



Martha's Vineyard Hospital
Community Health Needs Assessment
Report
2022



Name of hospital organization operating hospital

facility: Martha's Vineyard Hospital

EIN of hospital organization operating hospital facility:

073798373

Address of hospital organization: 1 Hospital Road, Oak Bluffs,
MA 02557

Contact Person: Amy Houghton

Date of CHNA approval: September 30, 2022

Web Address for CHNA Reports: www.mvhospital.org



Table of Contents

Section	Page
Executive Summary	4
I. Purpose and Scope of the Community Health Needs Assessment	6
II. Data and Methods	6
III. Findings	7
A. Target Population	7
B. Population Characteristics	8
C. Social and Physical Environment	9
D. Community Health Issues and Outcomes	18
IV. Key Themes and Conclusions	23
V. Mass General Brigham System Priorities	24
VI. Conclusions	28
A. Summary of Vulnerable Populations in the Community	29
B. Priorities Identified and How to Address the Need of the Community	29
C. Next Steps and Considerations toward the Implementation Plan	30
Appendices	31
A. Community Advisory Board Members	32
B. Community Survey Respondent Characteristics and Findings	33
C. List of Key Informant Interviewees	44



Martha's Vineyard Hospital 2022 Community Health Needs Assessment

Executive Summary

Background: Martha's Vineyard Hospital (MVH), a member of the MassGeneral Brigham System and affiliate of Massachusetts General Hospital, has delivered the finest community-based medicine and most advanced specialty care in the world to the Vineyard's full- and part-time residents and its visitors since its incorporation in 1921.

MVH's 2022 community health needs assessment (CHNA) kicked off on May 31, 2022 with a meeting of the hospital's Community Affairs Committee (CAC). The CAC, comprised of eight members representing a range of health and human services organizations and offering varied expertise about populations and/or health issues on the island, reviewed preliminary secondary public health, healthcare, and U.S. Census data and developed a plan for carrying out the CHNA.

MVH's priority community includes the island towns of Aquinnah, Chilmark, Edgartown, and Oak Bluffs, Tisbury, and West Tisbury and neighboring Gosnold. While MVH provides care to seasonal and part-time residents, the primary target for the CHNA is the island's year-round population.

Using multiple data source, the purpose of a CHNA is to identify the key issues affecting the health of residents within the hospital's designated target area. The CAC, after reviewing the CHNA findings, is charged with selecting a set of priorities that will become the focus of a community health improvement plan (CHIP). The CHIP will lay out strategies to address the priority health needs over a three-year period.

Methodology: MVH's 2022 CHNA was informed by three data sources:

- (1) **A review of secondary data** (e.g., the hospital, health system, U.S. Census Bureau, Massachusetts Department of Public Health) provided demographic data, as well as information about the health and behavioral health of residents, and the social determinants of health affecting them.
- (2) **The Martha's Vineyard Community Survey** was administered in English and Portuguese between July 18, 2022 and August 12, 2022. While primarily an online survey, some surveys were completed in hard copy. The survey received 455 responses, 352 (79.5%) of which were provided by year-round resident. Quantitative data were analyzed in Excel and SPSS and open-text responses were reviewed for common and divergent themes.
- (3) **Key Informant Interviews** were conducted with 18 leaders of organizations on the island who have expertise and experience with specific populations and/or health issues. Conducted by phone, the interviews were up to 60 minutes long and employed a semi-structured interview tool. Interview data were reviewed for common and divergent themes and to identify illustrative quotes about the major issues affecting the health of island residents.

Summary of findings: Relatively to the state, the island population is older and, while less racially and ethnically diverse than Massachusetts and home to a lower percentage of foreign-born residents, the Vineyard has a larger proportion of American Indians than statewide and is home to a substantial Brazilian population. With 7.5% of the island's population living in poverty, household incomes and labor force participation are lower than statewide.



The primary community health needs identified in the 2022 CHNA are as follows:

- (1) **Mental health:** Mental health was identified as one of the top four issues MVH should address in order to improve community health. Survey and interview participants called for expanding access to mental health for adults and children.¹
- (2) **Substance Use Disorders:** Substance use disorders, including the opioid crisis, was also among the top four issues identified that MVH should address to improve community health by improving access to services.¹
- (3) **Housing:** Housing was also identified as among the top four community health needs on the island. The key informants explained that creating affordable housing will help to alleviate stress and the difficult choices residents are making between housing costs and other living and medical expenses. They further argued that, if affordable housing were available, it would be easier to attract and retain primary care providers, behavioral health clinicians, and medical specialists and healthcare staff, including culturally and linguistically diverse providers and staff who are so critically needed. They urged the hospital to use its prominence and that of the health system to advocate for affordable, safe, and reliable housing for hospital staff as well as for year-round middle- and low-income residents and seniors.
- (4) **Increased access to care and improved service coordination and communication, particularly for seniors and diverse communities:** Improve care for various medical conditions was the fourth of the top needs identified in the CHNA. The primary barrier to healthcare faced by residents is the inability to get appointments because too few clinicians and staff are available on the island. Consequently, many residents must venture off-island to get care, which is particularly challenging for frail elders and those with disabilities. While telehealth has improved access to care for many, it is not necessarily effective for all seniors who are more likely to face challenges with technology and vision and hearing impairments. The community survey suggests that some residents are amenable to accessing screening services and mental health care from a mobile health van. Key informants also called for service improvements at the hospital, including increased coordination and collaboration between MVH and community-based organization to prevent duplication of effort and conserve resources, as well as the designation of a point person at MVH for seniors. Key informants also believe MVH should ensure that all new hires have diversity education and language skills to treat island's diverse residents, especially the Brazilian and Wampanoag communities and the hospital should make every effort to recruit diverse staff to fill positions across the board, including clinicians, staff, and senior leadership.

¹ Lack of services to address mental health and substance use disorder were associated with staffing shortages on the island; these shortages were attributed to the cost of living and housing crisis on Martha's Vineyard.

Martha's Vineyard Hospital 2022 Community Health Needs Assessment Report of Findings

I. Purpose and Scope of the Community Health Needs Assessment

Martha's Vineyard Hospital (MVH) has delivered high quality, compassionate medical care to the Vineyard's full- and part-time residents and its visitors since its incorporation in 1921. As a member of the MassGeneral Brigham System and an affiliate of Massachusetts General Hospital, MVH patients have access to the finest community-based medicine and most advanced specialty care in the world.

MVH's 2022 community health needs assessment (CHNA) kicked off on May 31, 2022 with a meeting of the hospital's Community Affairs Committee (CAC). The CAC is comprised of eight members representing a range of health and human services organizations and offering varied expertise about populations and/or health issues on the island (See list of CAC members in Appendix A). The group reviewed preliminary secondary public health, healthcare, and U.S. Census data to identify additional secondary data needed for the CHNA. They also discussed strategies and a timeline for collecting primary data, and identified issues and populations for inclusion in the assessment.

The purpose of the CHNA is to identify, using multiple data sources, the priority issues affecting the health of island residents. The CAC, after reviewing the assessment findings, is charged with selecting a set of priorities that will become the focus of a community health improvement plan (CHIP). The CHIP will then lay out strategies to address the priority health needs over a three-year time horizon.

II. Data and Methods

Based upon the CHNA plan developed by the CAC at its May 31, 2022 meeting, the CHNA methodology involved the following data sources and methods.

- (1) **A review of secondary data** from publicly available state and federal sources (e.g., U.S. Census Bureau, Massachusetts Department of Public Health), as well as MVH's own data. The secondary data review provided information about the demographics of residents, health and behavioral health risks and conditions, and social determinants of health affecting them. The most recently available data sources were used whenever possible (e.g., the 2021 American Community Survey versus the 2020 Census) to provide estimates closer to the current reality on the island. However, older sources were used when more recent data were not available. For example, Census data for the individual communities within the target area and for some variables discussed in this report are only available for time periods earlier than 2021.
- (2) **The Martha's Vineyard Community Survey** was administered primarily as an online survey in English and Portuguese with some surveys completed in hard copy. The survey was administered between July 18, 2022 and August 12, 2022 and received 455 responses. The majority of respondents (n=432 or 94.9%) reported that English is their primary language while 23 (5.1%) indicated that Portuguese is their primary language.² Year-round residents comprised

² REDCap, the survey program used for the community survey allows users to take a survey in a language other than English but their responses are reported in English for analytic purposes. REDCap does not allow for identification of the language in which online survey participants completed the survey. Thus, primary language data provide the best information on the language of survey completers. Among surveys administered in hard



(n=362) 79.5% of survey respondents. Quantitative data analysis was conducted using Excel and SPSS and open-text responses were reviewed for common and divergent themes. Descriptive information for survey respondents and detailed findings can be found in Appendix B.

- (3) **Key Informant Interviews** were conducted with 18 representatives from a range of organizations on the island who could offer perspectives on the island's health needs in general, as well as expertise on specific populations and/or health issues (see list in Appendix C). The interviews were up to 60 minutes long, conducted via telephone, and used a semi-structured interview tool. The interview data were reviewed for common and divergent themes and to identify illustrative quotes about the major issues affecting the health of island residents.

III. Findings

A. Target Population

Martha's Vineyard is an 88 square mile island located four miles off the coast of Cape Cod and is only accessible by plane, ferry or boat. Dukes County is made up of the six towns (Aquinnah, Chilmark, Edgartown, and Oak Bluffs, Tisbury, and West Tisbury) on the island of Martha's Vineyard plus Gosnold, a town that encompasses the Elizabeth Islands off the Vineyard's eastern coast. Because Gosnold makes up such a small fraction of the Dukes County population, we use the terms "Dukes County" and "Martha's Vineyard" interchangeably.

Martha's Vineyard is a popular tourist destination and locale for seasonal home-owners. The Martha's Vineyard Chamber of Commerceⁱ estimates that the island's summer population swells to 200,000. While MVH provides care to seasonal (i.e., summer) residents and part-time residents (i.e., those who reside on the island for six months or more, but who are not full-time), the year-round residents of Dukes County are the primary target for the MVH CHNA.

U.S. Censusⁱⁱ data for 2016-2020 indicate that the island's population during that time period was 17,430. According to the 2021 American Community Survey (ACS),ⁱⁱⁱ the year-round population of Martha's Vineyard is 21,097, up nearly 21.6% since the 2019 CHNA. And while 21.6% growth is substantial, hospital staff and key informants involved in the CHNA believe the year-round population is greater than 21,097 due to the number of formerly seasonal and part-time residents who moved to the island full-time during the COVID-19 pandemic.

According to 2020 Massachusetts Census^{iv}, the most populous towns on the island were Oak Bluffs, Edgartown, and Tisbury, home to 25.9%, 25.1%, and 23.4% of the year-round population, respectively.

copy and later hand-entered into REDCap, 13 were completed in Portuguese. With 23 identifying Portuguese as their primary language and 13 surveys known to be completed in Portuguese, it seems that offering a paper version is an important strategy in securing responses from the Portuguese-speaking community. Future community surveys should offer a hard copy option as well.


Population of Dukes County and Martha's Vineyard communities (2020)

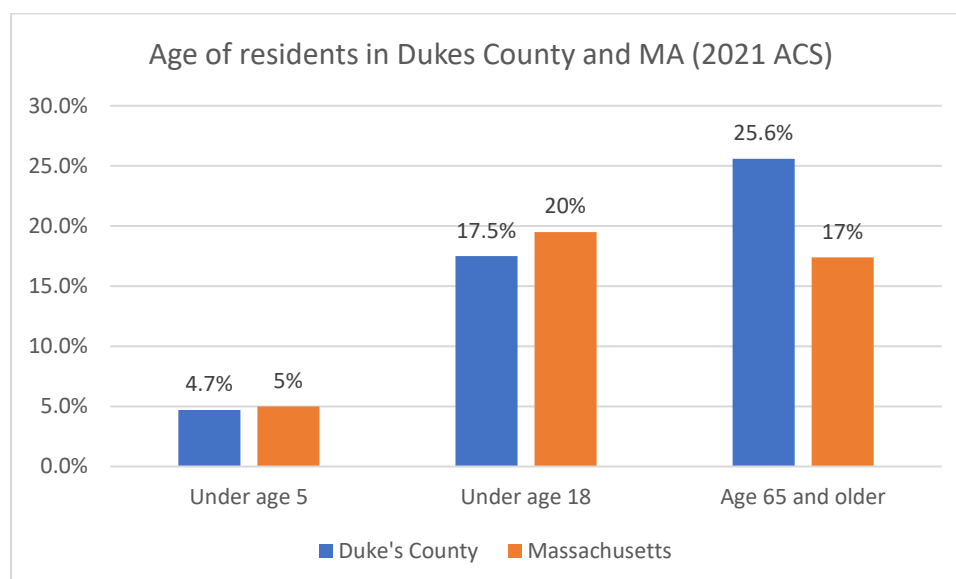
	#	%
Aquinnah	439	2.1%
Chilmark	1212	5.9%
Edgartown	5168	25.1%
Gosnold	70	0.3%
Oak Bluffs	5341	25.9%
Tisbury	4815	23.4%
West Tisbury	3555	17.3%
Duke's County	20600	100%

B. Population Characteristics

Key demographic data for Martha's Vineyard and Massachusetts are provided below.

Sex: According to the 2021 ACS, females make up 50.7% of the population on Martha's Vineyard.

Age: The population age 65 and older on Martha's Vineyard (25.6%) exceeds the proportion of seniors statewide (17%).



Race and Ethnicity: According to the 2021 ACS, the population of Martha's Vineyard is predominantly White, non-Hispanic (84.6%). The population of the island is less racially/ethnically diverse than Massachusetts. Because the federally-recognized Wampanoag tribe of Gay Head is based in Aquinnah, the percentage of American Indians on the island is higher than the state as a whole. While not evident in the ACS data, the island is home to a large Brazilian population. A 2016 New York Times^v article estimates that the Brazilian population represents 20% of the island's population overall.


Race/ethnicity for Duke's County and Massachusetts (2021)

	Duke's County	Massachusetts
White alone; non-Hispanic	86.4%	70.1%
Black or African American alone	5.1%	9.3%
American Indian and Alaska Native alone	1.2%	0.5%
Asian alone	1.4%	7.5%
Native Hawaiian or Other Pacific Islander alone	0.1%	0.1%
Two or More Races	3.0%	2.7%
Hispanic or Latino	3.8%	12.8%

Foreign-born: The 2021 ACS estimates that the island's foreign-born residents make up 12.3% of the population, lower than the proportion of foreign-born residents in the state overall at 16.9%.

Education: U.S. Census data for 2016-2020 show a greater percentage of island residents aged 25 or older have a high school degree or more than the same age group statewide, 95.7% vs. 91.1%, respectively. The proportion of island residents aged 25 or older who have a bachelor's degree or higher is only slightly lower than Massachusetts overall, 44% versus 44.5%, respectively.

Economic factors: The 2021 ACS estimates that 7.5% of Martha's Vineyard residents live in poverty. U.S. Census data for 2016-2020 show that the unemployment rate on Martha's Vineyard (5.06) was only slightly lower than for Massachusetts overall (5.09), however civilian labor force participation (age 16 and older) on the island was lower than statewide (62.94 versus 67.19, respectively). The 2016-2020 Census data indicate that the median household income (in 2020 dollars) for Martha's Vineyard was \$77,318 and per capita income (in 2020 dollars for the last 12 months) was \$43,994. In both cases, incomes were lower for Martha's Vineyard than for Massachusetts overall, where household income was \$84,385 and per capita income was \$44,555 for the same time period.

In summary, based on the available Census and ACS data, the Vineyard's population is older than the rest of the state. And while the island's population is less racially and ethnically diverse than Massachusetts overall and has a lower proportion of foreign-born residents, Martha's Vineyard has a larger American Indian community than statewide and is home to a substantial Brazilian population. Household incomes and labor force participation are lower than statewide and 7.5% of the island's population lives in poverty.

C. Social and Physical Environment

1. Community support and collaboration

The key informants identified community support as a significant community asset and noted how supportive members of the Martha's Vineyard community are to one another.

"Most people are community focused and centered. It's a wonderful community. [We are] blessed to have the people they do."

"[There is a] wonderfully wide and varied skill set of people who live here that are willing to give back."



Collaboration among organizations, programs and municipal governments on the island increased during the COVID-19 pandemic. One interviewee described the pandemic as *“a rallying call to collaborate and work together.”* Several key informants described how island residents and leaders worked to keep each other healthy during the pandemic. Despite listing challenges Martha’s Vineyard now faces due to the pandemic, almost every key informant echoed the feeling that island residents truly care about one another.

“There’s a strong sense of community, connectedness. There is a strength in choosing to live on an island and the island steps up when people need help and support.”

With regard to increasing access to essential resources like food, masks, and vaccines once available, one participant said that *“action was accelerated, people just made it happen.”* One interviewee credited the COVID-19 pandemic for making people more aware of the resources the island has.

And while commitment and collaboration are significant assets on the island, some people said that communication and coordination could be improved among MVH, Martha’s Vineyard Community Services, and other community-based organizations on the island to maximize resources. One key informant acknowledged that organizations often compete for the same fundraising dollars and another suggested there must be a more productive way to leverage all the volunteer work available on the island.

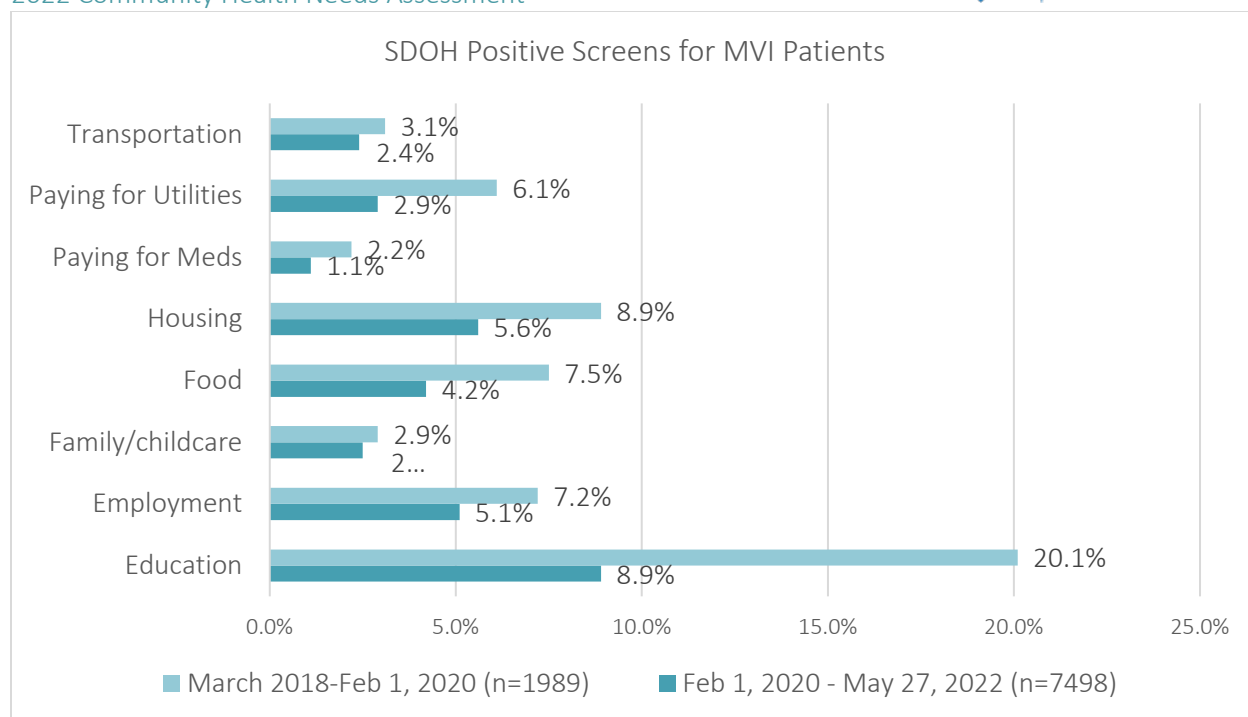
“Most of the nonprofits couldn’t function without volunteer donations of time.”

A coordinated effort to engage the summer population may be one opportunity to increase volunteerism and fundraising on the island, according to one key informant.

“If they can slow down enough to listen to what the islanders need, then we can work together to make some wonderful things happen...people are willing to invest resources in things that can help.”

2. Social Determinants of Health

Within primary care practices, patients are screened for needs related to the social determinants of health (SDOH). A positive screen indicates that the patient has a need related to a SDOH. The figure below shows the percent of patients who screened positive for various SDOH pre-pandemic (March 2018-February 1, 2020) and from February 1 to May 27, 2022. The proportion of patients who screened positive in the pre-pandemic period was higher than those who screened positive in the later time period.



The CAC members, who reviewed the SDOH data in their May 31 meeting, believe that changes in the island's year-round population during the pandemic may explain why a greater proportion of patients screened positive for various SDOH factors prior to the pandemic versus during the pandemic. During the pandemic, many formerly seasonal residents relocated to the island full-time, taking up residence in their homes there and transitioning to primary care practices at MVH. These residents tend to be wealthier and have fewer SDOH needs than the year-round population. Their inclusion in screening in the later time period could explain why, proportionately, the population looked like it had fewer SDOH needs during the pandemic. Throughout the report, the SDOH data are offered for both time periods to illustrate the level of need among MVH patients regarding various SDOH; no comparison of the pre-pandemic versus pandemic timeframes is intended.

3. Housing

According to the U.S. Census, for the years 2016-2020, there were 6,887 households on the island (2.49 persons per household) and 18,030 housing units. The owner-occupied housing rate for the same time period was 72.5% for Dukes County, significantly higher than the statewide rate of 62.5%. Further, 94.3% of residents one year or older were living in the same house as the one they resided in the previous year. These data seem to suggest that there should be adequate housing for the number of households on the island, and that there is a substantial housing continuity and owner occupancy. However, housing is a persistent challenge on the island.

Housing was the second most commonly reported need among MVH patients who were screened for SDOH (see section e2 above). When picking the top three things the hospital should address to improve community health, 41.4% of year-round residents who completed the community survey selected housing stability and homeownership as one of their three priorities. It was the second most commonly selected issue among year-round residents. Survey respondents were also asked to select from among a



number of issues that are challenges in their own lives. The third most frequently selected issue among year-round residents was housing (at 19.3%).

As noted by the Martha's Vineyard Commission,^{vi} *"all six towns on the island placed in the state's top twenty for population growth based on the 2020 Census."* Despite a 25% increase in population since 2010, the island's housing stock grew by less than 2% from 2010 to 2020. For the first time in five decades, Martha's Vineyard's housing stock shifted to a slight majority of year-round occupancy, at 51%, which likely means there is less housing stock available for off-season rentals.

Median gross rent on the island between 2016 and 2020 was \$1,589 per month versus \$1,336 for Massachusetts as a whole. Between 2016 and 2020, 45.97% of Dukes County households were rent burdened. In the same time period, the median home value in Massachusetts was \$398,800, while the median home value in Dukes County was \$794,000. Gosnold had the lowest median home value for the period at \$500,000 and Chilmark had the highest at nearly \$1.54 million.

Problems with housing availability and affordability were identified by key informants as well. They argued that the lack of affordable and stable housing for year-round residents had reached a crisis point.

"Local working people can't afford to live here because finding year-round housing is extremely difficult."

The key informants attributed the influx of year-round residents and decrease in housing opportunities to the COVID-19 pandemic. Due to the increase in population size, the island already limited housing stock was further strained.

"People are working remotely and taking up housing on the island, but not necessarily giving back to the local community through their work."

Interviewees articulated that the lack of affordable and stable housing affects the entire island because Martha's Vineyard organizations, including MVH are not able to attract and retain the staffing resources the island needs. Many expressed that housing is the root of many challenges and health issues the island faces.

"It's hard to find clinicians, people to work at the hospital, and teachers to work on Martha's Vineyard because there is no housing."

"Nineteen physicians turned down a hospital job offer since there is no housing. Housing is a health issue."

MVH provides some housing to its employees and is working toward helping to address the housing crisis, but many key informants felt like the hospital should do more to support the year-round community by using its influence to advocate for change.

"[Martha's Vineyard Hospital] can heavily advocate for affordable housing, they are the main employer on the island."

"Martha's Vineyard Hospital should advocate to disincentivize people from owning a ton of land. People don't need 20 acres."



Participants suggested that MVH should advocate for housing as a health issue and provide more housing for providers, especially those most needed on the island (e.g., primary care physicians, dentists, and mental health counselors).

In addition to lack of housing for employees and medical providers, the island is experiencing an increase in cost of living. Several key informants argued that working class people cannot afford to stay on the island.

"A year or two ago, the cost to turn on the outdoor shower was \$100, now it's \$250."

"People now can't afford lives that they were used to, but can't go anywhere else."

While the housing crisis certainly affects the entire island, there are specific populations that are affected disproportionately. For example, one key informant explained that down island towns of Oak Bluffs, Edgartown and Vineyard Haven, are the most impacted because there are more working-class people. Additionally, families of an individual with a disability have difficulty finding accessible housing and hiring caregivers because there are often no housing options for caregivers. Older adults also face difficulty in finding homes that would allow them to downsize when they can no longer maintain a large home.

One interviewee, explaining that while Martha's Vineyard is seen as an affluent community and a beautiful tourist destination, said that the reality is that living and working on the island is a challenge for all who aren't wealthy.

"Unseen poverty [is an issue] on Martha's Vineyard, which is being inflamed by the fact that the housing market gets more and more expensive."

A few interviewees discussed the housing bank, saying that while its goal is to create middle income housing on the island, progress is relatively slow. One interviewee believes towns should restrict the amount of land individuals can purchase by levying additional taxes. The informant argued that such land could then be used for building affordable housing, but was skeptical that the island's wealthier residents would support such a measure.

"A lot of [summer residents] are really well meaning. But those people don't want their view interrupted by affordable housing."

Harbor Homes, a winter homeless shelter for individuals experiencing chronic homelessness (a growing population on the island) does not have a permanent shelter and faces difficulty securing a location to operate the shelter each year.

4. Food/nutrition security

According to the Food Bank of Western Massachusetts and Massachusetts Law Reform Institute,^{vii} in 2021, 6,531 residents of Dukes County, Nantucket, and Barnstable were eligible for the Supplemental Nutrition Assistance Program (SNAP) and yet only 2,940 were enrolled, creating a "SNAP gap" of 69%. In the island communities of Aquinnah and Chilmark, the SNAP gap was 82%. In West Tisbury, Tisbury, and Oak Bluffs, it was 76%; and in Edgartown, it was 78%. It isn't clear why such large gaps exist between



2022 Community Health Needs Assessment

those who are eligible for SNAP and those who utilize the program to meet their food security needs. In the SDOH screening of MVH patients, 7.5% and 4.2% of patients identified food as a need in the two time periods. On the community survey, 12.7% of year-round residents indicated that food security is one of the top issues that the hospital should address to make the community healthier; that was the eighth most commonly selected priority. Of the survey respondents who reported needs they face, 0.8% indicated that accessing food is a challenge. One might interpret these data to mean that food is no longer a great challenge on the island. However, the key informant interviews tell a slightly different story.

According to one interviewee, one in ten year-round residents come to the island's food pantry for food support each year. While the food pantry and other programs have done well to improve access to food, there was acknowledgement that more is needed, particularly for groups on the island that are particularly at risk for poor nutrition. Older adults, for example, are more likely to have oral health challenges that prevent them from eating some foods and may lack the strength and dexterity needed to cut, chop, and prepare certain foods. Food allergies also limit some people's diets. A growing concern is a tick-borne allergy that causes people to develop a reaction to red meat, tomato-based products, and/or dairy, which necessitate a change in diet. At times, it can be difficult for people to find food replacements due to an increased cost or general lack of availability.

"Great strides have been made, but it really concerns me that other costs of living are so high. People are making decisions between getting food or medication this month."

The island relies heavily on food shipments from the Greater Boston Food Bank and other distributors, and all food must get shipped by boat to the island. Two interviewees shared that climate change is not a distant threat. Rather, extreme weather threatens both the ability of local growers to produce foods and the ability of shipments to reach the island in a timely fashion.

"A hurricane can ruin food sources to the island."

The Island Grown Initiative was lauded for its great work in improving food security on the island. Its mission is to *"create a regenerative and equitable food system."* Ensuring this mission is accomplished requires resources for infrastructure to warehouse stockpiles of food that can be available in emergencies.

Participants explained more is needed to ensure systematic connecting of islanders with food. A couple of participants noted the importance of safeguarding the Wampanoag community's ability to continue traditional food growing practices. Another argued that the potential exists for residents to grow their own food at home. Some also believe the hospital should begin a food prescription program to ensure patients are getting nutritious food to support good health.

5. Transportation

According to the U.S. Census, between 2016 and 2020, the average time workers over age 16 spent commuting to work in Duke's County was 14.5 minutes compared to 30 minutes for Massachusetts residents in general. Among year-round residents who completed the community survey, only 3% indicated that the hospital should prioritize investing in transportation as an important step to improving community health and 3.6% reported that transportation is a problem for them. In the SDOH screening of MVH patients, 3.1% and 2.4% of patients screened positive for transportation challenges



over the two time periods. While the key informants didn't talk about transportation on the island as a major problem for most residents, they acknowledged that for seniors, aging at home requires access to reliable transportation, particularly for medical appointments. While "on" island transportation was not elevated as a significant problem, "off" island transportation was another issue entirely. Boat/ferry service is critical to ensuring adequate supplies and food for the island. It is also essential, given the limited health and behavioral health services on the Vineyard, for residents to get to the mainland for care. Rather than call for improvements in ferry services, most key informants called for improvements in the array and amount of healthcare and behavioral health services on the island (See Section D). Among the 23 community survey respondents for whom Portuguese is their primary language, transportation poses a barrier to healthcare access for 21.4%.³

6. Childcare

While 22.1% of community survey respondents who reside on the island year-round indicated that the hospital should prioritize investment in childcare as a way to improve community health, only three individuals described childcare as a personal challenge. Among those screened for SDOH at MVH practices, 2.9% and 2.5% experienced problems with child or family care across the two time periods. The key informants did not raise the issue of childcare generally, although did discuss the difficulty those with disabilities (and their families) face in securing caregivers due to the shortage of affordable housing on the island.

7. Education supports/activities for youth

MVH's screening of patients for SDOH revealed that 20.1% and 8.9% of patients across the two time periods screened positive for education-related needs. On the community survey, 9.4% of year-round residents indicated that education supports and activities for youth were among the top three things the hospital should focus on to improve community health and 6.6% indicated that they face challenges related to education. It's difficult to know from these data the exact nature of need related to education and whether children and youth require additional services and/or adults need educational supports for career development/advancement. The key informants did not identify education as a key concern affecting community health on the island.

8. Utilities and internet/broadband and cell phone service

MVH's SDOH screening showed that, 6.1% and 2.9% of patients faced challenges paying for utilities across the two time periods. Among community survey respondents, 17.1% of the year-round residents indicated that they are challenged to pay for utilities, rent, and other supplies. While key informants did not talk about utilities specifically, they acknowledged the high cost of living on the island, primarily driven by the cost of housing. It stands to reason that those who are rent or mortgage-burdened may also struggle to pay utilities.

Just under three-percent (2.8%) of year-round residents who completed the community survey selected affordable and reliable internet as one of the top three things the hospital should address to improve community health and 3.3% reported that they face broadband/internet and computer challenges. According to the U.S. Census, between 2016 and 2020, 94.2% of Dukes County households had a computer and 84.1% had a broadband internet subscription. While the proportion of islanders with a

³ An n of 23 does not allow for extrapolation of the finding to the entire Brazilian community.



2022 Community Health Needs Assessment

computer is slightly higher than the statewide rate of 92.6%, a slightly smaller percentage of island residents had broadband service than statewide (88.2%). The key informants did not raise concerns about broadband access on the island.

On the community survey, 1.4% of respondents who are year-round residents prioritized affordable and reliable cell phone service as one of the top three things the hospital should address. Of those same respondents, 7.2% reported that they face challenges related to cell phone coverage and access. The key informants did not raise concerns about access to affordable cell service on the island.

9. Employment and support for small businesses

Prior to the pandemic, 7.2% and 5.1% of MVH patients across the two time periods screened for SDOH indicated that employment was a concern for them. Among the community survey respondents, 1.7% of year-round residents indicated that they face challenges with unemployment and 13% selected career training for quality jobs as one of the top three things the hospital should address to improve community health. While the key informants didn't discuss job opportunities as a key to improving community health, they did not that there are few job opportunities for adults with disabilities and that residents often have to work multiple jobs to afford the cost of living on the island. Most of the key informants' discussion of jobs centered on the difficulty of attracting people to fill healthcare and other positions on the island because housing is scarce and unaffordable.

Among year-round residents who responded to the community survey, only 1.7% indicated that the hospital should prioritize support to small businesses as a way of improving community health and support for small businesses was not raised in the key informant interviews.

10. Special populations

a. The Brazilian Community

Key informants described the Brazilian community as growing and tight-knit. While a few key informants expressed a desire to learn more about the Brazilian community on the island, what their needs are, and how to better serve them, they also said they do not feel equipped to adequately support the community. Within the community, they reported, there is a lot of support for community members despite how few resources on the island are available in Portuguese.

"The [Brazilian] Community really cares about one another even though there are a lot of resources they don't have."

One participant went on to say that MVH does not employ any in-person Brazilian interpreters. Instead, the hospital uses an interpreter phone service. Another participant confirmed that the Brazilian population has a hard time accessing primary healthcare, and since there is a waitlist for Island Healthcare services, underinsured or uninsured members of the Brazilian community often go without care. Another interviewee stated that the island's Brazilian population is disproportionately affected by trauma and that limited English proficiency within the community and too few Portuguese-speaking providers severely limit access to mental health services. Among the 23 community survey respondents for whom Portuguese is their primary language, not being able to access a provider that speaks their language is a barrier to care for 14.3% and transportation poses a barrier to healthcare access for 21.4%.



b. Seniors

The key informants were particularly concerned about the health and safety of the island's seniors, primarily because there aren't sufficient senior services and healthcare services available on the Vineyard due to staffing shortages. While housing is a concern for all populations, seniors have difficulty securing safe and affordable housing when they are ready to down-size. The cost of living on the island makes it particularly difficult for seniors to live on a fixed income. The need to go off island for healthcare is challenging for frail elders and those who lack transportation and/or a caregiver who can escort them to on-shore appointments. While telehealth services have expanded options for health and behavioral health services on the island, such services tend not to work as well for seniors who are more at-risk for hearing or vision impairments or who may have challenges with technology. All of these challenges make it very difficult for most seniors to safely age in place while living on the island.

Among seniors who completed the community survey, the most common challenge involved fitness/physical well-being (32.7%). Hospital data for 2016 to 2019 showed that those 65 years and older were the most at-risk age group for non-fatal unintentional falls that resulted in hospitalization.

The second most common challenge reported by seniors who took the community survey was social isolation/mental and emotional wellbeing (19.2%). The COVID-19 pandemic was especially detrimental to the older adult population because it caused the closure of many in-person services and social gatherings that seniors rely upon.

"People have declined so much that they have been put into skilled nursing facilities on or off island, or people have passed away. The pandemic sped up the process due to a lack of socialization."

The closing of Windemere, the nursing and rehabilitation center on the island, is a stressor since the Navigator Homes project has not yet broken ground. The key informants said that island residents are excited for Navigator Homes, as it will provide housing for its own staff as well as comprehensive services for older adults. However, the informants fear that it won't be open soon enough to care for many seniors currently living on the island.

"Everybody is going off island and will have to continue to go off island for skilled nursing facilities. [It is] Heartbreaking to have to leave their home entirely."

One participant believes it is "achievable to create sustainable in-home care, transportation, community engagement and digital access [to older adults]" by "strengthening infrastructure and service provision so older adults can age in place." The participant suggested that MVH join the network of Healthy Aging Hospitals around the country, which would change the way primary care practices and the emergency department operate by providing care specific to the needs of elders.

One participant reported feeling "left out of conversations at the hospital" regarding older adults and has a desire to work with the hospital so efforts to help this population can be advanced.

"We [members of the Council on Aging] are willing participants of a plan to make it easier for people to stay on the island and make their older years more enjoyable and safer."

The same participant suggested that the hospital designate a point person to address the needs of older adults; such a position would be helpful to health care providers and other organizations on Martha's Vineyard as there would be a streamlined way to coordinate services for elders with the hospital. They gave an example that the COVID-19 vaccine roll-out for older adults would have been much smoother had community programs collaborated with the hospital, since, at first, the only way to sign up for a vaccine appointment was electronic.

c. Those with disabilities

According to the U.S. Census, 4.3% of Dukes County residents under age 65 have a disability. Perhaps the rate on the island is lower than the statewide percentage of 7.9%, because it is so difficult to live on the island if a person has a disability or is caring for someone with a disability. Key informants acknowledge that the challenges residents in general face when trying to access jobs or services on the island are exacerbated for individuals who have a disability (and families of such individuals). While the Martha's Vineyard school system provides support to children with any type of disability, resources were described as limited when people age out of the school system.

"It's hard to transition people [with disabilities] into jobs and adult life on the Vineyard. If they can't find appropriate work or supports, they might need to move off island."

Some said that better communication is needed between the hospital and the disability community. Key informants said that those working with the disability community want to create a partnership with the hospital to create service navigation for people with disabilities, and they believe this can start now and improve services for this population over the next three years.

"There is not one person or agency that is able to pull things together for people with disabilities...there are segmented resources, but no organized approach to fit the missing piece that a growing number of caregivers are anxious about."

One interviewee recommended the hospital train more doctors through the Lurie Center for Autism, which would reduce the need for families to travel off island for specialized Autism care. An "Autism Medical Day" was also suggested so a doctor that specializes in Autism could travel to the island one day a month to see patients with Autism.

D. Community Health Issues and Outcomes

1. Health insurance

U.S. Census data for 2015-2019 showed that 6.9% of those under age 65 in Dukes County were uninsured, whereas the 2021 ACS showed that 5.1% of those under age 65 were uninsured. Although overall, there has been a drop in the rate of those who are uninsured, as some key informants noted, lack of health insurance is still a concern for some groups on the island, particularly the immigrant community. On the community survey, among year-round residents, 18.4% reported that lack of health insurance and healthcare costs are barriers to care for them.



2. Healthcare access

While many survey respondents reported that they do not face any barriers to health care access, the majority face factors that complicate access to healthcare services. Just over 55% of year-round residents who completed the community survey, indicated that they face one or more barriers to care. Of those, 10.4% indicated that they have fear or distrust of the healthcare system, 10% have concerns about COVID-19 exposure, 4.5% have problems with transportation, and 1% report that providers do not speak their language. Among seniors who completed the survey, 43.6% indicated that they face at least one barrier to care. Of those, 10.3% fear COVID exposure, and 8.8% have fear/distrust of the system, and 5.9% have transportation challenges. Among those for whom Portuguese is their primary language (n=23), 60.9% experience one or more barriers to care. Of those, 21.4% experience transportation issues that interfere with their access to care, 14.3% reported that providers don't speak their language, and 7.1% have fear/distrust in the healthcare system and fear COVID exposure. Key informants would like to see MVH continue to recruit primary care physicians and expand specialty services for the island's aging population. In addition, a few interviewees cited the need for physicians to complete cultural competency trainings to better serve diverse communities on the island. Two key informants mentioned the need to hire more hospital staff of color as there are many non-physician staff members that interact with island residents throughout their healthcare journey.

"When people know them [hospital staff] and you're the same color as them, they can trust you. They believe the educational information you're giving to them."

The participants believed that more people of color in hospital administrative leadership would help with recruitment of physicians and hospital staff of color.

The single largest obstacle to healthcare access among community survey is being unable to get an appointment; among respondents who indicated that they experience barriers to care, half (50.2%) of year-round residents, 54.4% of seniors, and 42.9% of those for whom Portuguese is their primary language said they were unable to get appointments.

Several key informants expressed concern that essential healthcare resources are not accessible on the island. They reported that there are too few specialists and primary care physicians and that it is "normal" to have to travel off island to see a specialist. There was consensus among these interview participants that insufficient supply of health care providers on the island stems from the lack of affordable housing.

Since so many residents go off island to see specialists, participants recognized the strain round trips cause on individuals and families. One participant highlighted that getting off island for care is especially burdensome for families with an individual with a chronic disease, older adults, and women with high-risk pregnancies. The same participant noted that 35% of older adults have a dentist off island.

"So many specialists have to be visited off island, and during the pandemic many have eliminated or postponed care that they would have received had it not been for the pandemic."

The rise of telemedicine during the COVID-19 pandemic garnered mixed reviews among participants because, while they recognized the benefits of it, they also described disparities in accessibility. One participant noted that telehealth can be great to gain access to specialists and to reduce the travel burden, but telehealth is not always a good solution for older adults.



"[Telemedicine is] bad for the [senior] population because even those well connected don't feel comfortable using technology for this."

Transportation to Martha's Vineyard Hospital and to off island appointments is seen as a stressor for individuals and families, as well as organizations that help facilitate off island appointments. Long commutes and multiple transfers were described as especially arduous for individuals with a disability and older adults.

Community survey respondents indicated which, if any, health-related services they would be willing to access from a mobile health van. Among year-round residents who responded to the survey, roughly 28% reported that they would not seek any services from a van. Over one-third of survey respondents would be willing to access blood pressure checks and cancer screenings from a van, and 26.5% would be willing to access mental health services. The data suggest there are opportunities for extending services to at least some portion of the community via mobile health services.

Proportion of year-round survey respondents who would be willing to access services on a mobile health van

	Year-round residents (n=362)	
	#	%
Blood pressure checks	137	37.8%
Cancer screenings	120	33.1%
Food assistance, including SNAP enrollment	29	8.0%
Housing resources and support	47	13.0%
Mental health services	96	26.5%
Substance use counseling	48	13.3%
Supplies, such as face masks and hand sanitizer	74	20.4%
Other	27	7.5%
I wouldn't seek any health services	103	28.5%

3. Access to medications

Among MVH patients screened for SDOH, 2.2% and 1.1% across the two time periods screened positive for problems accessing medication. On the community survey, 3.3% of year-round residents have difficulty accessing medications. Among key informants, some noted the high cost of living often has residents choosing between the purchase of food or their medications.

4. Health issues:

a. Risk factors, cancer, and chronic disease

The most recently available surveillance data (from 2017 and 2018) from the Massachusetts Department of Public Health regarding behavioral risk factors are shown below and compare the proportion of Dukes County residents to Massachusetts residents overall. Although some differences are small, Dukes County residents were more at risk for 10 of 11 risk factors associated with chronic disease.



Behavioral Risk Factor Surveillance Survey – Estimated % adults reporting on variables	Dukes County	MA
Adults reporting to be physically inactive in the past 30 days (2017)	29.3%	27.6%
Adults reporting to engage in heavy drinking (2018)	26.6%	26.0%
Adults reporting to engage in binge drinking (2018)	20.3%	19.9%
Adults reporting to have ever smoked cigarettes (2018)	47.1%	38.5%
Adults reporting to smoke cigarettes regularly (2018)	39.9%	34.8%
Adults reporting a physical checkup in the past year (2018)	75.9%	79.7%
Adults reporting to have a personal doctor or health care provider (2018)	83.6%	86.7%
Adults reporting fourteen or more days of poor mental health in the past 30 days (2018)	15.0%	12.8%
Adults reporting to be overweight (a BMI > greater 24.9 and < 30) (2018)	34.2%	36.0%
Adults reporting to be obese (a body mass index of 30 or greater) (2018)	29.1%	25.7%
Adults reporting to eat less than one serving of fruit/vegetables per day (2017)	13.1%	13.0%

In the key informant interviews, cancer and diabetes were mentioned as concerns on the island. Cancer rates from 2020 showed that 50 residents died of cancer. These residents had a mean age of 72.2 and a range of 42 to 96.

To address chronic diseases, one interviewee argued that the hospital could do more to advocate for improvements in the built environment.

“If communities are not bike-able or walkable, they have higher chronic diseases.”

Interview participants explained that an improved built environment would also help alleviate concerns for older adults ambulating throughout the community.

b. Other health conditions

In 2019, there were 186 births in Dukes County. Of those, 5.4% were pre-term births and 2.7% of newborns had low birthweight. Dukes County had a lower percentage of these birth-related risk factors than all other counties in Massachusetts.

Between 2016 and 2019, the average annual rate per 100,000 who were hospitalized for work-related injuries was higher in Dukes County (88.8/100,000) than for the state overall (29.7/100,000) and all other counties (ranging from a low 18.7/100,000 in Suffolk County to 62.3/100,000 in Nantucket).

Tick-borne illnesses, which can have both short- and long-term health effects, were described by key informants as widespread and “*completely out of control*” on the island. One participant, describing the experience of tribal members, said that several have experienced neurological effects, joint pain and general malaise from Lyme Disease. Because Lyme Disease can cause disability and increased medical need, most feel it is treated seriously once it is diagnosed. Interview participants also reported that residents have significantly modified their behavior to avoid ticks. However, one participant argued that the island needs a large tick-borne illness prevention program.



5. Behavioral health:

The available secondary data suggest that mental health and substance use disorders are a problem on the island. In 2017, 2018, and 2019, age-adjusted Emergency Department rates per 100,000 for mental health issues were higher for Martha's Vineyard than statewide.

While substantially lower in 2020 (at 87 admissions), each year between 2016 and 2019, over 200 individuals on the island had alcohol-related hospital admissions. Heroin-related admissions over the five-year period between 2016 and 2020 were highest in 2016 (at 42) but dropped substantially in the next four years and were at their lowest in 2020 at seven admissions. Between 2010 and 2020, there were 32 opioid-related overdose deaths among Dukes County residents. The highest number of deaths occurred in 2015 and 2020, when seven people died in each of those years from opioid overdoses.

When selecting the top three concerns community survey respondents believe the hospital should prioritize to improve community health, mental health services was the most frequently selected option by year-round residents (66.3%) and seniors (57.7%). In terms of issues community survey respondents are experiencing in their own life, 6.6% of year-round residents and 19.2% of seniors indicated that they are dealing with social isolation/issues with mental and emotional well-being.

More than half of the key informant interview participants reported that, since the start of the COVID-19 pandemic, mental health and substance use disorders have been on the rise among both adults and children. One participant mentioned they are observing a rise in e-cigarette use and increased consumption of marijuana edibles among adolescents.

"People are stretched thin, stressed, worried. That is trickling down to the kids."

"Mental health issues have escalated on the island to a severe escalation. The services we have don't meet the need."

Many participants cited the housing crisis as a major stressor on mental health, both because of the high cost of housing and because a lack of affordable housing prevents mental health providers from coming to the island to work.

"Lack of affordable housing creates mental strain. People have to work multiple jobs to be able to live on the island."

"[There are] not enough mental health professionals, especially on island. Feels like we're sometimes just trying to put a Band-Aid on a gushing wound."

Most interview participants noted that mental health and substance use disorders are affecting all populations on the island, but different demographic groups have varying levels of access to an already limited pool of resources. Despite the limited resources, interviewees believe that those on the island are doing the best they can to support residents.

"[There are] great therapists, counselors and crisis workers on the island. They are overworked and they still keep giving...People really do care."

One participant argued that mental health, because of its prevalence and severity on the island, should be a priority of the CHNA and the community, and went on to argue that organizing is needed to garner financial support for mental health services.

"Free tennis, free sailing...The teen center was built with donations from local donors. We need to figure out how to use money for mental health for people."

Interviewees identified several populations on the island as experiencing particular needs related to behavioral health:

- Youth: There has been a rise mental health and substance use issues among children and adolescents, but there is a shortage in mental health counselors specifically for youth.
- The Wampanoag community: The tribe's primary care doctor, whom they rely upon to make referrals to mental health providers and specialists, only comes to the island one day per week, which creates a barrier to accessing behavioral health services.
- The Brazilian community: Thought to be disproportionately affected by trauma, those with limited English proficiency have difficulty accessing mental health services in Portuguese. Members of the Brazilian community are also more likely to lack insurance.
- Seniors: Became increasingly isolated over the last couple of years because in-person services and social events were suspended due to COVID-19.

Martha's Vineyard Hospital does not have a psychiatric ward, so those admitted to the hospital in need of a psychiatric evaluation have to wait in the emergency department. As one key informant noted, the experience can be simultaneously isolating and very public for the patient. For those without health insurance, few mental health resources exist. Even for island residents with health insurance, as key informants explained, their plans offer a limited number of mental health visits so many do not receive the comprehensive care they require.

IV. Key Themes and Conclusions

The island population is comparatively older than the rest of the state and, while it is home to a lower percentage of foreign-born residents and is less racially and ethnically diverse than Massachusetts overall, the Vineyard has a larger proportion of American Indians than statewide and is home to a substantial Brazilian population. Household incomes and labor force participation are lower than statewide and 7.5% of the island's population lives in poverty.

One-third or more of community survey respondents who are year-round residents believe that the hospital should focus on mental health services (66.3%), housing stability and home ownership (41.4%), substance misuse and the opioid crisis (38.1%), and improved care for medical conditions (36.7%) in order to make the community healthier. While the vast majority of residents indicated that they get their care from a doctor's office, the primary barrier to healthcare is the inability to get appointments, which suggests that demand for services exceeds current capacity. The community survey suggests that some residents are amenable to accessing screening services and mental health care from a mobile health van.

The key informants were clear that creating affordable housing on the island will help to alleviate stress and the difficult choices people are making between housing costs and other living and medical expenses. Additionally, if affordable housing were available, it would be easier to attract and retain



primary care providers, behavioral health clinicians, and medical specialists and healthcare staff, including culturally and linguistically diverse providers and staff who are so critically needed. The hospital, according to key informants, could use its prominence and that of the health system to advocate for affordable, safe, and reliable housing for hospital staff as well as for year-round middle- and low-income residents and seniors. Key informants also believe MVH should ensure that all new hires have diversity education and language skills to treat island's diverse residents, especially the Brazilian and Wampanoag communities. Key informants also called for service improvements at the hospital, including increased coordination and collaboration between MVH and community-based organization to prevent duplication of effort and conserve resources, as well as the designation of a point person at MVH for seniors. Key informants would also like to see investments to expand transportation options for seniors to travel to medical appointments on and off island, funding to expand mental health and substance abuse treatment for adults and children, and additional support for local initiatives to create sustainable food sources on the island.

While relevant and timely secondary data were not available for all of the priorities that emerged from the community survey and key informant interviews, secondary data exist to suggest that seniors comprise a large and growing segment of the island's population; there is a history of need for services to address mental health concerns and substance use disorders; and both home-owners and renters are burdened by excessive housing costs. While the secondary data offer little insight into the need for improved care for medical conditions, it is clear that islanders experience higher rates of multiple risk factors for chronic disease that, if addressed, would likely improve the health of the community. The available secondary data were not helpful in understanding the challenges the island faces related to housing supply and demand; the need for culturally competent and linguistically-appropriate care; the remaining needs related to improved and sustained food and nutrition security; and transportation challenges, particularly to off-island services and for seniors and those with disabilities.

V. Mass General Brigham System Priorities

Context and Priorities

Mass General Brigham Community Health leads the Mass General Brigham system-wide commitment to improve the health and well-being of residents in our priority communities most impacted by health inequities. Mass General Brigham's commitment to the community is part of a \$30 million pledge to fund programs aimed at dismantling racism and other forms of inequity through a comprehensive range of approaches involving our health care delivery system and community health initiatives.

While not required to conduct a CHNA under current regulations, Mass General Brigham's belief in the critical importance of system-wide, population-level approaches resulted in our decision to have every hospital conduct a 2022 CHNA. Having all our hospitals on the same three-year cycle will prove invaluable in our efforts to eliminate health inequities by identifying system-wide priorities that require system-level efforts.

In addition to the priorities each hospital identifies that are unique to its communities, Mass General Brigham identified two system-level priorities: cardiometabolic disease and substance use disorder. These priorities emerged from a review of hospital-level data and prevalent trends in population health statistics. Our efforts within these priorities will aim to reduce racial and ethnic disparities in outcomes, with the goal of improving life expectancy.

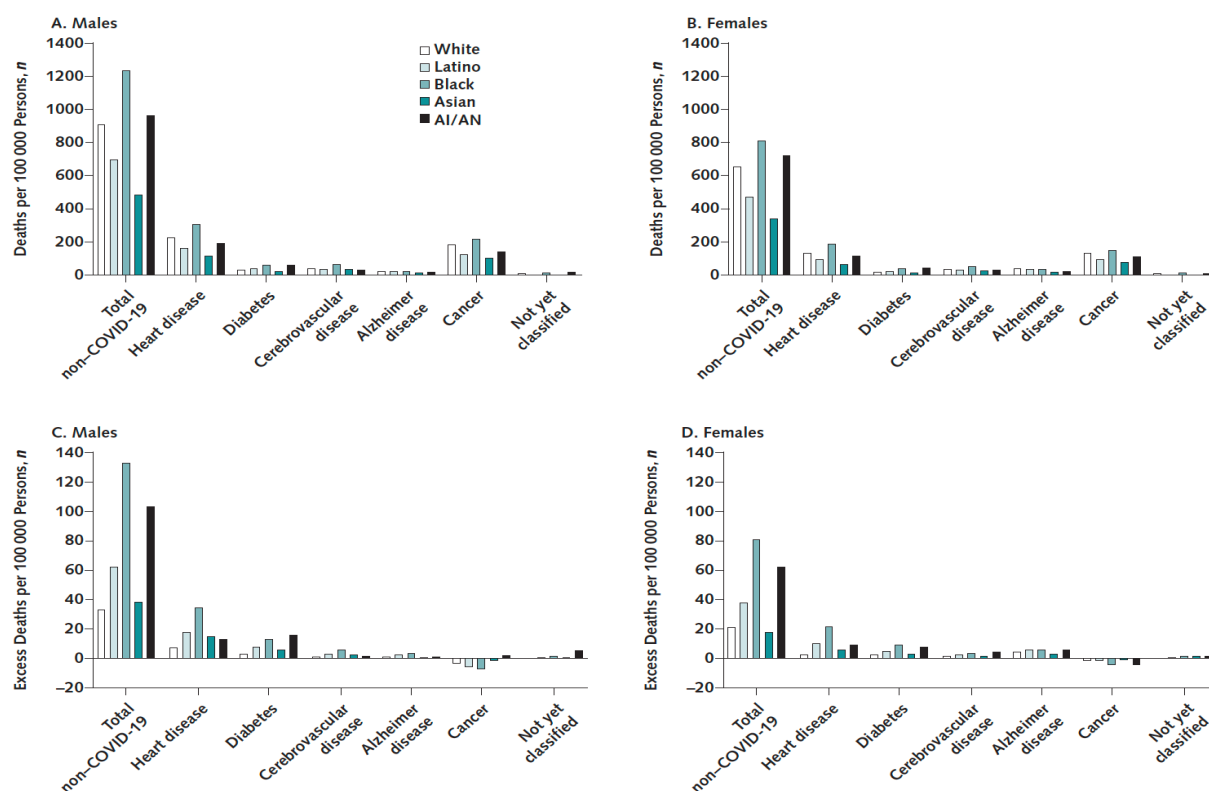
Key Findings

In a national study of deaths during the first wave of the COVID-19 pandemic (March to December 2020), researchers explored non-COVID deaths and excess deaths, defined as the difference between the number of observed and number of expected deaths.

Nationally, non-COVID deaths disproportionately affected Black, American Indian/Alaska Native, and Latinx persons (A. and B.) (Graphic 1)⁴. Moreover, when looking at excess deaths, the inequities worsened (C. and D.). The greatest disparities are seen for heart disease and diabetes. Inequities also exist for all cancer deaths but not excess cancer deaths.

Graphic 1: (labeled Figure 3 from MGB report), Racial and Ethnic Disparities in Excess Deaths During the COVID-19 Pandemic, March to December 2020, Annals of Internal Medicine

Figure 3. Age-standardized non-COVID-19 cause-specific deaths per 100 000 persons in the United States in March to December 2020 among males (A) and females (B) and age-standardized non-COVID-19 excess cause-specific deaths per 100 000 persons among males (C) and females (D), by race/ethnicity.



AI/AN = American Indian/Alaska Native.

Massachusetts mortality data for 2019 reveal that heart disease and unintentional injuries, which include drug overdoses, account for the second and third highest causes of death. As shown in Graphic 2, the highest number of deaths among individuals from birth to age 44 were the result of unintentional injuries. However, among those 45 years of age and older, heart disease accounts for the highest or

⁴ Sheils et al. Racial and Ethnic Disparities in Excess Deaths During the COVID-19 Pandemic, March to December 2020. Annals of Internal Medicine, Vol 174 No. 12. December 2021. 1693-1699

2022 Community Health Needs Assessment
second highest cause of death across age group.



MARTHA'S VINEYARD
HOSPITAL

Graphic 2: (labeled at Table 6 in MGB report) Top Ten Leading Underlying Causes of Death by Age, MA 2019

Table 6. Top Ten Leading Underlying Causes of Death by Age, Massachusetts: 2019

	Age Groups (number of deaths)								
Rank	<1 year	1-14 years	15-24 years	25-44 years	45-64 years	65-74 years	75-84 years	85+ years	All
1	Short gestation and LBW ¹ (57)	Unintentional Injuries ³ (20)	Unintentional Injuries ³ (186)	Unintentional Injuries ³ (1319)	Cancer (2781)	Cancer (3446)	Cancer (3430)	Heart Disease (5622)	Cancer (12584)
2	Congenital malformations (56)	Cancer (17)	Suicide (67)	Cancer (241)	Heart Disease (1585)	Heart Disease (1786)	Heart Disease (2581)	Cancer (2641)	Heart Disease (11779)
3	SIDS ² (21)	Congenital malform (9)	Homicide (43)	Suicide (202)	Unintentional Injuries ³ (1138)	Chronic Lower Respiratory Disease ⁵ (632)	Chronic Lower Respiratory Disease ⁵ (893)	Stroke (1260)	Unintentional Injuries ³ (4094)
4	Complications of placenta (19)	Other infect (8)	Cancer (27)	Heart Disease (193)	Chronic liver disease (383)	Unintentional Injuries ³ (340)	Stroke (629)	Alzheimer's Disease (1128)	Chronic Lower Respiratory Disease ⁵ (2842)
5	Pregnancy Complications (13)	Homicide (8)	Heart Disease (7)	Homicide (77)	Chronic Lower Respiratory Disease ⁵ (350)	Stroke (331)	Alzheimer's Disease (415)	Chronic Lower Respiratory Disease ⁵ (941)	Stroke (2463)
6	Respiratory distress (8)	Ill-defined conditions-signs and symptoms ⁴ (7)	Injuries of Undetermined Intent ³ (7)	Chronic liver disease (62)	Diabetes (312)	Diabetes (300)	Unintentional Injuries ³ (381)	Unintentional Injuries ³ (709)	Alzheimer's Disease (1662)
7	Bacterial sepsis of newborn (7)	Influenza & Pneumonia (4)	Diabetes (6)	Ill-defined conditions-signs and symptoms ⁴ (37)	Suicide (281)	Nephritis (221)	Diabetes (358)	Influenza & Pneumonia (612)	Diabetes (1386)
8	Necrotizing enterocolitis (6)	Suicide (3)	Influenza & Pneumonia (4)	Diabetes (29)	Stroke (212)	Septicemia (181)	Nephritis (339)	Nephritis (553)	Nephritis (1280)
9	Circulatory System (5)	Septicemia (2)	Ill-defined conditions-signs and symptoms ⁴ (4)	Stroke (29)	Septicemia (171)	Chronic liver disease (180)	Parkinsons (285)	Diabetes (381)	Influenza & Pneumonia (1217)
10	Intrauterine Hypoxia (4)	In situ neoplasms (2)	Chronic Lower Respiratory Disease ⁵ (2)	Injuries of Undetermined Intent ³ (26)	Nephritis (150)	Influenza & Pneumonia (179)	Influenza & Pneumonia (276)	Ill-defined conditions-signs and symptoms ⁴ (355)	Septicemia (942)
All Causes	255	106	389	2,646	9,417	9,974	13,570	22,303	58,660

Note: Ranking based on number of deaths. The number of deaths is shown in parentheses.

1. LBW: Low birthweight. 2. SIDS: Sudden Infant Death Syndrome. 3. Injuries are subdivided into 4 separate categories by intent: unintentional, homicide, suicide, and injuries of undetermined intent (deaths where investigation has not determined whether injuries were accidental or purposely inflicted). 4. Ill-Defined Conditions: Includes ICD-10 codes R00-R99. 5. The title of this cause of death has changed between ICD-10 and ICD-9. Chronic Lower Respiratory Disease (ICD-10 title) corresponds to Chronic Obstructive Pulmonary Disease (COPD) (ICD-9 title).

In Boston, heart disease mortality for Black and Hispanic residents was second only to COVID-19 in 2020.



Graphic 3: (labeled as Table 2 in MGB report).

Table 2. Leading Causes of Mortality, by Boston and Race/Ethnicity, Age-Adjusted Rate per 100,000 Residents, 2020

	Boston	Asian	Black	Latino	White
1	COVID-19 138.4	COVID-19 95.1	COVID-19 238.1	COVID-19 143.5	Cancer 117.6
2	Cancer 117.4	Cancer 92.8	Heart Disease 183.6	Heart Disease 86.1	Heart Disease 113.1
3	Heart Disease 114.9	Heart Disease 55.4	Cancer 166.7	Cancer 78.8	COVID-19 103.5
4	Accidents 53.7	Cerebrovascular Diseases 22.2 †	Accidents 82.7	Accidents 59.5	Accidents 53.2
5	Cerebrovascular Diseases 27.4	Accidents 17.1 †	Cerebrovascular Diseases 52.8	Diabetes 27.4	Chronic Lower Respiratory Diseases 24.7

DATA SOURCE: Massachusetts Department of Public Health, Boston Resident Deaths, 2020

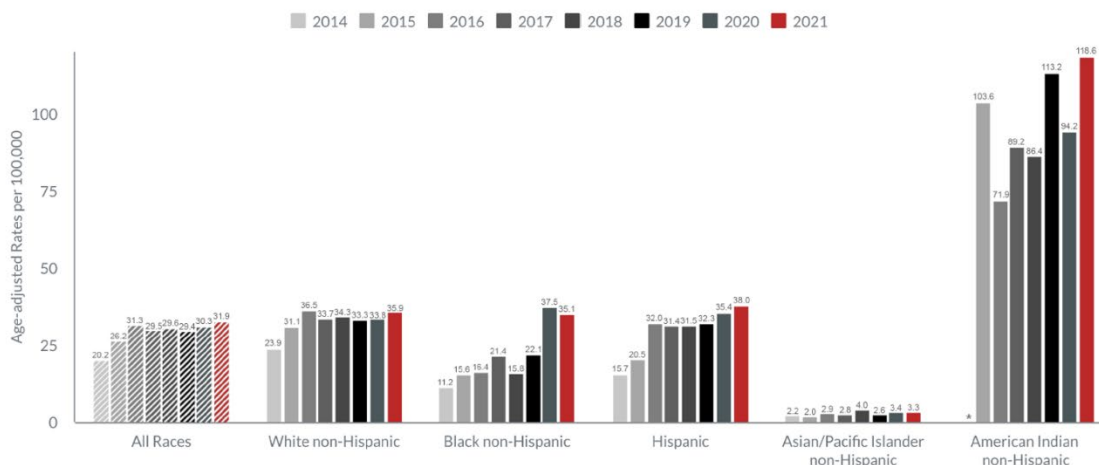
DATA ANALYSIS: Boston Public Health Commission, Research and Evaluation Office

NOTES: Please be advised that 2020-2022 data are preliminary and subject to change. Raw preliminary data may be incomplete or inaccurate, have not been fully verified, and revisions are likely to occur following the production of these data. The Massachusetts Department of Public Health strongly cautions users regarding the accuracy of statistical analyses based on preliminary data and particularly with regard to small numbers of events; Dagger (†) denotes where rates are based on 20 or fewer deaths and may be unstable

From 2014 to 2021, opioid-related overdose deaths in Massachusetts increased dramatically for Black and Hispanic residents (Graphic 4 and 5). Death rates for American Indian residents have consistently and significantly outpaced deaths rates for all other races.

Graphic 4: Massachusetts Opioid-Related Deaths, All

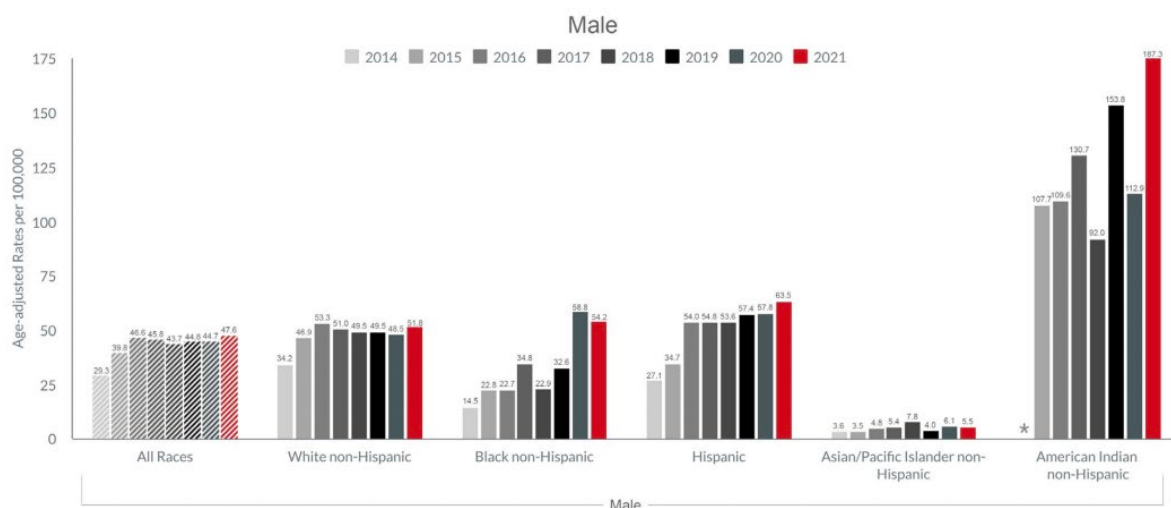
Confirmed Opioid-Related Overdose Death Rates, All Intent, by Race and Hispanic Ethnicity



Data Source: MA Department of Public Health. <https://www.mass.gov/doc/opioid-related-overdose-deaths-demographics-june-2022/download>



Graphic 5: Massachusetts Opioid-Related Deaths, Males



Focus Areas

As Mass General Brigham develops and implements programming and supports that will reduce disparities in health outcomes for the two system priorities, our efforts will focus on the highest need communities across our hospital priority neighborhoods. We will also continue to support locally identified priorities at the hospital level.

VI. Conclusions

The 2022 CHNA found that, relative to Massachusetts, the population of Martha's Vineyard is older. Although less racially and ethnically diverse and home to a lower percentage of foreign-born residents than the state overall, the Vineyard has a larger proportion of American Indians than statewide and is home to a substantial Brazilian population. Household incomes and labor force participation are lower on the island than statewide and 7.5% of island residents live in poverty. The major community health challenges identified in the CHNA were as follows:

- (1) **Mental health** was identified as one of the top four issues MVH should address in order to improve community health. Survey and interview participants called for expanding access to mental health services for adults and children.
- (2) **Substance Use Disorders**, including the opioid crisis, was also among the top four issues identified that MVH should address to improve community health by improving access to services.
- (3) **Housing** was also identified as among the top four community health needs on the island. The creation of affordable housing will help to alleviate stress and the difficult choices residents must make (e.g., between housing costs and other living and medical expenses). If affordable year-round housing were available, it would be easier to attract and retain primary care providers, behavioral health clinicians, and medical specialists and healthcare staff, including culturally and linguistically diverse providers and staff. CHNA participants urged the hospital to use its prominence and that of the health system to advocate for safe and affordable housing for hospital staff as well as for year-round middle- and low-income residents and seniors.



- (4) ***Increased access to care and improved service coordination and communication, particularly for seniors and diverse communities*** was the fourth of the top needs identified in the CHNA. The primary barrier to healthcare faced by residents is the inability to get appointments because too few clinicians and staff are available on the island. Therefore, many residents must seek care off-island, which is particularly challenging for frail elders and those with disabilities. While telehealth has improved access to care in general, many seniors are challenged by technology and vision and hearing impairments. The community survey indicated that some island residents are open to accessing services from a mobile health van (e.g., screenings and mental health care). Key informants desire increased coordination and collaboration between MVH and community-based organization to prevent duplication of effort and conservation of resources. They called for a designated point person at MVH for seniors. Key informants also believe MVH should ensure that all new hires have diversity education and language skills to treat the island's diverse residents, especially the Brazilian and Wampanoag communities. They added that the hospital should make every effort to recruit diverse staff to fill positions across the board, including clinicians, staff, and senior leadership.

A. Summary of vulnerable populations in the community

The vulnerable communities prioritized for the 2023 CHIP are: (1) seniors (e.g., those who are aged 65 and over and particularly those who are frail and who face risks to their health, safety, and well-being) and (2) the island's racially/ethnically diverse populations, particularly the Brazilian community, members of the Wampanoag tribe, and other people of color and foreign-born residents within the island's year-round population.

B. Priorities identified and how they address the needs of the community

The MVH Community Advisory Committee chose to recommend the following to the MVH Board for its consideration at the Board's September 30, 2022 meeting.

1. Mental health
2. Substance Use Disorders
3. Housing
4. Increased access to primary care and improved service coordination (e.g., for the social determinants of health, behavioral health, and specialty care), and communication, particularly for seniors and diverse communities

The committee members recognized that the primary "need" related to mental health and substance use disorders is improved access to behavioral health services. Access to such services is impeded by how few providers are available to treat and support these issues in general and specifically on the island. The lack of affordable year-round housing is a major barrier to attracting and securing behavioral health providers on the island. Each of these issues is complex in its own right, but on the island, they are inextricably linked.

The primary care practices associated with MVH identify and refer patients to specialty care and screen for behavioral health issues and the social determinants of health. For these reasons, the committee members believe that primary care providers are ideally positioned to help patients understand and access available services (both on- and off-island) and coordinate care and communication, particularly for patients with complex needs and/or for whom access to care is impacted by factors such as



2022 Community Health Needs Assessment

language, transportation, and understanding of and/or trust in the health system. Seniors and members of the island's racially/ethnically diverse communities are particularly at-risk for problems related to access. The committee members believe that primary care practices are best positioned to develop relationships and trust with patients and to help them understand and navigate the health system. Efforts to increase diversity within primary care practices will further support the building of trust, as well as addressing barriers to care posed by language.

Thus, improvements related to housing and behavioral health services and coinciding improvements in access to primary care should address the major community health challenges on the island. With particular attention to improving access, coordination, and communication for seniors and the island's diverse communities, access to care and resources should be improved for those most likely to face barriers to care.

At its meeting on September 30, the MVH Board decided to endorse the priorities recommended by the Community Advisory Committee.

C. Next steps and considerations toward implementation plan

The Community Advisory Committee will resume meeting in October of 2022 and throughout the fall and early winter to develop strategies to address the identified priorities. The plan will be completed, as required by the IRS, by February 15, 2023.

APPENDICES



Appendix A. Community Affairs Committee Members

Bruce Bullen, Chairman of the Community Affairs Committee, MVH Board of Directors
Rebecca Haag, Executive Director, Island Grown Initiative
Julie Fay, Martha's Vineyard Community Foundation
Arielle Faria, Martha's Vineyard Community Foundation

Ex-Officio

Michael Jaff, DO, Chairman, MVH
Denise Schepici, President and CEO, MVH

Staff Liaison

Claire Seguin, Chief Nurse & Operations Officer, MVH
Amy Houghton, Contracts and Projects Administrator, MVH



Appendix B. Community Survey Respondent Characteristics and Findings

Age

	All (n=399)	Year- round residents (n=328)	Seniors (n=156)	Portuguese speaking (n=23)
Mean	56.5	54.6	73.4	39.7
Low	11	11	65	11
High	99	99	99	83

Gender identity

	All respondents (n=413)		Year-round residents (n=339)		Seniors (65+) (n=155)		Portuguese speaking (n=22)	
	#	%	#	%	#	%	#	%
Gender queer or gender non- confirming	7	1.7%	7	2.1%	1	0.6%	0	0.0%
Man	92	22.3%	76	22.4%	45	29.0%	6	27.3%
Transgender	2	0.5%	2	0.6%	0	0.0%	0	0.0%
Woman	309	74.8%	251	74.0%	107	69.0%	16	72.7%
Prefer to self- describe	3	0.7%	3	0.9%	2	1.3%	0	0.0%

Race/ethnicity*

	All respondents (n=455)		Year-Round residents (n=362)		Seniors (65+) (n=156)		Portuguese speaking (n=20)	
	#	%	#	%	#	%	#	%
American Indian or Alaska Native	7	1.5%	6	1.7%	2	1.3%	0	0.0%
Asian	4	0.9%	4	1.1%	0	0.0%	0	0.0%
Black or African American	14	3.1%	10	2.8%	1	0.6%	1	5.0%
Hispanic/Latino	19	4.2%	18	5.0%	2	1.3%	13	65.0%
Native Hawaiian or other Pacific Islander	0	0.0%	0	0.0%	0	0.0%	0	0.0%
White	360	79.1%	292	80.7%	144	92.3%	6	30.0%
Other	20	4.4%	19	5.2%	6	3.8%	0	0.0%



Language

	All respondents (n=416)		Year-Round residents (n=340)		Seniors (65+) (n=156)	
	#	%	#	%	#	%
English	391	94.0%	319	93.8%	153	98.1%
Spanish	1	0.2%	1	0.3%	1	0.6%
Portuguese	23	5.5%	20	5.9%	2	1.3%
Chinese (including Cantonese and Mandarin)	0	0.0%	0	0.0%	0	0.0%
French	0	0.0%	0	0.0%	0	0.0%
French Creole	0	0.0%	0	0.0%	0	0.0%
Italian	0	0.0%	0	0.0%	0	0.0%
Russian	0	0.0%	0	0.0%	0	0.0%
Vietnamese	0	0.0%	0	0.0%	0	0.0%
Greek	0	0.0%	0	0.0%	0	0.0%
Arabic	0	0.0%	0	0.0%	0	0.0%
Cambodian (including Mon-Khmer)	0	0.0%	0	0.0%	0	0.0%
Other	1	0.2%	0	0.0%	0	0.0%

Employment status

	All respondents (n=414)		Year-Round residents (n=338)		Seniors (65+) (n=156)		Portuguese speaking (n=23)	
	#	%	#	%	#	%	#	%
Employed, self-employed full-time	237	57.2%	211	62.4%	47	30.1%	12	52.2%
Employed part-time or seasonal work	48	11.6%	36	10.7%	23	14.7%	6	26.1%
Currently out of work	4	1.0%	3	0.9%	1	0.6%	1	4.3%
Unable to work for health reasons	1	0.2%	1	0.3%	1	0.6%	1	4.3%
A stay at home parent or caregiver	7	1.7%	6	1.8%	1	0.6%	0	0.0%
A student (full or part-time)	8	1.9%	8	2.4%		0.0%	2	8.7%
Retired	99	23.9%	64	18.9%	81	51.9%	1	4.3%
Other	10	2.4%	9					


Community survey respondents' residency on Martha's Vineyard

	All respondents		Seniors (65+)		Portuguese speaking	
Year-round residents	362	79.6%	114	73%	20	87.0%
Part-time residents (6 months or more)	39	8.6%	18	12%	1	4.3%
Seasonal (less than 6 months)	42	9.2%	24	15%	2	8.7%
Missing	12	2.6%	0	0%	0	0.0%
All respondents	455	100.0%	156	100%	23	100.0%

Community that survey respondents identify with most

	All respondents (n=446)		Year-Round residents (n=361)		Seniors (65+) (n=155)		Portuguese speaking (n=23)	
Town	#	%	#	%	#	%	#	%
Aquinnah	16	3.6%	12	3.3%	7	4.5%	0	0.0%
Chilmark	49	11.0%	32	8.9%	27	17.4%	0	0.0%
Edgartown	99	22.2%	81	22.4%	32	20.6%	8	34.8%
Oak Bluffs	100	22.4%	81	22.4%	26	16.8%	5	21.7%
Tisbury	96	21.5%	83	23.0%	26	16.8%	6	26.1%
West Tisbury	86	19.3%	72	19.9%	37	23.9%	4	17.4%
Total	446	100.0%	361	100.0%	155	100.0%	23	100.0%

Top issues selected by all survey respondents that hospitals should address to improve community health	All respondents (n=455)	
Top concerns:	#	%
Mental health services	281	61.8%
Improved care for medical conditions	167	36.7%
Housing stability and homeownership	166	36.5%
Substance misuse and the opioid crisis	154	33.8%
Affordable childcare	92	20.2%
COVID-19 pandemic (testing, vaccinations, information, supplies)	69	15.2%
Food insecurity	59	13.0%
Career training for quality jobs	50	11.0%
Education supports and activities for youth	46	10.1%
Affordable/reliable internet	15	3.3%
Transportation	15	3.3%
Affordable/reliable cell service	13	2.9%
Neighborhood safety and violence	9	2.0%
Small business support	8	1.8%



Top issues selected by year-round residents that hospitals should address to improve community health	#	%
Mental health services	240	66.3%
Housing stability and homeownership	150	41.4%
Substance misuse and the opioid crisis	138	38.1%
Improved care for medical conditions	133	36.7%
Affordable childcare	80	22.1%
COVID-19 pandemic (testing, vaccinations, information, supplies)	51	14.1%
Career training for quality jobs	47	13.0%
Food insecurity	46	12.7%
Education supports and activities for youth	34	9.4%
Transportation	11	3.0%
Affordable/reliable internet	10	2.8%
Neighborhood safety and violence	8	2.2%
Small business support	6	1.7%
Affordable/reliable cell service	5	1.4%

	Seniors (65+) (n=156)	
Top issues selected by year-round seniors that hospitals should address to improve community health	#	%
Mental health services	90	57.7%
Improved care for medical conditions	73	46.8%
Substance misuse and the opioid crisis	58	37.2%
COVID-19 pandemic (testing, vaccinations, information, supplies)	30	19.2%
Food insecurity	29	18.6%
Housing stability and homeownership	28	17.9%
Affordable childcare	22	14.1%
Education supports and activities for youth	8	5.1%
Career training for quality jobs	7	4.5%
Transportation	6	3.8%
Affordable/reliable cell service	3	1.9%
Affordable/reliable internet	2	1.3%
Small business support	1	0.6%
Neighborhood safety and violence	0	0.0%



	Portuguese speaking (n=23)	
Top issues selected by those whose primary language is Portuguese that hospitals should address to improve community health	#	%
Housing stability and homeownership	11	47.8%
Mental health services	10	43.5%
Affordable childcare	10	43.5%
Education supports and activities for youth	9	39.1%
Career training for quality jobs	5	21.7%
Improved care for medical conditions	3	13.0%
COVID-19 pandemic (testing, vaccinations, information, supplies)	3	13.0%
Transportation	3	13.0%
Affordable/reliable internet	2	8.7%
Neighborhood safety and violence	2	8.7%
Substance misuse and the opioid crisis	1	4.3%
Food insecurity	1	4.3%
Affordable/reliable cell service	1	4.3%
Small business support	1	4.3%

Main challenges in the lives year-round residents who responded to the community survey (n=455)	#	%
Fitness and physical wellbeing	130	28.6%
Social isolation/mental and emotional wellbeing	100	22.0%
Housing	80	17.6%
Paying for utilities, rent, other supplies	67	14.7%
Cell phone coverage/access	38	8.4%
Spiritual wellbeing	34	7.5%
Educational opportunities	25	5.5%
Access to medication	21	4.6%
Broadband/internet or computer	17	3.7%
Transportation	15	3.3%
Unemployment	11	2.4%
Safety	9	2.0%
Access to food	4	0.9%



Main challenges in the lives year-round residents who responded to the community survey (n=362)	#	%
Fitness and physical wellbeing	104	28.7%
Social isolation/mental and emotional wellbeing	86	23.8%
Housing	70	19.3%
Paying for utilities, rent, other supplies	62	17.1%
Cell phone coverage/access	26	7.2%
Spiritual wellbeing	26	7.2%
Educational opportunities	24	6.6%
Transportation	13	3.6%
Access to medication	12	3.3%
Broadband/internet or computer	12	3.3%
Safety	7	1.9%
Unemployment	6	1.7%
Access to food	3	0.8%

Main challenges in the lives senior residents who responded to the community survey (n=156)	#	%
Fitness and physical wellbeing	51	32.7%
Social isolation/mental and emotional wellbeing	30	19.2%
Cell phone coverage/access	12	7.7%
Housing	12	7.7%
Paying for utilities, rent, other supplies	12	7.7%
Spiritual wellbeing	9	5.8%
Broadband/internet or computer	7	4.5%
Transportation	7	4.5%
Safety	5	3.2%
Access to medication	4	2.6%
Educational opportunities	3	1.9%
Access to food	1	0.6%
Unemployment	1	0.6%



Main challenges in the lives those who identified Portuguese as their primary language (n=23)	#	%
Housing	14	60.9%
Transportation	5	21.7%
Paying for utilities, rent, other supplies	4	17.4%
Educational opportunities	4	17.4%
Fitness and physical wellbeing	3	13.0%
Spiritual wellbeing	3	13.0%
Social isolation/mental and emotional wellbeing	2	8.7%
Access to medication	2	8.7%
Broadband/internet or computer	1	4.3%
Safety	1	4.3%
Access to food	1	4.3%
Cell phone coverage/access	0	0.0%
Unemployment	0	0.0%

Where do you primarily receive your routine healthcare?

	All respondents (n=423)		Year-round residents (n=348)		Seniors (65+) (n=155)		Portuguese speaking (n=23)	
	#	%	#	%	#	%	#	%
A doctor's office	353	83.5%	293	84.2%	133	85.8%	8	34.8%
A public health clinic or CHC	25	5.9%	22	6.3%	8	5.2%	6	26.1%
A hospital emergency room	19	4.5%	14	4.0%	5	3.2%	8	34.8%
No usual place	15	3.5%	12	3.4%	4	2.6%	1	4.3%
Other	8	1.9%	7	2.0%	4	2.6%	0	0.0%
Urgent care provider	3	0.7%	0	0.0%	1	0.6%	0	0.0%


What barriers, if any, prevent you from getting needed healthcare? (sorted for each group)

	All respondents (n=455)	
	#	%
I don't face any barriers	213	46.8%
I face one or more barriers	242	53.2%
	Of those facing barriers n=242	
Can't get an appointment	123	50.8%
Not enough time	53	21.9%
Other	50	20.7%
Insurance issues	46	19.0%
Cost	44	18.2%
Fear or distrust of healthcare system	23	9.5%
Concern about COVID exposure	22	9.1%
Transportation	9	3.7%
No providers or staff speak my language	2	0.8%

	Year-round residents (n=362)	
	#	%
I don't face any barriers	161	44.5%
I face one or more barriers	201	55.5%
	Of those facing barriers (n=201)	
Can't get an appointment	101	50.2%
Not enough time	49	24.4%
Other	41	20.4%
Insurance issues	37	18.4%
Cost	37	18.4%
Fear or distrust of healthcare system	21	10.4%
Concern about COVID exposure	20	10.0%
Transportation	9	4.5%
No providers or staff speak my language	2	1.0%



	Seniors (65+) (n=156)	
	#	%
I don't face any barriers	88	56.4%
I face one or more barriers	68	43.6%
	Of those facing barriers (n=68)	
Can't get an appointment	37	54.4%
Other	23	33.8%
Concern about COVID exposure	7	10.3%
Fear or distrust of healthcare system	6	8.8%
Not enough time	5	7.4%
Cost	5	7.4%
Transportation	4	5.9%
Insurance issues	3	4.4%
No providers or staff speak my language	0	0.0%

	Portuguese speaking (n=23)	
	#	%
I don't face any barriers	9	39.1%
I face one or more barriers	14	60.9%
	Of those facing barriers (n=14)	
Can't get an appointment	6	42.9%
Other	0	0.0%
Concern about COVID exposure	1	7.1%
Fear or distrust of healthcare system	1	7.1%
Not enough time	2	14.3%
Cost	2	14.3%
Transportation	3	21.4%
Insurance issues	4	28.6%
No providers or staff speak my language	2	14.3%



What types of healthcare services or resources would you seek for yourself or family on a mobile health van in your community?*

	All respondents (n=455)	
	#	%
Blood pressure checks	163	35.8%
Cancer screenings	144	31.6%
Food assistance, including SNAP enrollment	32	7.0%
Housing resources and support	51	11.2%
Mental health services	108	23.7%
Substance use counseling	51	11.2%
Supplies, such as face masks and hand sanitizer	82	18.0%
Other	33	7.3%
I wouldn't seek any health services	127	27.9%

	Year-round residents (n=362)	
	#	%
Blood pressure checks	137	37.8%
Cancer screenings	120	33.1%
Food assistance, including SNAP enrollment	29	8.0%
Housing resources and support	47	13.0%
Mental health services	96	26.5%
Substance use counseling	48	13.3%
Supplies, such as face masks and hand sanitizer	74	20.4%
Other	27	7.5%
I wouldn't seek any health services	103	28.5%



	Seniors (65+) (n=156)	
	#	%
Blood pressure checks	68	43.6%
Cancer screenings	42	26.9%
Food assistance, including SNAP enrollment	2	1.3%
Housing resources and support	5	3.2%
Mental health services	18	11.5%
Substance use counseling	9	5.8%
Supplies, such as face masks and hand sanitizer	22	14.1%
Other	13	8.3%
I wouldn't seek any health services	57	36.5%

	Portuguese speaking (n=23)	
	#	%
Blood pressure checks	7	30.4%
Cancer screenings	5	21.7%
Food assistance, including SNAP enrollment	1	4.3%
Housing resources and support	1	4.3%
Mental health services	5	21.7%
Substance use counseling	1	4.3%
Supplies, such as face masks and hand sanitizer	5	21.7%
Other	3	13.0%
I wouldn't seek any health services	5	21.7%

* = it is not possible to know whether someone checked none of the categories because none apply or because they skipped the question.

Thus, it is not possible to know the true number who answered the question. The "n" is based on the total number who fall within the group (all, year round, seniors).



Appendix C. List of Key Informant Interviewees

Marina Lent	Chilmark Board of Health
Sharon Brown	Island Food Pantry
Beth Wike	Island Disability Coalition/MVCS
Amy Lilavois	MV Regional High School
Paddy Moore	Healthy Aging Martha's Vineyard
Cindy Trish	Healthy Aging Martha's Vineyard
Lyndsay Famarris	Edgartown Council on Aging
Lisa Belcastro	National Alliance on Mental Illness and Harbor Homes
Janet Constantino	Martha's Vineyard Community Services
Noli Taylor	Island Grown Initiative
Dr. Alethea Donahue	Martha's Vineyard Hospital
Graham Houghton	West Tisbury School
Dr. Lorna Andrade	MV Diversity Coalition and NAACP
Luiza Mouzinho	MV Community Services and MV Regional High School
Sarah Kuh (Director),	Vineyard Health Care Access
Kate Devane	Island Autism Group
Yvonne Michelson	Wampanoag Tribal Nurse
Lila Fischer	Island Healthcare



REFERENCES

ⁱ Martha's Vineyard Chamber of Commerce accessed August 21, 2022

<https://www.mvy.com/faq.html#:~:text=The%20Vineyard%20is%20home%20to,Vineyard%20belong%20to%20seasonal%20residents.>

ⁱⁱ United States U.S. Census (2020) accessed multiple times at

<https://www.census.gov/programs-surveys/decennial-census/decade/2020/2020-census-results.html>

ⁱⁱⁱ American Community Survey accessed multiple times at <https://www.census.gov/programs-surveys/acs>

^{iv} Massachusetts Census Data accessed August 21, 2022

<https://malegislature.gov/Redistricting/MassachusettsCensusData/County>

^v New York Times <https://www.nytimes.com/2016/11/20/travel/marthas-vineyard-off-season.html>

^{vi} Martha's Vineyard Commission, 2020 US Census Overview January 5, 2022

https://www.mvcommission.org/sites/default/files/docs/2020_US_Census_Powerpoint_1_5_22.pdf

American Community Survey accessed multiple times at <https://www.census.gov/programs-surveys/acs>

^{vii} Closing the SNAP Gap (originally published 1/6/17 and updated 3/1/21)

by The Food Bank of Western Massachusetts (www.foodbankwma.org) and Massachusetts Law Reform Institute (www.mlri.org). Access on September 19, 2022 at <https://www.foodbankwma.org/closing-the-snap-gap-in-massachusetts/>