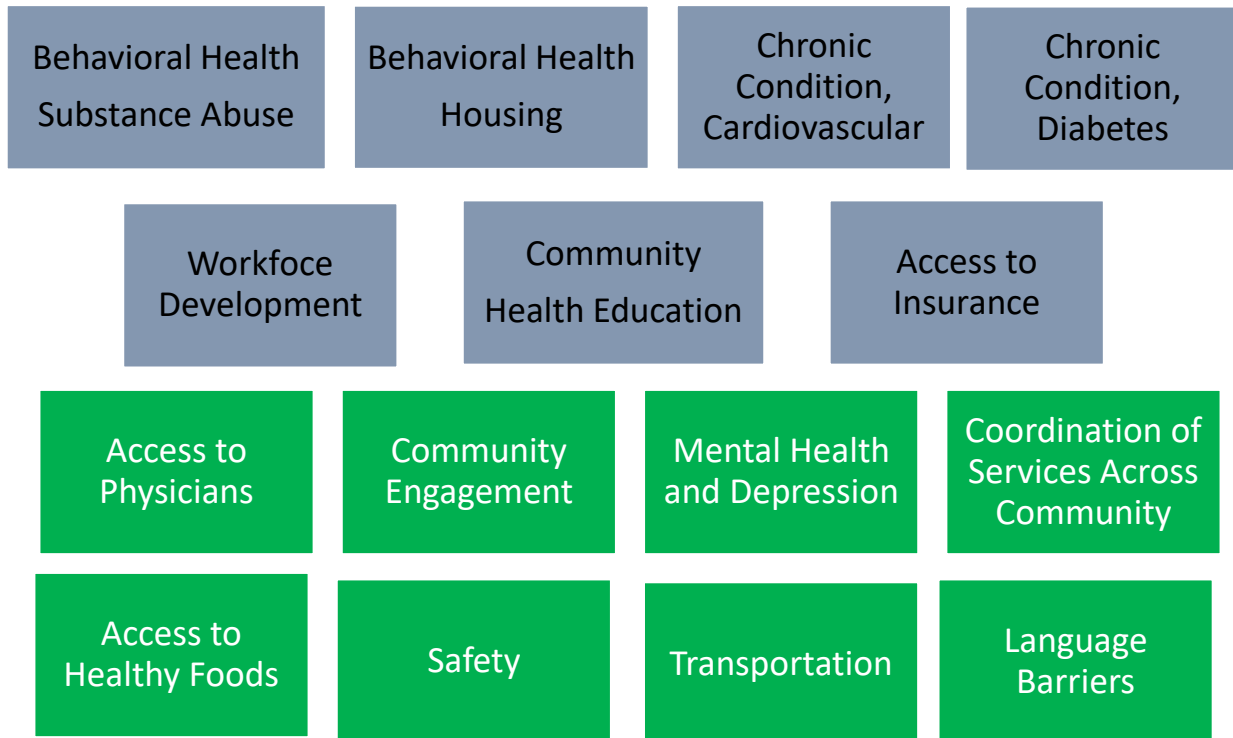
Sinai Hospital Identified Health Needs and Priorities

In 2018, Sinai Hospital identified and prioritized the following health needs in the community:

- Behavioral Health/Substance Abuse
- Behavioral Health and Housing
- Chronic Disease, Diabetes
- Chronic Disease, Cardiovascular
- Workforce Development
- Community Health Education
- Access to Insurance

In 2021, the seven needs (above) remained as **Identified Needs** of the community, and eight additional needs (in green boxes below) were added.

Identified Needs of Community Served



The Sinai Hospital CEO and CHNA leadership met with representatives of the Sinai Hospital Board, Leadership team, key community stakeholders, and the LifeBridge Health Community Mission Committee members on March 19, 2021 to review findings of the CHNA and to seek recommendations to prioritize the identified needs above. Following review of secondary and survey data, as well as findings of the interviews and conducted focus groups, the participants were asked to select those identified needs for which there was “**High Need**” (significance and prevalence) and “**High Feasibility**” (ability to impact).

The following Identified Needs were selected as **Priorities** for Sinai Hospital and will be included in the 2021 – 2024 Implementation Plan:

1. Heart Disease
2. Mental Health and Depression/Substance Abuse
3. Community Health and Wellness Education
4. Diabetes
5. Housing
6. Food Insecurity

7. Community Safety

In addition, the leadership of Sinai Hospital recognizes the significant need to address imbalances among racial and minority groups and those impacted by longstanding social determinants of health. An eighth priority, Health Disparities, is intended to expand community relationships and extend coordinated services more closely to socio-economically impacted neighborhoods.

Sinai Hospital leadership anticipates the 2021 – 2024 Implementation Plan will address these needs in conjunction with both LifeBridge Health resources and with well-established community partners and organizations.

Sinai Hospital will also support the work of City agencies and collaborative organizations to address and advocate for solutions to additional Identified Needs not prioritized in its Implementation Plan.

2021 Community Health Needs Assessment

A community health needs assessment (CHNA) provides the foundation for improving and promoting the health of a community. Through the assessment process, Sinai Hospital (“Sinai”) identifies and describes the health status of the community that it serves; any factors in the community that contribute to health challenges; and existing community assets and resources that can be mobilized to improve the health status of the community. The community health needs assessment, therefore, ensures that Sinai and partner resources are directed toward activities and interventions that address critical and timely community health needs. This Report documents the results of Sinai’s CHNA for fiscal year 2021. This Report will inform Sinai’s CHNA Implementation Strategy that will describe how Sinai Hospital plans to address prioritized health needs.

Federal CHNA Requirement

The Patient Protection and Affordable Care Act [§ 9007, 26 U.S.C. 501(c) (2010)], (commonly referred to as “Obamacare”) requires non-profit hospitals to conduct a community health needs assessment (CHNA) and adopt an implementation strategy (i.e., community health improvement plan (CHIP)) every 3 years to be considered a non-profit by the Internal Revenue Service (IRS). A CHNA defines the community a hospital serves, surveys the health of their community, and listens to their community members’ opinions in order to decide what the greatest needs of their community are and what resources are available. An implementation strategy then describes how the hospital plans to address the greatest needs in their community.

A CHNA will only meet the requirements of the law if it:

- (i) Defines the community it serves.
- (ii) Assesses the health needs of that community.
- (iii) Reviews input from their community and local public health officials.
- (iv) Documents the CHNA in a written report (CHNA Report) that is adopted for the hospital by an authorized body of the hospital facility.
- (v) Makes the CHNA report widely available to the public.

1 Impact of Implementation Plan (2018 – 2020)

2018 SINAI IMPLEMENTATION STRATEGY

Category: Health Concerns; **Prioritized Need:** Behavioral Health

In response to the continued prioritized need of Behavioral Health, the Office of Community Health Improvement implemented the Screening and Brief Intervention and Referral to Treatment (SBIRT) protocol in Sinai Emergency Department. The protocol

is designed to work with patients who may have substance use disorder and provide some level of support and navigation for them before they leave the facility. Sinai Hospital partnered with Mosaic to train support workers who provide the interventions and Emergency Department staff who complete the screening and treat the patient before referral. Since November of 2019, of the 43,342 ED registrations, 35,304 screenings were completed and 4,560 of those patients screened were positive for substance use. SBIRT staff completed 1,262 brief interventions, 286 referrals to treatment were made and 137 of the referral appointments made were kept.

Category: Health Concerns **Prioritized Need:** Chronic Disease

In response to the prioritized need of chronic disease, the Office of Community Health Improvement implemented the Diabetes Wellness Series. This education series offered education on the treatment strategies and self-management of Diabetes for patients and family members. Also included in the curriculum is information on pre-diabetes, medication management, food, physical activity and healthy lifestyle choices. We partnered with various community organizations, American Diabetes Association, Maryland Department of Health, Baltimore City Health Department, Sinai Hospital's Diabetes Resource Center, and many others. Between July 2017 and March 2020, there were 38 in-person classes offered serving 167 people. 93% of attendees surveyed indicated that they would institute lifestyle changes and behavioral change based on the information heard and received during events.

Category: Health Concerns **Prioritized Need:** Chronic Disease

In response to the prioritized need of chronic disease, the Office of Community Health Improvement continued the Changing Hearts Program (through June 2019) to maintain and improve behavioral and biometric outcomes connected to heart disease. Various aspects of the program continued after June 2019 through March 2020. Components included but were not limited to providing on-going support to facilitate lifestyle change; improve quality of life, smoking status, healthy eating practices and physical activity. The program also held regular education sessions and shared materials to improve biometric elements such as blood pressure, fasting blood sugar, body mass index, and cholesterol levels. We partnered with many organizations throughout the communities including the American Heart Association, Baltimore City Health Department Cardiovascular Disparities Task Force, and the Park Heights Community Health Alliance. 69% of program participants presented with either pre-hypertension and either Stage One or Stage Two Hypertension as defined by the American Heart Association. Of those completing the program, 42% demonstrated an improvement in their blood pressure compared to the beginning measurement. 87% presented as overweight or obese and after completing the program 14% had an improvement in their BMI compared to the beginning measurement. 71% of participants presented as pre-diabetic

or diabetic according to their fasting blood glucose measurements. 21% demonstrated improvement in their fasting blood sugar upon completion of the program. 58% presented with cholesterol numbers that were above normal, with 18% of individuals demonstrating an improvement in cholesterol levels upon program completion. 93% of program participants reported making healthier lifestyle choices regarding diet, activity, communication with healthcare providers and smoking status (38% began smoking cessation programs). Upon conclusion of the Changing Hearts Program, in-person screening and risk assessment activities continued (June 2019-March 2020) serving 362 people during which time 96% committed to and/or reported making healthier lifestyle choices based on the results of their assessment and education provided.

Category: Access to Health Care **Prioritized Need:** Health Education/Knowledge of Available Resources

In response to the prioritized needs of health education and the knowledge of available resources the Office of Community Health Improvement increased staff to expand reach into surrounding communities. The addition of the Community Pastoral Outreach Coordinator (Nov. 2017) and additional Health Educators (July 2017-June 2019 and Jan. 2020-present) allowed for the increase in health events and expansion of topics. In addition to illness and prevention related topics, information was added on the connection between faith and health; and the inclusion of more information on community resources facilitated more access. Staff hours for workshops FY18-FY20 (health fairs and other in-person events through March 2020), increased by 37% compared to the previous CHNA cycle (FY15-FY17). The overall number of people receiving health education increased by 47% during the same time frame (including a 13% increase in the faith-based partners) compared to the previous cycle. Coalition building saw an exceptional increase (more than 100%) as our Community Pastoral Outreach Coordinator facilitated better, more collaborative relationships with our surrounding faith communities.

Category: Access to Health Care **Prioritized Need:** Medical Insurance

Access to health care impacts our overall physical, social, and mental health status and quality of life. Health insurance coverage helps patients enter the health care system. Uninsured or underinsured individuals are more likely to delay healthcare and to go without the necessary healthcare or medication they should have been prescribed. Training staff to assist patients with navigating and applying for Medicaid health insurance has been the focus of one Community Health Worker's work. In the past 2.5 years, approximately 700 patients have received assistance with new applications, renewal applications or referrals to other insurance services. During the second half of 2020, 60% of those in need of insurance have become insured. Those who have not

been eligible for Medicaid due to income requirements, citizen requirements or eligibility for other insurance have been referred to other resources.

2 Overview of Sinai Hospital and the LifeBridge Health System

Founded in 1866 as the Hebrew Hospital and Asylum, Sinai Hospital has evolved into a Jewish-sponsored health care organization providing care for all people. Today, Sinai Hospital is a 483-bed community teaching hospital that provides patient care in a variety of settings including inpatient, surgical, outpatient, trauma center (Level II designation), high risk Neonatal Unit, state-of-the-art Emergency Department, and responsive community outreach provided by M. Peter Moser Community Initiatives Department (Community Initiatives), an integral part of the Population Health Department. Sinai Hospital has 16 specialized clinical Centers of Excellence, including the Alvin & Lois Lapidus Cancer Institute, Sandra and Malcolm Berman Brain & Spine Institute, the Rubin Institute for Advanced Orthopedics, and the Krieger Eye Institute, and the Herman & Walter Samuelson Children's Hospital.

Sinai Hospital is the most comprehensive and largest community hospital in Maryland and is the state's third largest teaching hospital. Community teaching hospitals such as Sinai find one of their greatest strengths is their clinicians' commitment to direct patient care. The residents and medical students who train at Sinai have chosen a community-teaching setting over a classic academic medical center setting. Sinai provides medical education and training to 2,000 medical students, residents, fellows, nursing students, and other health professionals each year from the Johns Hopkins University, University of Maryland, and other teaching institutions in the Baltimore/ Washington/ Southern Pennsylvania region.

Sinai Hospital is a member of the LifeBridge Health system, which was formed in 1998 by the merger between Sinai Health System, Inc., that included Sinai and Levindale Hebrew Geriatric Center and Hospital, and Northwest Health System, Inc. A fourth hospital, Carroll County Health Services Corporation, joined the LifeBridge Health system in April 2015.

3 CHNA Approach and Methodology

Sinai used a work group (“team”) to complete the CHNA to ensure that the CHNA was conducted in a way that best identifies the health needs of its service area and meets the IRS CHNA requirements for not-for-profit hospitals.

The CHNA team, which had representation from the Population Health department partnered with health systems across Baltimore City in dissemination of a community survey as well as stakeholder interviews and focus groups. (The list of team members can be found in Appendix A).

As part of the CHNA methodology to identify community health needs, the team collected and analyzed both qualitative and quantitative data via community input and review of secondary data sources. Quantitative data was provided by the Baltimore City Health Department as well as Baltimore Neighborhood Indicators Alliance – Jacob Francis Institute (BNIA), and the Center for Disease Control.

The CHNA team used a multi-pronged approach to solicit input from the community across the service area regarding their health needs. Qualitative data collection methodologies included stakeholder interviews, focus groups, and a survey. In addition to soliciting public input via social media the CHNA team contacted community partners and association leaders, faith organizations as well as senior housing facilities in the service area.

All data collection efforts were significantly impaired by the COVID-19 virus. Health Department officials were focused on pandemic virus responses and unable to update the 2017 Baltimore Neighborhood Health Profile Reports. Availability of staff for interviews was limited. Outreach to potential participants was substantially constrained and limited to electronic venues and materials.

Methods were based on the intended target audience and information needs. The chart below shows the data collection method used to meet CHNA requirements.

CHNA Requirement and Data Collection Methodology

CHNA Requirement	Data Collection Methodology
Secondary Data sources reflecting health and social conditions of the community served.	<ul style="list-style-type: none"> • Baltimore City Health Dept; Baltimore Neighborhood Indicators Alliance; CDC
At least one state, local, tribal, or regional governmental public health department (or equivalent department or agency), or a State Office of Rural Health with knowledge, information, or expertise relevant to the health needs of that community;	<ul style="list-style-type: none"> • Collaborative stakeholder Interviews
Members of medically underserved, low-income, and minority populations in the community, or individuals or organizations serving or representing the interests of such populations;	<ul style="list-style-type: none"> • Stakeholder Interviews • Survey • Focus Groups
Input received from a broad range of persons located in or serving its community including but not limited to health care consumers and consumer advocates, nonprofit and community-based organizations, academic experts, local government officials, local school districts, health care providers, and community health centers, health insurance and managed care organizations, private businesses and labor and workforce representatives.	<ul style="list-style-type: none"> • Survey • Focus Groups

4 Description of the Community Served

Sinai Hospital is located in the northwest quadrant of Baltimore City, serving both its immediate neighbors and others throughout the Baltimore City and Baltimore County. The community served by Sinai Hospital can be defined by its Primary Service Area (PSA) and geographically represents the zip codes immediately surrounding Sinai Hospital. Listed in order from largest to smallest number of discharges for fiscal year 2020, Sinai Hospital’s CHNA service area includes the following zip codes: 21215, 21207, 21117, 21216, 21208, and 21209. (represented by the red and purple areas of the map, Appendix B).

More specifically, the CHNA service area is comprised of the following Community Statistical Areas (“CSAs”) – Cross-Country/Cheswolde, Dorchester/Ashburton, Glen-

Falstaff, Howard Park/West Arlington, Mount Washington/Coldspring, Pimlico/Arlington/Hilltop, and Southern Park Heights. These CSAs overlap with the zip codes from which the top 53% of 2020 total patient discharges originate.

The table below provides comparative Demographic information across the Sinai Hospital service area, the City of Baltimore, and those from the Sinai service area who participated in the 2020 survey.

Demographic Highlights

Category	Sinai Hospital Service Area	Baltimore City, US Census Bureau 2019	2020 Survey Respondents from Service Area
Population	2010 Census: 253,870 2016 Census: 261,160 2020 Estimate: 251,771	2019: 593,490	663
Gender	Female: 54% Male: 46%	Female: 53% Male: 47%	Female: 66% Male: 31% Transgender: 1%
Race	Black/African American: 63% White: 31% Asian: 4.1% Multiple Races: 2.3%	Black/AA: 62.7% White: 31.8% Asian: 2.7% Multiple Races: 2.2%	Black/AA: 78% White: 14% Asian: 1% Multiple Races: 1%
Ethnicity	Hispanic/Latinx: 4.7%	Hispanic/Latinx: 5.7%	Hispanic/Latinx: 4.5%
Age	Under 18: 22.3% 18 to 64: 59.7% 65 and Older: 18.0%	Under 18: 20.2% 18 to 64: 65.3% 65 and Older: 14.5%	Under 18: N/A 18 to 64: 75% 65 and Older: 25%
Uninsured		7.4%	11%
Education	Non-HS grad: 10.4% High School grad: 52.6% Bachelors+: 37.0%	Non-HS grad: 14.8% High School grad: 53.3% Bachelors+: 31.9%	Were not asked

Baltimore City is comprised of 593,490 people (US Census Bureau, July 2019 estimate), of which 251,771 (42.4%) live in the Sinai service area. The demographics of service area commonly reflect Baltimore City as a whole for age, ethnicity, race, and

gender. With respect to education, residents of the service area have attained higher education levels than the City's population collectively.

5 Qualitative Findings

Survey

A web-based and hardcopy survey instrument was distributed in 2020 to collect information from Baltimore City residents regarding their health and social needs. The survey consisted of 14 questions (both open and closed ended) covering the following categories (number of questions):

- Demographics (5),
- Health problems (1),
- Social and Environmental problems (1),
- Mental Health (1),
- Access to Health Insurance and Barrier to Healthcare Access (2),
- Impact of COVID-19 (3), and
- Suggestions for Improving the Health of the Community (1).

A total of 3,170 surveys were completed in the fall of 2020 across Baltimore City. Six hundred sixty-three of the respondents (21%) were from the Sinai service area.

While females represented 63% of the respondents overall, in the Sinai service area they represented 66% of those who completed the survey. The proportion of respondents from within the Sinai service area under the age of 50 was 41% versus 47% for the whole survey participants. Seven percent of respondents were 75 years or older from the Sinai zip codes compared to 5.7% of all respondents.

A larger percentage of African-Americans (78% vs. 61% overall) in the Sinai service area took the survey and a slightly greater percentage (5% vs. 4%) considered themselves Hispanic. A slightly lower percentage (86% vs 90.6% overall) indicated they had health insurance.

While 43% of Sinai area respondents reported zero (0) days of the past 30 days in which their mental health was not good (compared to 28% of all who took the survey), as the subsequent question and response demonstrate, Mental Health is secondly only to Alcohol and Drug addiction as the most important health problem for the health of the community. Within the Sinai service area, Mental Health is a more significant concern for survey respondents than for survey respondents across the city.

What are the three most important health problems that affect the health of your community? Please check only three.	Number of Sinai area Respondents	Percent of total Sinai area Respondents	% of City-Wide Respondents
Alcohol/Drug Addiction	396	60%	63%
Mental Health (Depression/Anxiety)	295	44%	36%
Diabetes/High Blood Sugar	221	33%	34%
Heart Disease/Blood Pressure	208	31%	34%
Smoking/Tobacco Use	152	23%	18%
Cancer	111	17%	18%

Across the Sinai service area, and consistent with all respondents in the City survey, the three most important social / environmental problems affecting the health of the community are Lack of Job Opportunities, Housing and Homelessness, as well as Neighborhood Safety and Violence. Among respondents, Neighborhood Safety and Access to Healthy Foods are of more concern in the hospital's service area than the City as a whole.

What are the three most important social/environmental problems that affect the health of your community? Please check only three.	Number of Sinai area Respondents	Percent of total Sinai area Respondents	% of City-Wide Respondents
Lack of Job Opportunities	215	32%	32%
Housing/Homelessness	189	29%	30%
Neighborhood Safety/Violence	177	27%	25%
Limited Access to Healthy Foods	143	22%	19%
Availability/Access to Doctor's Office	122	18%	19%

The top three reasons residents in the community do not get health care are linked to the cost of health care, a lack of insurance, and/or a lack of transportation. The responses of those in the Sinai service area are similar, though to a lesser extent, to those across the whole City.

What are the three most important reasons people in your community do not get health care? Please check only three.	Number of Sinai area Respondents	Percent of total Sinai area Respondents	% of City-Wide Respondents
Cost - Too Expensive/Can't Pay	409	62%	69%
No Insurance	346	52%	56%
Lack of Transportation	188	28%	27%

The impact of COVID-19 on residents is reflected in a variety of significant needs. Food assistance, and financial assistance were identified as needs by more than one-third of respondents in the Sinai service area. Energy and rental assistance were listed by 18 percent of Sinai respondents. All four needs exceeded the percent of respondents city-wide who referenced these types of assistance.

As a result of COVID-19, have you needed any of the following? (Check all that apply)	Number of Sinai area Respondents	Percent of total Sinai area Respondents	% City-Wide Respondents
Food Assistance	280	44%	32%
Financial Assistance	233	37%	30%
None	231	36%	49%
Energy Assistance	117	18%	15%
Rental Assistance	114	18%	13%
WiFi/Internet Assistance	84	13%	10%
Housing/Shelter	70	11%	7%
Child Care	62	10%	7%
Translation/Interpretation Services	19	3%	2%

When asked “What ideas or suggestions do you have to improve the health in your community?”, respondents from the Sinai Hospital service area spoken to the following themes:

- **Health** - Universal healthcare, affordable insurance, equity and access, mental health resources, and better quality of care;
- **Community** - More community investment and resources, outreach and rehabilitation across the community, cleanliness, and safety;
- **Economy** - Opportunities for people, less socio-economic discrimination; and
- **Nutrition** - Access to healthier foods, more affordable fresh foods.

Focus Groups and Stakeholder Interviews

In addition, Sinai and its companion LifeBridge Health facilities conducted focus groups as well as conversations with key stakeholders within the primary service areas. Representatives included community leaders, associations, as well as expressed demographic groups – those with disabilities, re-entry residents, and Spanish-speaking employees. Four stakeholder interviews and four focus groups were conducted between August 2020 and November 2020. The stakeholders were selected because they had special knowledge of or expertise in public health or represented the broad interest of the community served by Sinai, including the interests of medically underserved, low-income and minority populations with chronic disease needs.

The conversations asked the following questions:

1. What are the top health concerns in your community?
 - a) Pre-COVID?
2. What are the top social/environmental barriers in your community?
3. What are the top reasons people in your community don't access healthcare?
4. As a result of COVID-19, what barriers have emerged or gotten worse in your community?
5. What ideas or suggestions do you have to improve the health and or healthcare system in your community?

Participants highlighted the following themes as **top health concerns**:

- High Blood Pressure, Diabetes, and High Cholesterol
- Mental Health and Illness, Depression, Loneliness
- Drug and Alcohol Addiction, Substance Abuse
- Additional concerns included Nutrition, Wellness, Cancer, HIV/AIDS, and stroke.

The leading **social and environmental barriers** referenced were:

- Unemployment, Poverty, as well as Crime and Trash
- Lack of Transportation
- Safety across the community
- Lack of open space, recreation, and a sense of community
- Language barriers

The top reasons for not accessing healthcare services included:

- Lack of Insurance, and underlying lack of funds
- A distrust in the healthcare system and corresponding misinformation and perceived discrimination
- Delays in receiving care, more timely care needed
- Lack of education
- Lack of transportation and distance from doctors

Increased barriers as a result of COVID-19 include:

- Food insecurity and access to grocery stores
- General fearfulness, safety, depression, loneliness and mental health
- Housing security
- Domestic violence
- Transportation and resources for Spanish speaking populations

Suggestions made to improve health or healthcare systems were:

- More engagement with the community; expand beyond social media
- Establishment of care coaches/coordinators to help patients navigate health care and services needed
- Services for new families, parenting classes
- Language resources
- Attention to senior wellness, prostate screenings.

A complete summary of the individual interviews and focus groups conducted can be found in Appendix C.

6 Secondary Data Analysis

Health Outcomes

As in 2018, the following CSAs were selected by **Sinai Hospital** to be included in this CHNA quantitative profile: Cross-Country/Cheswolde, Dorchester/Ashburton, Glen-Falstaff, Howard Park/West Arlington, Mt. Washington/Coldspring, Pimlico/Arlington/Hilltop, Southern Park Heights.

Life Expectancy: For 2018, the most recently reported data indicates that the overall life expectancy at birth in Baltimore City was 72.7 years. In the Sinai service area, the Pimlico/Arlington/Hilltop and Southern Heights CSAs have life expectancies below the City-wide life expectancy. The remaining CSAs all exceed City-wide life expectancy.

Life expectancy at birth by Sinai CSAs, and Baltimore City

Community Statistical Area (CSA)	Life expectancy at birth, in years
Cross-Country/Cheswolde	84.7
Dorchester/Ashburton	72.0
Glen-Falstaff	76.7
Howard Park/West Arlington	74.7
Mt. Washington/Coldspring	79.9
Pimlico/Arlington/Hilltop	67.1
Southern Park Heights	68.9
Baltimore City	72.7

Source - Baltimore Neighborhood Indicators Alliance – Jacob France Institute

In the 2018 CHNA, several important data indicators were provided by the Baltimore City Health Department through their 2017 Neighborhood Health Profile Reports. The City Health Department has not issued new Reports since 2017. These important health and social indicators are included in this CHNA for their continued significance in reflecting the health status of the Sinai Hospital service area.

Mortality Rate: The all-cause age-adjusted mortality rate in Baltimore City is 99.5 per 10,000 residents. The CSAs served by Sinai Hospital range from 44.9 in Cross-Country Cheswolde to 128.2 for Pimlico/Arlington/Hilltop. The top causes of death in Baltimore City are due to heart disease, cancer, stroke, and drug-and/or alcohol-related. (Maps for All-Causes Mortality and Drug/Alcohol Mortality can be found in Appendix D and E.)

The number of homicides that occurred per 10,000 residents (all ages) per year in Baltimore City is 3.9. Homicide mortality rate is also a large health disparity in the Sinai service area with age-adjusted mortality rates as high as 9.3 (Pimlico/Arlington/Hilltop).

All-cause mortality, Homicide, and Drug/Alcohol Rate by CSAs in Sinai Service Area, and Baltimore City

Community Statistical Area (CSA)	All Causes Mortality Rate	Homicide Mortality Rate	Drug/Alcohol Mortality Rate
Cross-Country/Cheswolde	44.9	0.3	1.4
Dorchester/Ashburton	101.7	5.6	3.7
Glen-Falstaff	70.2	2.7	2.4
Howard Park/West Arlington	89.9	1.9	4.1
Mt. Washington/Coldspring	65.8	0.6	3.5
Pimlico/Arlington/Hilltop	128.2	9.3	5.6
Southern Park Heights	119.1	5.6	7.0
Baltimore City	99.5	3.9	4.4

*Data from BCHD Neighborhood Health Profile Reports 2017.

Heart Disease, Cancer, HIV/AIDS: Deaths (per 10,000 lives) due to Heart Disease for three of the CSAs in Sinai's service area exceed the City-wide rate of 24.4. HIV/AIDS in Pimlico/Arlington/Hilltop (3.5) is almost twice the percentage in Baltimore City (1.8).

Percentage of Deaths due to Heart Disease, Cancer, and HIV/AIDS by CSAs, Sinai Service Area and Baltimore City

Community Statistical Area (CSA)	Deaths due to Heart Disease	Deaths due to Cancer	Deaths due to HIV/AIDS
Cross-Country/Cheswolde	11.5	11.5	0.4
Dorchester/Ashburton	22.8	19.9	2.6
Glen-Falstaff	19.6	13.7	0.6
Howard Park/West Arlington	29.0	23.4	1.3
Mt. Washington/Coldspring	24.0	17.1	0.0
Pimlico/Arlington/Hilltop	34.3	27.2	3.5
Southern Park Heights	29.4	29.1	2.2
Baltimore City	24.4	21.2	1.8

*Data from BCHD Neighborhood Health Profile Reports 2017.

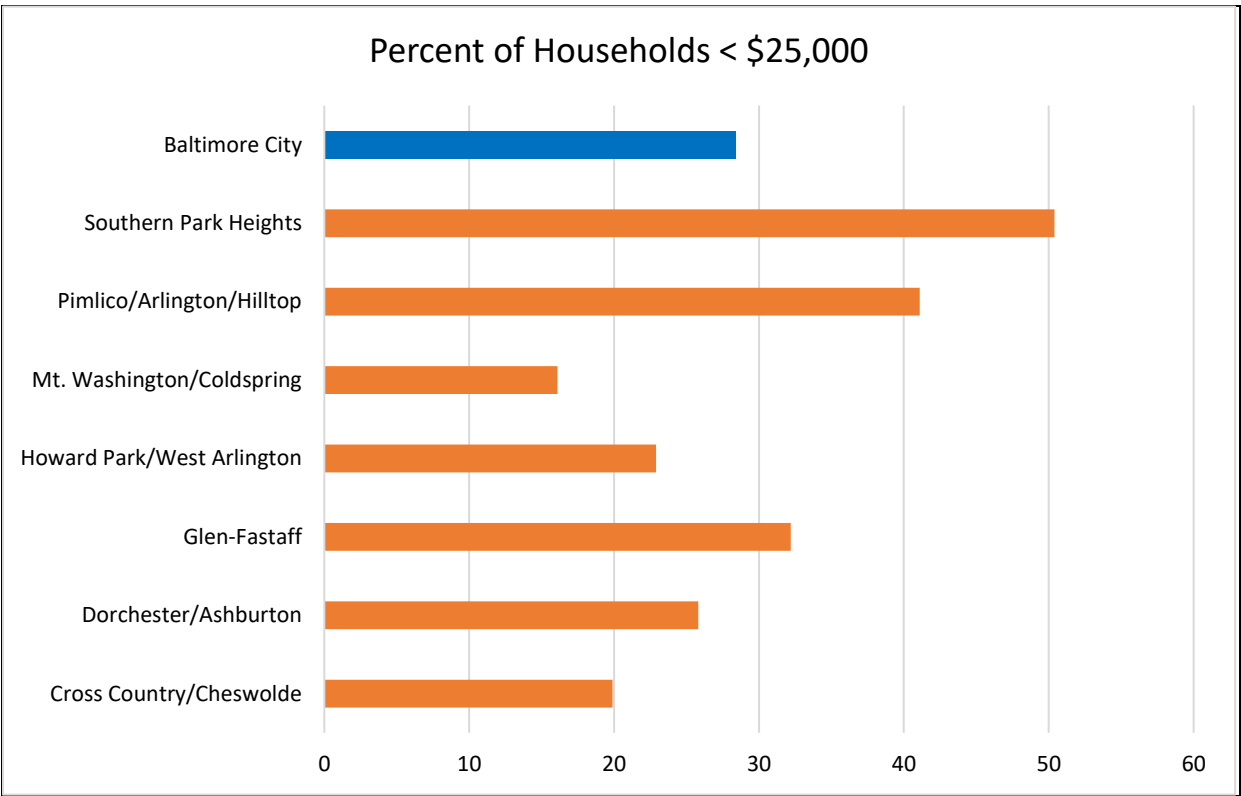
Other Health Issues: For Infant Mortality and Teen Birth (15-19 years old) rates, the 2017 BCHD Neighborhood Health Profile Reports relies on 2011-2014 data. At that time, the Baltimore City infant mortality rate per 10,000 residents was 10.4 and the teen birth rate per 1,000 teens was 42.3. The corresponding Maryland state-wide rates for 2018 (per CDC) were 6.8 infant mortality and 14.1 teen births.

For the Sinai Hospital service area, four of the CSAs have infant mortality rates below both the City of Baltimore as well as Maryland state rates. Pimlico/Arlington/Hilltop and Southern Park Heights, however, had infant mortality rates of 20.0 and 15.5 respectively. Both these neighborhoods with teen birth rates of 55.4 for Pimlico/Arlington/Hilltop and 57.0 for Southern Park Heights also significantly exceeded the Baltimore City and state of Maryland teen birth rates.

Social and Economic Factors

Percent of Households Earning Less Than \$25,000: This indicator reflects potential for economic stress and capacity for achieving and maintaining good health. In Southern Park Heights more than 50% of households earning less than \$25,000 suggesting limited economic security across the community. Three of the Sinai CSA have a greater proportion of their population earning less than \$25,000 than the City as a whole.

Percentage of Households earning less than \$25,000 in Sinai CSAs, and Baltimore City

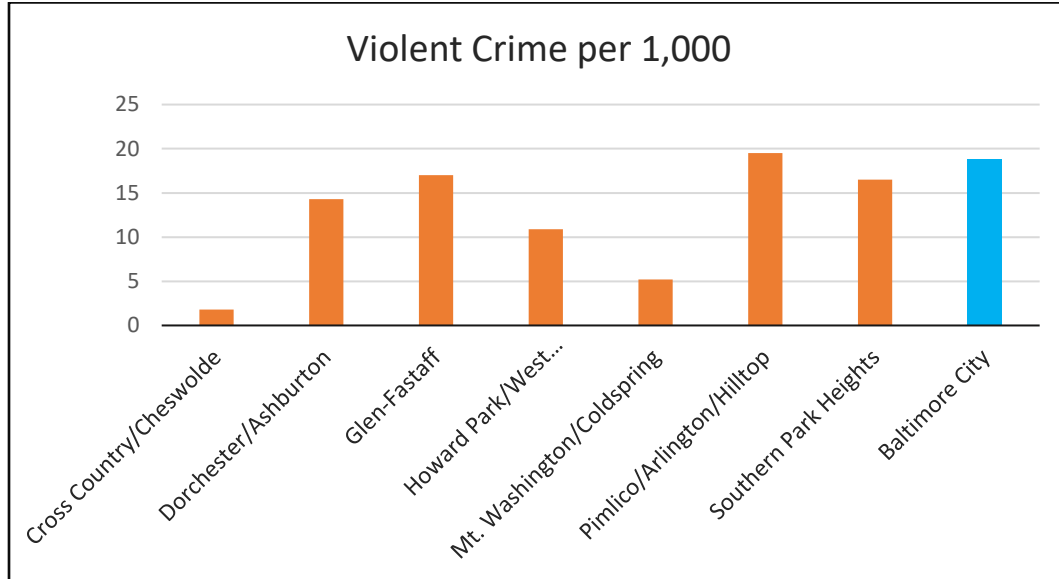


Source - Baltimore Neighborhood Indicators Alliance – Jacob France Institute

Violent Crimes: Violent crimes involve homicide, rape, aggravated assault, and robbery reported to the police department. The violent crime rate varies across the Sinai service area from 1.8 crimes per 1,000 residents in Cross-Country/Cheswolde

CSA to 19.5 crimes per 1,000 residents in Pimlico/Arlington/Hilltop CSA. The Baltimore City rate is 18.8 crimes per 1,000 residents.

Violent Crimes per 1,000 residents by CSAs in Sinai service area, and Baltimore City



Source - Baltimore Neighborhood Indicators Alliance – Jacob France Institute

Hardship Index

Hardship Index: The Hardship Index is a measure of combined socioeconomic factors that include income, education, unemployment, poverty, crowded housing, and dependency (persons aged less than 18 years and 65+ years). As a multi-factor measurement, the Hardship Index more substantially reflects the wider context and varied dimensions of a community's overall health.

The Index has a range from 0 to 100, where a higher score reflects greater hardship across the community. In Baltimore City, the Hardship Index is 51. The CSAs in the Sinai Service Area have a Hardship Index ranging from 23 to 73. Southern Park Heights has the highest (worst) score of 73. Five of the CSAs have Hardship Index scores that exceed the City-wide Index score.

Hardship Index by CSAs in the Sinai service area, and Baltimore City

Community Statistical Area (CSA)	Hardship Index
Cross-Country/Cheswolde	37
Dorchester/Ashburton	61
Glen-Falstaff	63
Howard Park/West Arlington	55
Mt. Washington/Coldspring	23
Pimlico/Arlington/Hilltop	61
Southern Park Heights	73
Baltimore City	51

*Data from BCHD Neighborhood Health Profile Reports 2017.

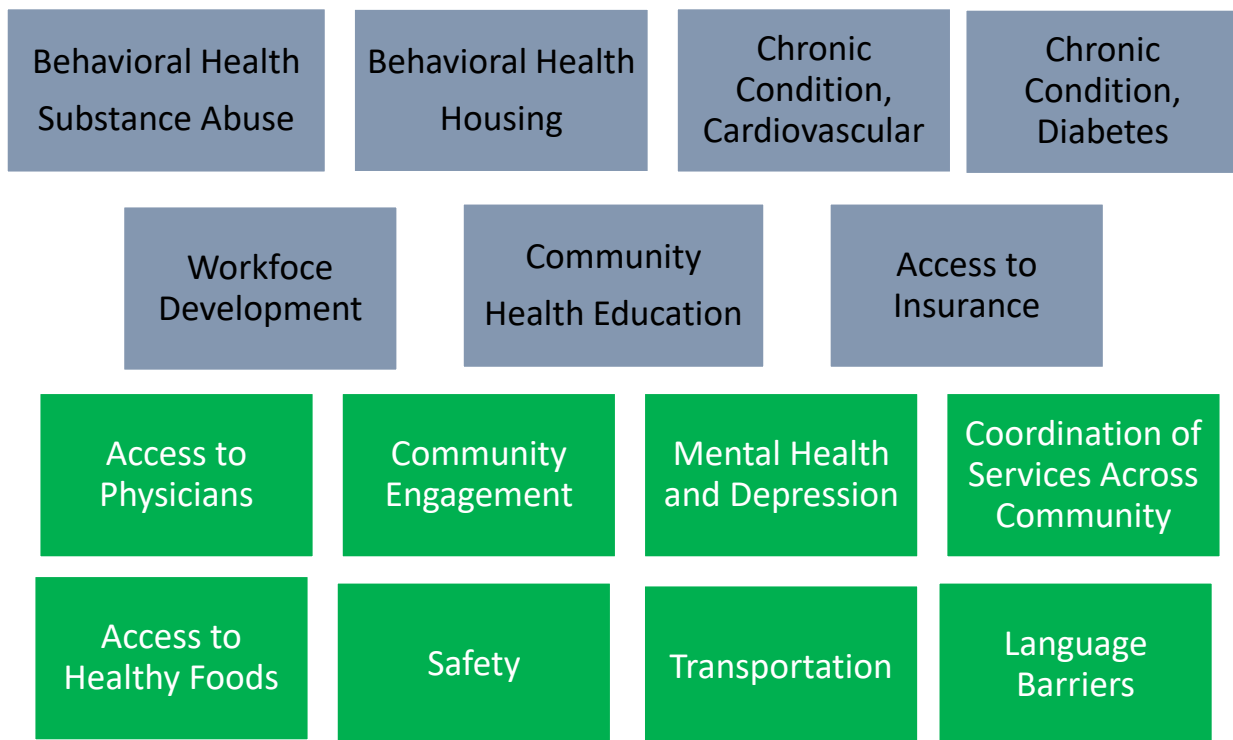
7 Sinai Hospital Identified Health Needs and Priorities

In 2018, Sinai Hospital identified and prioritized the following health needs in the community:

- Behavioral Health/Substance Abuse
- Behavioral Health and Housing
- Chronic Disease, Diabetes
- Chronic Disease, Cardiovascular
- Workforce Development
- Community Health Education
- Access to Insurance

In 2021, the seven needs (above) remained as **Identified Needs** of the community, and eight additional needs (in green boxes below) were added. See Figure below.

Identified Needs of Community Served



7.1 Prioritization Process and Criteria Used to Prioritize Needs

The Sinai Hospital CEO and CHNA leadership met with representatives of the Sinai Hospital Board, Leadership, key community stakeholders and members of the LifeBridge Health Community Mission Committee on March 19, 2021 to review findings of the CHNA and to seek recommendations to prioritize the identified needs above. Following review of secondary and survey data, as well as findings of the stakeholder interviews and conducted focus groups, the participants were asked to select those identified needs for which there was “**High Need**” (significance and prevalence) and “**High Feasibility**” (ability to impact).

For the above **Criteria** participants indicated on a scale of 1 to 6, where 1 indicated little Significance/Prevalence or Ability to Impact and 6 indicated a high Significance/Prevalence or Ability to Impact, those Needs which should be strongly considered for Prioritization. These two polling questions reflected the following underlying considerations:

- Supported by Community Service Area data;
- Consistent with Public Health and health expert input of Baltimore City;
- In support of benefitting a significant population of the community;
- In consideration of 2020 community survey results;
- In support of continuity and progress made by the 2018 Implementation Plan;
- Consistent with the capacities and resources of the hospital.

7.2 Priorities for 2021 - 2024

The following **Identified Needs were selected as Priorities** for Sinai Hospital and will be included in the 2021 – 2024 Implementation Plan:

1. Heart Disease
2. Mental Health and Depression/Substance Abuse
3. Community Health and Wellness Education
4. Diabetes
5. Health Disparities
6. Housing
7. Food Insecurity
8. Community Safety

8 Needs not addressed by Implementation Plan

The following needs were identified either as priorities by populations or conversations, but ultimately were not chosen priorities for implementation as the hospital does not have sufficient resources or other organizations are more capable of meeting the need.

Lack of transportation: Lack of transportation arose in the surveys as an important reason for why people do not get health care. Through the Care Management Department and other programs that work with people in the community, transportation funding is provided for many patients who need help in getting to their doctors' appointments. Since patients and clients are served well by these resources, this concern was not prioritized for further investment.

Access to Insurance: Sinai Hospital provides sign-up assistance to patients without insurance when they present at the hospital. A staffer person oversees this function.

Workforce Development: Sinai Hospital refers residents and patients without employment to partner organizations, particularly Bon Secours CommunityWorks in south and west Baltimore, to address this pressing social need. Sinai Hospital also supports various agencies in addressing underlying factors, e.g. financial literacy and education to mitigate conditions of poverty.

Access to Physicians: A system-wide effort has been developed since the 2018 CHNA to address needs of various patients. Specialists are readily identified and referrals are appropriately made. Departments and team members continue in efforts to reduce appointment wait times for health care services lacking community capacity such as mental health therapy.

Coordination across services: Since the last CHNA Sinai Hospital departments, including social services and care management, have worked more closely both internally as well as with community resources to enable patients to access necessary and valuable resources in as timely a manner as possible. Inclusion of social resources in coordination is intended to reduce reoccurrence of acute health episodes that require hospitalizations.

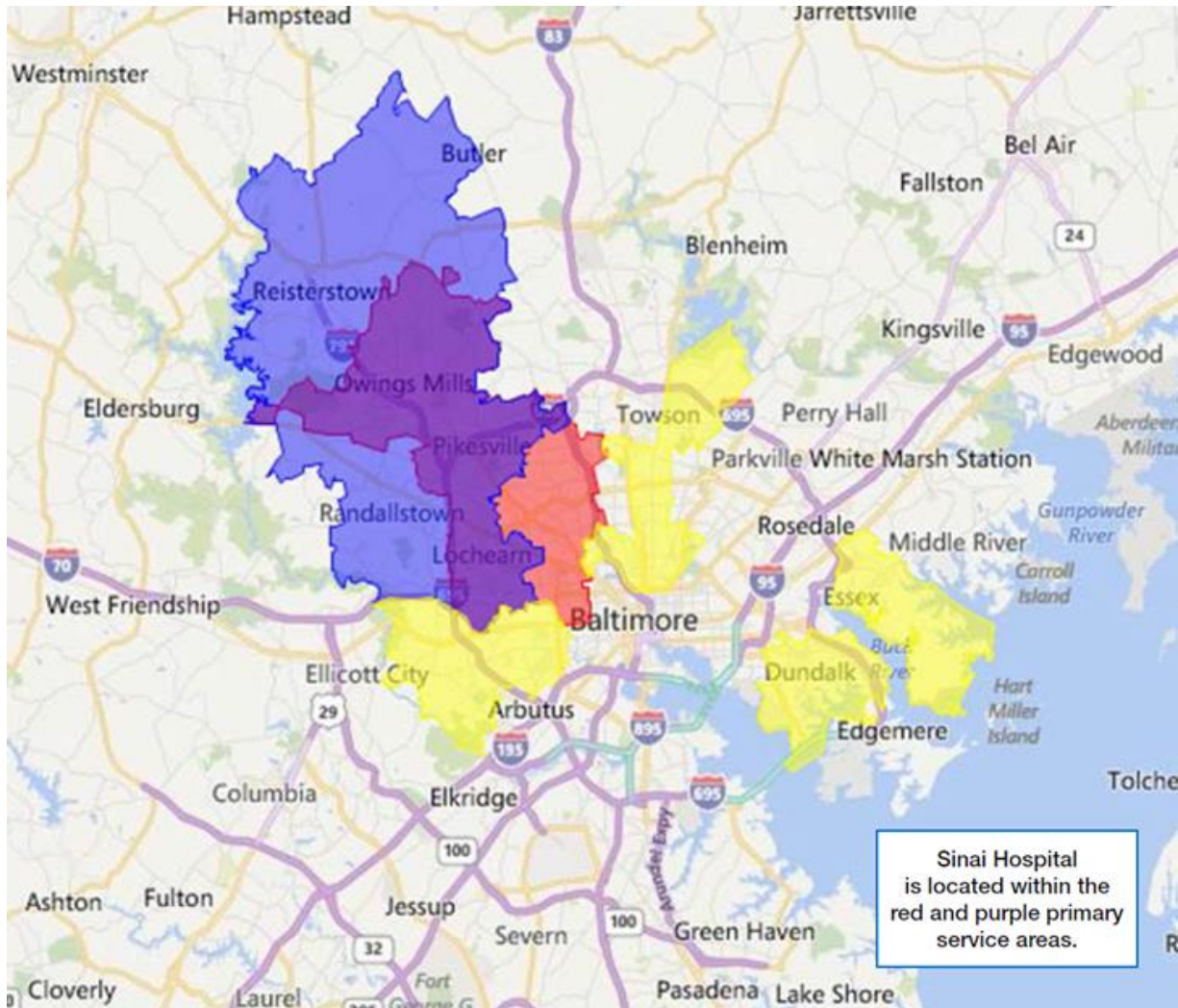
Language barriers: Sinai Hospital has interpretive services available and signs in multiple languages are posted in ER as well as in hard copy forms in the welcome packet patients receive. Forms are available in Spanish as well as other languages, e.g. Russian. Consent forms are translated into several languages as well.

Appendices

Appendix A – CHNA Team

- Dorothy Fox
- Regina Merritt
- Michelle Berkley-Brown
- Rhonda Williams
- Karen Jarrell
- Dan Meltzer
- Kurt Sommer
- Terrie Dashiell
- David Baker
- Sharon McClernan
- Dr. Susan Mani

Appendix B – Map of Sinai Hospital Service Area



Appendix C –

Report on Focus Groups and Stakeholder Interviews

Questions asked:

2. What are the top health concerns in your community?
 - b) Pre-COVID?
4. What are the top social/environmental barriers in your community?
5. What are the top reasons people in your community don't access healthcare?
5. As a result of COVID-19, what barriers have emerged or gotten worse in your community?
6. What ideas or suggestions do you have to improve the health and or healthcare system in your community?

**8/11/2020 Focus Group: Baltimore City Parks and Recreation-Older Adults (8 participants – frequent Sinai, Levindale, Grace, and Northwest hospitals)
Participants came from both Baltimore City and Baltimore County.**

Top health concerns: High Blood pressure, diabetes, mental illness, high cholesterol, drug addiction, depression, loneliness

Top social/environmental: Depression, loneliness, unemployment, crime, poverty,

Why people don't access healthcare: Transportation, lack of education, doctors are too far, lack of money to pay for care.

COVID Barriers/Concerns: Food insecurity and lack of transportation were heavily discussed. They haven't been able to do as much or get the necessary supplies. Increased loneliness.

Suggestions: Hospitals should provide transportation to appointments and getting their medications.

8/26/2020 Stakeholder: Aaron Plymouth-Stevenswood Community Association (Northwest)

Top health concerns: Obesity, Wellness, Mental, Hypertension, Strokes, Renal failure.

Top social/environmental: Transportation, Food/Nutrition/access to grocery stores, risks of falling (lack of handrails, ramps, etc.)

Why people don't access healthcare: Insurance, fear of bad news, COVID fears (masks, handwashing, etc.), crossing busy streets and handicap ramps for sidewalks to walk to the hospital.

COVID Barriers/Concerns: COVID fears (masks, handwashing, etc.)

Suggestions: Better emphasis on wellness for seniors, prostate screenings/education/etc.

8/27/2029 Stakeholder: Gail Edmonds-Member of Central Baptist Church and former Resident of the same neighborhood (Grace)

Top health concerns: Diabetes, high blood pressure, drug addiction, alcoholism.

Top social/environmental: Poverty, unemployment, access to healthcare, education, early childhood programming and childcare.

Why people don't access healthcare: Lack of trust in the healthcare system.

COVID Barriers/Concerns: Increased unemployment; housing, education, and employment systemic barriers that have continued and were exacerbated; the increase of crime.

Suggestions: Providing stable service to families from birth to they leave (nutrition, advice, etc.) this includes wraparound services that includes assistance to single parents, parenting classes, etc.

9/21/2020 Focus Group-League of People with Disabilities (13 participants; Citywide) Participants also came from all over the city as well as a few county residents.

Top health concerns: COVID, high blood pressure, diabetes.

Top social/environmental: Accessibility, violence, device repairs that take a long time, transportation, MTA Mobility (late or treated badly).

Why people don't access healthcare: Transportation, length of time to get equipment from insurance/doctors, referral issues, lack of financial means for things outside of insurance, complicated systems.

COVID Barriers/Concerns: Transportation (underlying issues and being removed from spaces due to fear), depression and anxiety have increased, loneliness and decrease in social access.

Suggestions: Hospitals streamlining insurance/equipment suppliers/referrals; having a program that would cover the cost that insurance does not cover.

9/3/2020 Stakeholder: Pastor Terrye Moore-Senior Pastor of New Solid Rock Fellowship Church and Executive Director North West Faith Based Partnership (Sinai Hospital)

Top health concerns: Mental health, high blood pressure, diabetes, HIV/AIDS, substance abuse.

Top social/environmental: Trash; lack of community; not enough clean, open space, safe; crime/violence.

Why people don't access healthcare: Lack of insurance, fear of being underserved without insurance, distrust of the medical community, negative outlook on life (won't live very long).

COVID Barriers/Concerns: Isolation, depression, domestic violence, mental health challenges.

Suggestions: Streamline healthcare so all treatment was equitable and accessible.

9/10/2020 Stakeholder: Tony Bayesmore-Rolling Oaks Community Association (Baltimore County/Northwest)

Top health concerns: COVID, obesity, high blood pressure, diabetes, cancer, and heart issues.

Top social/environmental: Lack of community centers, safe spaces, and green spaces.

Why people don't access healthcare: Culture and history (distrust of medical professionals); lack of personal relationships with health professionals, access to healthcare/insurance.

COVID Barriers/Concerns: Heightened vulnerability/sense of safety to go outside and go to the doctor now.

Suggestions: Make a concerted effort to be a part of the community where the hospital sits.

9/18/2020 Focus Group: Re-Entry Bon Secours Community Works (3 participants, Grace) located in West Baltimore and all participants come from West and Southwest Baltimore

Top health concerns: COVID, diabetes, alcoholism, substance abuse, obesity, lack of good nutrition.

Top social/environmental: Unemployment, domestic violence, child abuse, lack of resources, lack of insurance, gun violence, lack of recreation facilities.

Why people don't access healthcare: Health insurance, racism, access to doctors, money, substance abuse, misinformation.

COVID Barriers/Concerns: Unemployment, hunger, further distrust of healthcare/law enforcement, depression, anxiety.

Suggestions: Create a friendly open environment, treat people with dignity, be more relatable.

11/20/2020 Focus Group-Spanish-Speaking, LifeBridge Health Hispanic Latino Employee Network (3 participants)

Top health concerns: COVID, mental health, access to preventative medicine.

Top social/environmental: Language barriers, lack of trust to share information, adequate housing and family support, safety, food access, lack of resources for Spanish speaking people.

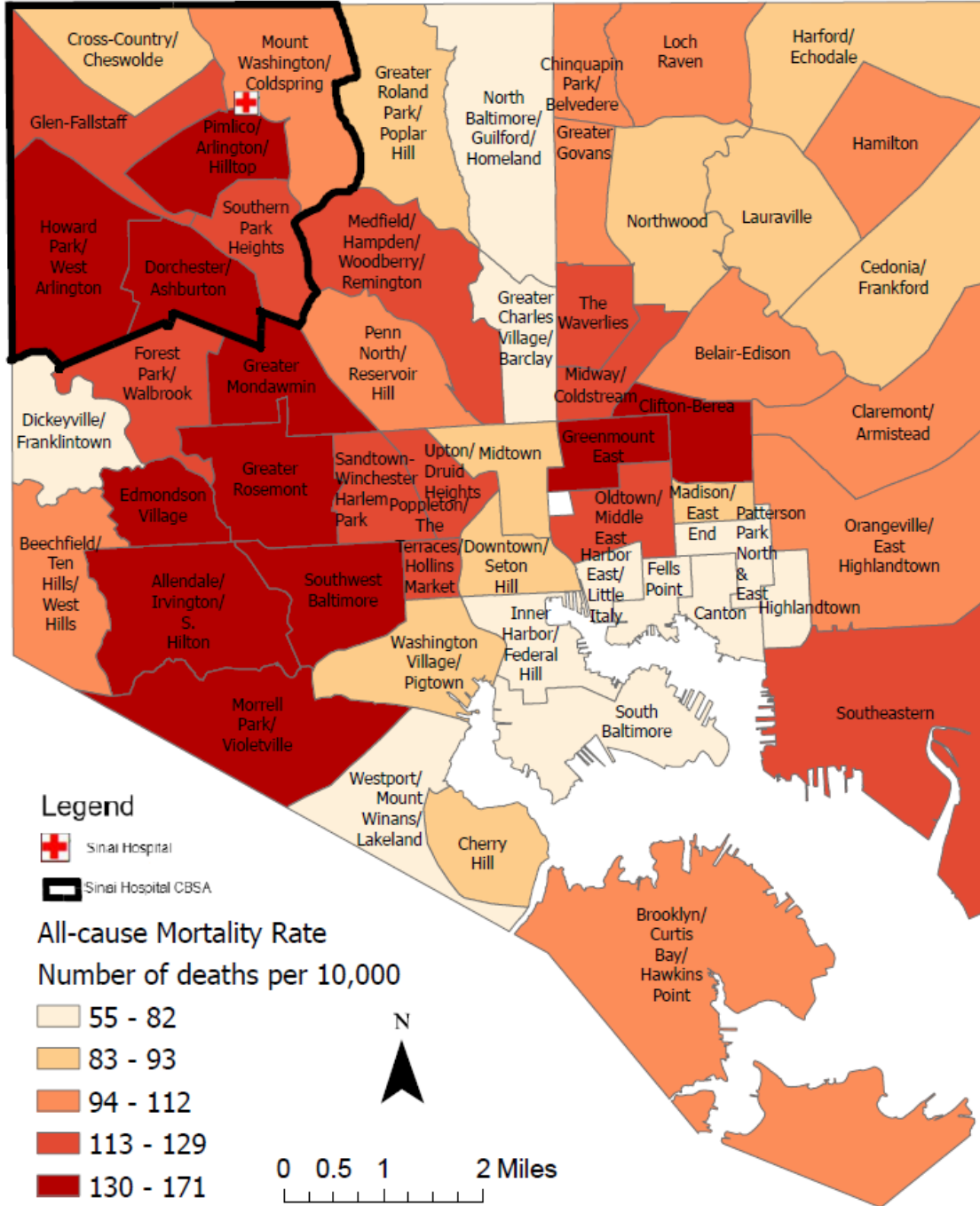
Why people don't access healthcare: Religious beliefs, lack of interpreters, insurance, lack of financial resources, lack of connection, lack of education of rights, transportation.

COVID Barriers/Concerns: Lack of urgent care access, lack of access to technology, lack of access to childcare, increase of disconnect and fear of separation.

Suggestions: Increase of a diverse workforce; central location/directory for resources in patient language; utilize employee skills to their full potential.

Appendix D – All Cause Mortality Map

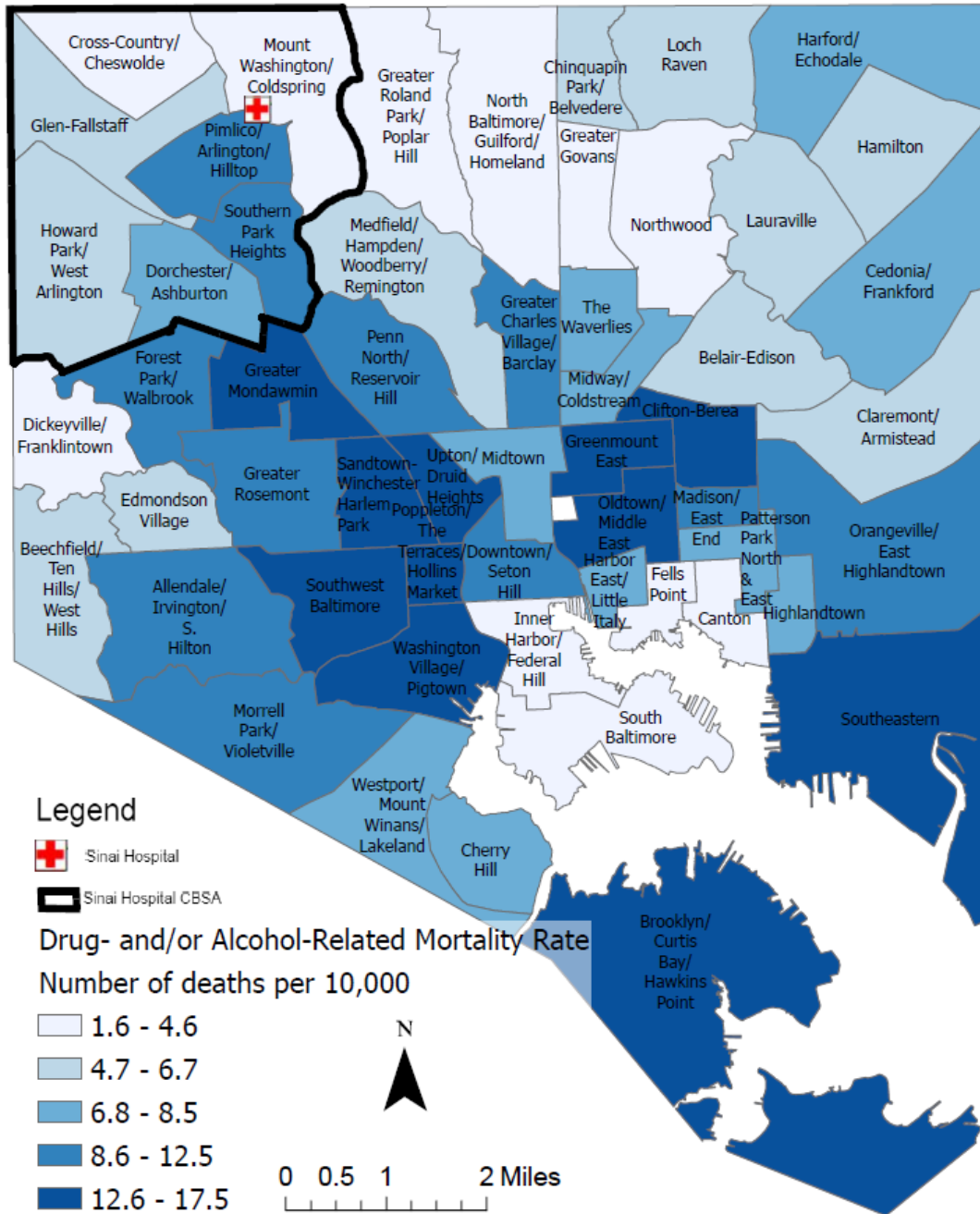
All-Cause Mortality Rate per 10,000 by Community Statistical Area (CSA), Baltimore City



Data source: Baltimore City Health Dept. analysis of data provided by the Maryland Dept. Health. Data categorized by quintile. February 2, 2021.

Appendix E – Drug/Alcohol Mortality Map

Drug- and/or Alcohol-Related Mortality Rate per 10,000 by Community Statistical Area (CSA), Baltimore City



Data source: Baltimore City Health Dept. analysis of data provided by the Maryland Dept. Health. Data categorized by quintile. February 2, 2021.