

Q1. COMMUNITY BENEFIT NARRATIVE REPORTING INSTRUCTIONS

The Maryland Health Services Cost Review Commission (HSCRC or Commission) is required to collect community benefit information from individual hospitals in Maryland and compile it into an annual statewide, publicly available report. The Maryland General Assembly updated §19-303 of the Health General Article in the 2020 Legislative Session (HB1169/SB0774), requiring the HSCRC to update the community benefit reporting guidelines to address the growing interest in understanding the types and scope of community benefit activities conducted by Maryland’s nonprofit hospitals in relation to community health needs assessments. The reporting is split into two components, a Financial Report and a Narrative Report. This reporting tool serves as the narrative report. Detailed reporting instructions have been distributed to your hospital’s community benefit contacts, and additional copies can be requested at the email below.

In this reporting tool, responses are mandatory unless specifically marked as optional. If you submit a report without responding to each question, your report may be rejected. You would then be required to fill in the missing answers before resubmitting. Questions that require a narrative response have a limit of 20,000 characters. This report need not be completed in one session and can be opened by multiple users. Hospitals are expected to respond to any follow-up/clarifying questions from staff to ensure completeness and accuracy of the report.

For technical assistance, contact [HCBHelp@hilltop.umbc.edu](mailto:HCBHelp@hilltop.umbc.edu).

Q2. Section I - General Info Part 1 - Hospital Identification

Q3. Please confirm the information we have on file about your hospital for the fiscal year.

|                                                                                                                                 | Is this information correct?     |                                  | If no, please provide the correct information here: |
|---------------------------------------------------------------------------------------------------------------------------------|----------------------------------|----------------------------------|-----------------------------------------------------|
|                                                                                                                                 | Yes                              | No                               |                                                     |
| The proper name of your hospital is: UM St. Joseph Medical Center                                                               | <input checked="" type="radio"/> | <input type="radio"/>            |                                                     |
| Your hospital's ID is: 210063                                                                                                   | <input checked="" type="radio"/> | <input type="radio"/>            |                                                     |
| Your hospital is part of the hospital system called University of Maryland Medical System                                       | <input checked="" type="radio"/> | <input type="radio"/>            |                                                     |
| The primary hospital community benefit (HCB) Narrative contact at your hospital is Jill Brown Hong (Primary), Dr. Roderick King | <input type="radio"/>            | <input checked="" type="radio"/> | Rebecca Cohen (primary); Dr. Roderick King          |
| The primary HCB Narrative contact email address at your hospital is Jill.Brown@umm.edu; Roderick.King@umm.edu                   | <input type="radio"/>            | <input checked="" type="radio"/> | Rebecca.Cohen@umm.edu; Roderick.King@umm.edu        |
| The primary HCB Financial report contact at your hospital is Paul Nicholson, CFO                                                | <input type="radio"/>            | <input checked="" type="radio"/> | Laura Doody, CFO                                    |
| The primary HCB Financial report contact email at your hospital is paulnicholson@umm.edu                                        | <input type="radio"/>            | <input checked="" type="radio"/> | Laura.Doody@umm.edu                                 |

Q4. Please select the community health statistics that your hospital uses in its community benefit efforts.

- ☐ Median household income
- ☒ Percentage below federal poverty level (FPL)
- ☒ Percent uninsured
- ☐ Percent with public health insurance
- ☐ Percent with Medicaid
- ☐ Mean travel time to work
- ☒ Percent speaking language other than English at home
- ☐ Race: percent White
- ☐ Race: percent Black
- ☒ Ethnicity: percent Hispanic or Latino
- ☐ Life expectancy
- ☐ Crude death rate
- ☐ Other

Q5. Please describe any other community health statistics that your hospital uses in its community benefit efforts.

Q6. Attach any files containing community health statistics that your hospital uses in its community benefit efforts.

Q7. Section I - General Info Part 2 - Community Benefit Service Area

Q8. The next group of questions asks about the area where your hospital directs its community benefit efforts, called the Community Benefit Service Area. You may find [these community health statistics](#) useful in preparing your responses.

Q9. Please select the county or counties located in your hospital's CBSA.

- ☐ Allegany County
- ☐ Anne Arundel County
- ☐ Baltimore City
- ☒ Baltimore County
- ☐ Calvert County
- ☐ Caroline County
- ☐ Carroll County
- ☐ Cecil County
- ☐ Charles County
- ☐ Dorchester County
- ☐ Frederick County
- ☐ Garrett County
- ☐ Harford County
- ☐ Howard County
- ☐ Kent County
- ☐ Montgomery County
- ☐ Prince George's County
- ☐ Queen Anne's County
- ☐ Somerset County
- ☐ St. Mary's County
- ☐ Talbot County
- ☐ Washington County
- ☐ Wicomico County
- ☐ Worcester County

Q10. Please check all Allegany County ZIP codes located in your hospital's CBSA.

This question was not displayed to the respondent.

Q11. Please check all Anne Arundel County ZIP codes located in your hospital's CBSA.

This question was not displayed to the respondent.

Q12. Please check all Baltimore City ZIP codes located in your hospital's CBSA.

This question was not displayed to the respondent.

Q13. Please check all Baltimore County ZIP codes located in your hospital's CBSA.

- ☒ 21013

☒ 21020

☒ 21022

☒ 21023

☒ 21027

☒ 21030

☒ 21031

☒ 21043

☒ 21051

☒ 21052

☒ 21053

☒ 21057

☒ 21065

☒ 21071

☒ 21074

☒ 21082

☒ 21085

☒ 21087
- ☒ 21092

☒ 21093

☒ 21094

☒ 21102

☒ 21104

☒ 21105

☒ 21111

☒ 21117

☒ 21120

☒ 21128

☒ 21131

☒ 21133

☒ 21136

☒ 21139

☒ 21152

☒ 21153

☒ 21155
- ☒ 21156

☒ 21161

☒ 21162

☒ 21163

☒ 21204

☒ 21206

☒ 21207

☒ 21208

☒ 21209

☒ 21210

☒ 21212

☒ 21215

☒ 21219

☒ 21220

☒ 21221

☒ 21222

☒ 21224
- ☒ 21225

☒ 21227

☒ 21228

☒ 21229

☒ 21234

☒ 21235

☒ 21236

☒ 21237

☒ 21239

☒ 21241

☒ 21244

☒ 21250

☒ 21252

☒ 21282

☒ 21284

☒ 21285

☒ 21286

Q14. Please check all Calvert County ZIP codes located in your hospital's CBSA.

This question was not displayed to the respondent.

Q15. Please check all Caroline County ZIP codes located in your hospital's CBSA.

This question was not displayed to the respondent.

Q16. Please check all Carroll County ZIP codes located in your hospital's CBSA.

*This question was not displayed to the respondent.*

Q17. Please check all Cecil County ZIP codes located in your hospital's CBSA.

*This question was not displayed to the respondent.*

Q18. Please check all Charles County ZIP codes located in your hospital's CBSA.

*This question was not displayed to the respondent.*

Q19. Please check all Dorchester County ZIP codes located in your hospital's CBSA.

*This question was not displayed to the respondent.*

Q20. Please check all Frederick County ZIP codes located in your hospital's CBSA.

*This question was not displayed to the respondent.*

Q21. Please check all Garrett County ZIP codes located in your hospital's CBSA.

*This question was not displayed to the respondent.*

Q22. Please check all Harford County ZIP codes located in your hospital's CBSA.

*This question was not displayed to the respondent.*

Q23. Please check all Howard County ZIP codes located in your hospital's CBSA.

*This question was not displayed to the respondent.*

Q24. Please check all Kent County ZIP codes located in your hospital's CBSA.

*This question was not displayed to the respondent.*

Q25. Please check all Montgomery County ZIP codes located in your hospital's CBSA.

*This question was not displayed to the respondent.*

Q26. Please check all Prince George's County ZIP codes located in your hospital's CBSA.

*This question was not displayed to the respondent.*

Q27. Please check all Queen Anne's County ZIP codes located in your hospital's CBSA.

*This question was not displayed to the respondent.*

Q28. Please check all Somerset County ZIP codes located in your hospital's CBSA.

*This question was not displayed to the respondent.*

Q29. Please check all St. Mary's County ZIP codes located in your hospital's CBSA.

*This question was not displayed to the respondent.*

Q30. Please check all Talbot County ZIP codes located in your hospital's CBSA.

*This question was not displayed to the respondent.*

Q31. Please check all Washington County ZIP codes located in your hospital's CBSA.

*This question was not displayed to the respondent.*

Q32. Please check all Wicomico County ZIP codes located in your hospital's CBSA.

*This question was not displayed to the respondent.*

Q33. Please check all Worcester County ZIP codes located in your hospital's CBSA.

Q34. How did your hospital identify its CBSA?

☐ Based on ZIP codes in your Financial Assistance Policy. Please describe.

☐ Based on ZIP codes in your global budget revenue agreement. Please describe.

☐ Based on patterns of utilization. Please describe.

☒ Other. Please describe.

The Community Benefit Service Area for the University of Maryland St. Joseph Medical Center encompasses all of Baltimore County. This is in keeping with our commitment to serve all county residents and our partnership with the Baltimore County Department of Health, Baltimore County Department of Aging, and University of Maryland Medical System. Current priorities such as physical health, behavioral health, and health disparities extend across all communities in the area. The most recent Community Health Needs Assessment conducted by UM SJMC was done so in conjunction with other health organizations and included all of Baltimore County. Within Baltimore County, there are more vulnerable populations where more targeted efforts occur. Zip codes with the highest utilization rates include: 21234, 21093, 21030, 21212, and 21286. Zip codes with the greatest socioeconomic needs include: 21207, 21221, 21222, 21227, 21030, 21237, 21252 (CNI, 2021).

Q35. Provide a link to your hospital's mission statement.

<https://www.umms.org/sjmc/about>

Q36. (Optional) Is there any other information about your hospital's Community Benefit Service Area that you would like to provide?

Q37. Section II - CHNAs and Stakeholder Involvement Part 1 - Timing & Format

Q38. Within the past three fiscal years, has your hospital conducted a CHNA that conforms to IRS requirements?

☒ Yes

☐ No

Q39. Please explain why your hospital has not conducted a CHNA that conforms to IRS requirements, as well as your hospital's plan and timeframe for completing a CHNA.

Q40. When was your hospital's most recent CHNA completed? (MM/DD/YYYY)

03/18/2024

Q41. Please provide a link to your hospital's most recently completed CHNA. Please provide the entire CHNA, not just an Executive Summary.

<https://www.umms.org/sjmc/community/assessment>

Q42. Please upload your hospital's most recently completed CHNA. Please provide the entire CHNA, not just an Executive Summary.

[2023\\_24\\_20Baltimore\\_20County\\_20CHNA\\_FINAL\\_3.19.24v2%20\(2\).pdf](#)  
5.3MB  
application/pdf

Q43. Section II - CHNAs and Stakeholder Involvement Part 2 - Internal CHNA Partners

Q44. Please use the table below to tell us about the internal partners involved in the development of your most recent CHNA.

|                                                                  | CHNA Activities                               |                                             |                                     |                                             |                                     |                                         |                                                   |                                                                      |                                |                                     |                                                                                |
|------------------------------------------------------------------|-----------------------------------------------|---------------------------------------------|-------------------------------------|---------------------------------------------|-------------------------------------|-----------------------------------------|---------------------------------------------------|----------------------------------------------------------------------|--------------------------------|-------------------------------------|--------------------------------------------------------------------------------|
|                                                                  | N/A - Person or Organization was not Involved | N/A - Position or Department does not exist | Member of CHNA Committee            | Participated in development of CHNA process | Advised on CHNA best practices      | Participated in primary data collection | Participated in identifying priority health needs | Participated in identifying community resources to meet health needs | Provided secondary health data | Other (explain)                     | Other - If you selected "Other (explain)," please type your explanation below: |
| CB/ Community Health/Population Health Director (facility level) | <input type="checkbox"/>                      | <input type="checkbox"/>                    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/>         | <input type="checkbox"/>            | <input checked="" type="checkbox"/>     | <input checked="" type="checkbox"/>               | <input checked="" type="checkbox"/>                                  | <input type="checkbox"/>       | <input type="checkbox"/>            |                                                                                |
|                                                                  | N/A - Person or Organization was not Involved | N/A - Position or Department does not exist | Member of CHNA Committee            | Participated in development of CHNA process | Advised on CHNA best practices      | Participated in primary data collection | Participated in identifying priority health needs | Participated in identifying community resources to meet health needs | Provided secondary health data | Other (explain)                     | Other - If you selected "Other (explain)," please type your explanation below: |
| CB/ Community Health/ Population Health Director (system level)  | <input checked="" type="checkbox"/>           | <input type="checkbox"/>                    | <input type="checkbox"/>            | <input type="checkbox"/>                    | <input type="checkbox"/>            | <input type="checkbox"/>                | <input type="checkbox"/>                          | <input type="checkbox"/>                                             | <input type="checkbox"/>       | <input type="checkbox"/>            |                                                                                |
|                                                                  | N/A - Person or Organization was not Involved | N/A - Position or Department does not exist | Member of CHNA Committee            | Participated in development of CHNA process | Advised on CHNA best practices      | Participated in primary data collection | Participated in identifying priority health needs | Participated in identifying community resources to meet health needs | Provided secondary health data | Other (explain)                     | Other - If you selected "Other (explain)," please type your explanation below: |
| Senior Executives (CEO, CFO, VP, etc.) (facility level)          | <input type="checkbox"/>                      | <input type="checkbox"/>                    | <input type="checkbox"/>            | <input type="checkbox"/>                    | <input type="checkbox"/>            | <input checked="" type="checkbox"/>     | <input checked="" type="checkbox"/>               | <input checked="" type="checkbox"/>                                  | <input type="checkbox"/>       | <input type="checkbox"/>            |                                                                                |
|                                                                  | N/A - Person or Organization was not Involved | N/A - Position or Department does not exist | Member of CHNA Committee            | Participated in development of CHNA process | Advised on CHNA best practices      | Participated in primary data collection | Participated in identifying priority health needs | Participated in identifying community resources to meet health needs | Provided secondary health data | Other (explain)                     | Other - If you selected "Other (explain)," please type your explanation below: |
| Senior Executives (CEO, CFO, VP, etc.) (system level)            | <input type="checkbox"/>                      | <input type="checkbox"/>                    | <input type="checkbox"/>            | <input type="checkbox"/>                    | <input checked="" type="checkbox"/> | <input type="checkbox"/>                | <input type="checkbox"/>                          | <input type="checkbox"/>                                             | <input type="checkbox"/>       | <input type="checkbox"/>            |                                                                                |
|                                                                  | N/A - Person or Organization was not Involved | N/A - Position or Department does not exist | Member of CHNA Committee            | Participated in development of CHNA process | Advised on CHNA best practices      | Participated in primary data collection | Participated in identifying priority health needs | Participated in identifying community resources to meet health needs | Provided secondary health data | Other (explain)                     | Other - If you selected "Other (explain)," please type your explanation below: |
| Board of Directors or Board Committee (facility level)           | <input type="checkbox"/>                      | <input type="checkbox"/>                    | <input type="checkbox"/>            | <input type="checkbox"/>                    | <input type="checkbox"/>            | <input type="checkbox"/>                | <input type="checkbox"/>                          | <input type="checkbox"/>                                             | <input type="checkbox"/>       | <input checked="" type="checkbox"/> | approved CHNA report and implementation plan                                   |
|                                                                  | N/A - Person or Organization was not Involved | N/A - Position or Department does not exist | Member of CHNA Committee            | Participated in development of CHNA process | Advised on CHNA best practices      | Participated in primary data collection | Participated in identifying priority health needs | Participated in identifying community resources to meet health needs | Provided secondary health data | Other (explain)                     | Other - If you selected "Other (explain)," please type your explanation below: |

|                                                      |                                               |                                             |                                     |                                             |                                     |                                         |                                                   |                                                                      |                                |                          |                                                                                |
|------------------------------------------------------|-----------------------------------------------|---------------------------------------------|-------------------------------------|---------------------------------------------|-------------------------------------|-----------------------------------------|---------------------------------------------------|----------------------------------------------------------------------|--------------------------------|--------------------------|--------------------------------------------------------------------------------|
| Board of Directors or Board Committee (system level) | <input checked="" type="checkbox"/>           | <input type="checkbox"/>                    | <input type="checkbox"/>            | <input type="checkbox"/>                    | <input type="checkbox"/>            | <input type="checkbox"/>                | <input type="checkbox"/>                          | <input type="checkbox"/>                                             | <input type="checkbox"/>       | <input type="checkbox"/> |                                                                                |
|                                                      | N/A - Person or Organization was not Involved | N/A - Position or Department does not exist | Member of CHNA Committee            | Participated in development of CHNA process | Advised on CHNA best practices      | Participated in primary data collection | Participated in identifying priority health needs | Participated in identifying community resources to meet health needs | Provided secondary health data | Other (explain)          | Other - If you selected "Other (explain)," please type your explanation below: |
| Clinical Leadership (facility level)                 | <input type="checkbox"/>                      | <input type="checkbox"/>                    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/>         | <input type="checkbox"/>            | <input checked="" type="checkbox"/>     | <input checked="" type="checkbox"/>               | <input checked="" type="checkbox"/>                                  | <input type="checkbox"/>       | <input type="checkbox"/> |                                                                                |
|                                                      | N/A - Person or Organization was not Involved | N/A - Position or Department does not exist | Member of CHNA Committee            | Participated in development of CHNA process | Advised on CHNA best practices      | Participated in primary data collection | Participated in identifying priority health needs | Participated in identifying community resources to meet health needs | Provided secondary health data | Other (explain)          | Other - If you selected "Other (explain)," please type your explanation below: |
| Clinical Leadership (system level)                   | <input type="checkbox"/>                      | <input type="checkbox"/>                    | <input type="checkbox"/>            | <input type="checkbox"/>                    | <input checked="" type="checkbox"/> | <input type="checkbox"/>                | <input type="checkbox"/>                          | <input type="checkbox"/>                                             | <input type="checkbox"/>       | <input type="checkbox"/> |                                                                                |
|                                                      | N/A - Person or Organization was not Involved | N/A - Position or Department does not exist | Member of CHNA Committee            | Participated in development of CHNA process | Advised on CHNA best practices      | Participated in primary data collection | Participated in identifying priority health needs | Participated in identifying community resources to meet health needs | Provided secondary health data | Other (explain)          | Other - If you selected "Other (explain)," please type your explanation below: |
| Population Health Staff (facility level)             | <input type="checkbox"/>                      | <input type="checkbox"/>                    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/>         | <input type="checkbox"/>            | <input checked="" type="checkbox"/>     | <input checked="" type="checkbox"/>               | <input checked="" type="checkbox"/>                                  | <input type="checkbox"/>       | <input type="checkbox"/> |                                                                                |
|                                                      | N/A - Person or Organization was not Involved | N/A - Position or Department does not exist | Member of CHNA Committee            | Participated in development of CHNA process | Advised on CHNA best practices      | Participated in primary data collection | Participated in identifying priority health needs | Participated in identifying community resources to meet health needs | Provided secondary health data | Other (explain)          | Other - If you selected "Other (explain)," please type your explanation below: |
| Population Health Staff (system level)               | <input checked="" type="checkbox"/>           | <input type="checkbox"/>                    | <input type="checkbox"/>            | <input type="checkbox"/>                    | <input type="checkbox"/>            | <input type="checkbox"/>                | <input type="checkbox"/>                          | <input type="checkbox"/>                                             | <input type="checkbox"/>       | <input type="checkbox"/> |                                                                                |
|                                                      | N/A - Person or Organization was not Involved | N/A - Position or Department does not exist | Member of CHNA Committee            | Participated in development of CHNA process | Advised on CHNA best practices      | Participated in primary data collection | Participated in identifying priority health needs | Participated in identifying community resources to meet health needs | Provided secondary health data | Other (explain)          | Other - If you selected "Other (explain)," please type your explanation below: |
| Community Benefit staff (facility level)             | <input type="checkbox"/>                      | <input type="checkbox"/>                    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/>         | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/>     | <input checked="" type="checkbox"/>               | <input checked="" type="checkbox"/>                                  | <input type="checkbox"/>       | <input type="checkbox"/> |                                                                                |
|                                                      | N/A - Person or Organization was not Involved | N/A - Position or Department does not exist | Member of CHNA Committee            | Participated in development of CHNA process | Advised on CHNA best practices      | Participated in primary data collection | Participated in identifying priority health needs | Participated in identifying community resources to meet health needs | Provided secondary health data | Other (explain)          | Other - If you selected "Other (explain)," please type your explanation below: |
| Community Benefit staff (system level)               | <input type="checkbox"/>                      | <input type="checkbox"/>                    | <input type="checkbox"/>            | <input type="checkbox"/>                    | <input checked="" type="checkbox"/> | <input type="checkbox"/>                | <input checked="" type="checkbox"/>               | <input type="checkbox"/>                                             | <input type="checkbox"/>       | <input type="checkbox"/> |                                                                                |
|                                                      | N/A - Person or Organization was not Involved | N/A - Position or Department does not exist | Member of CHNA Committee            | Participated in development of CHNA process | Advised on CHNA best practices      | Participated in primary data collection | Participated in identifying priority health needs | Participated in identifying community resources to meet health needs | Provided secondary health data | Other (explain)          | Other - If you selected "Other (explain)," please type your explanation below: |
| Physician(s)                                         | <input type="checkbox"/>                      | <input type="checkbox"/>                    | <input type="checkbox"/>            | <input type="checkbox"/>                    | <input type="checkbox"/>            | <input checked="" type="checkbox"/>     | <input checked="" type="checkbox"/>               | <input checked="" type="checkbox"/>                                  | <input type="checkbox"/>       | <input type="checkbox"/> |                                                                                |
|                                                      | N/A - Person or Organization was not Involved | N/A - Position or Department does not exist | Member of CHNA Committee            | Participated in development of CHNA process | Advised on CHNA best practices      | Participated in primary data collection | Participated in identifying priority health needs | Participated in identifying community resources to meet health needs | Provided secondary health data | Other (explain)          | Other - If you selected "Other (explain)," please type your explanation below: |
| Nurse(s)                                             | <input type="checkbox"/>                      | <input type="checkbox"/>                    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/>         | <input type="checkbox"/>            | <input checked="" type="checkbox"/>     | <input checked="" type="checkbox"/>               | <input checked="" type="checkbox"/>                                  | <input type="checkbox"/>       | <input type="checkbox"/> |                                                                                |
|                                                      | N/A - Person or Organization was not Involved | N/A - Position or Department does not exist | Member of CHNA Committee            | Participated in development of CHNA process | Advised on CHNA best practices      | Participated in primary data collection | Participated in identifying priority health needs | Participated in identifying community resources to meet health needs | Provided secondary health data | Other (explain)          | Other - If you selected "Other (explain)," please type your explanation below: |
| Social Workers                                       | <input type="checkbox"/>                      | <input type="checkbox"/>                    | <input type="checkbox"/>            | <input type="checkbox"/>                    | <input type="checkbox"/>            | <input checked="" type="checkbox"/>     | <input checked="" type="checkbox"/>               | <input checked="" type="checkbox"/>                                  | <input type="checkbox"/>       | <input type="checkbox"/> |                                                                                |

|                                                                  | Activities                                    |                                             |                                              |                                                  |                                                       |                                     |                                               |                                     |                                          |                          |                                                                                |
|------------------------------------------------------------------|-----------------------------------------------|---------------------------------------------|----------------------------------------------|--------------------------------------------------|-------------------------------------------------------|-------------------------------------|-----------------------------------------------|-------------------------------------|------------------------------------------|--------------------------|--------------------------------------------------------------------------------|
|                                                                  | N/A - Person or Organization was not Involved | N/A - Position or Department does not exist | Selecting health needs that will be targeted | Selecting the initiatives that will be supported | Determining how to evaluate the impact of initiatives | Providing funding for CB activities | Allocating budgets for individual initiatives | Delivering CB initiatives           | Evaluating the outcome of CB initiatives | Other (explain)          | Other - If you selected "Other (explain)," please type your explanation below: |
| CB/ Community Health/Population Health Director (facility level) | <input type="checkbox"/>                      | <input type="checkbox"/>                    | <input checked="" type="checkbox"/>          | <input checked="" type="checkbox"/>              | <input checked="" type="checkbox"/>                   | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/>           | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/>      | <input type="checkbox"/> |                                                                                |
|                                                                  | N/A - Person or Organization was not Involved | N/A - Position or Department does not exist | Selecting health needs that will be targeted | Selecting the initiatives that will be supported | Determining how to evaluate the impact of initiatives | Providing funding for CB activities | Allocating budgets for individual initiatives | Delivering CB initiatives           | Evaluating the outcome of CB initiatives | Other (explain)          | Other - If you selected "Other (explain)," please type your explanation below: |
| CB/ Community Health/ Population Health Director (system level)  | <input checked="" type="checkbox"/>           | <input type="checkbox"/>                    | <input type="checkbox"/>                     | <input type="checkbox"/>                         | <input type="checkbox"/>                              | <input type="checkbox"/>            | <input type="checkbox"/>                      | <input type="checkbox"/>            | <input type="checkbox"/>                 | <input type="checkbox"/> |                                                                                |
|                                                                  | N/A - Person or Organization was not Involved | N/A - Position or Department does not exist | Selecting health needs that will be targeted | Selecting the initiatives that will be supported | Determining how to evaluate the impact of initiatives | Providing funding for CB activities | Allocating budgets for individual initiatives | Delivering CB initiatives           | Evaluating the outcome of CB initiatives | Other (explain)          | Other - If you selected "Other (explain)," please type your explanation below: |
| Senior Executives (CEO, CFO, VP, etc.) (facility level)          | <input type="checkbox"/>                      | <input type="checkbox"/>                    | <input checked="" type="checkbox"/>          | <input checked="" type="checkbox"/>              | <input checked="" type="checkbox"/>                   | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/>           | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/>      | <input type="checkbox"/> |                                                                                |
|                                                                  | N/A - Person or Organization was not Involved | N/A - Position or Department does not exist | Selecting health needs that will be targeted | Selecting the initiatives that will be supported | Determining how to evaluate the impact of initiatives | Providing funding for CB activities | Allocating budgets for individual initiatives | Delivering CB initiatives           | Evaluating the outcome of CB initiatives | Other (explain)          | Other - If you selected "Other (explain)," please type your explanation below: |
| Senior Executives (CEO, CFO, VP, etc.) (system level)            | <input type="checkbox"/>                      | <input type="checkbox"/>                    | <input type="checkbox"/>                     | <input type="checkbox"/>                         | <input type="checkbox"/>                              | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/>           | <input type="checkbox"/>            | <input type="checkbox"/>                 | <input type="checkbox"/> |                                                                                |
|                                                                  | N/A - Person or Organization was not Involved | N/A - Position or Department does not exist | Selecting health needs that will be targeted | Selecting the initiatives that will be supported | Determining how to evaluate the impact of initiatives | Providing funding for CB activities | Allocating budgets for individual initiatives | Delivering CB initiatives           | Evaluating the outcome of CB initiatives | Other (explain)          | Other - If you selected "Other (explain)," please type your explanation below: |
| Board of Directors or Board Committee (facility level)           | <input type="checkbox"/>                      | <input type="checkbox"/>                    | <input type="checkbox"/>                     | <input type="checkbox"/>                         | <input type="checkbox"/>                              | <input type="checkbox"/>            | <input type="checkbox"/>                      | <input type="checkbox"/>            | <input checked="" type="checkbox"/>      | <input type="checkbox"/> |                                                                                |
|                                                                  | N/A - Person or Organization was not Involved | N/A - Position or Department does not exist | Selecting health needs that will be targeted | Selecting the initiatives that will be supported | Determining how to evaluate the impact of initiatives | Providing funding for CB activities | Allocating budgets for individual initiatives | Delivering CB initiatives           | Evaluating the outcome of CB initiatives | Other (explain)          | Other - If you selected "Other (explain)," please type your explanation below: |
| Board of Directors or Board Committee (system level)             | <input checked="" type="checkbox"/>           | <input type="checkbox"/>                    | <input type="checkbox"/>                     | <input type="checkbox"/>                         | <input type="checkbox"/>                              | <input type="checkbox"/>            | <input type="checkbox"/>                      | <input type="checkbox"/>            | <input type="checkbox"/>                 | <input type="checkbox"/> |                                                                                |
|                                                                  | N/A - Person or Organization was not Involved | N/A - Position or Department does not exist | Selecting health needs that will be targeted | Selecting the initiatives that will be supported | Determining how to evaluate the impact of initiatives | Providing funding for CB activities | Allocating budgets for individual initiatives | Delivering CB initiatives           | Evaluating the outcome of CB initiatives | Other (explain)          | Other - If you selected "Other (explain)," please type your explanation below: |

[illegible]

Q47. Section II - CHNAs and Stakeholder Involvement Part 4 - Meaningful Engagement

Q48. Community participation and meaningful engagement is an essential component to changing health system behavior, activating partnerships that improve health outcomes and sustaining community ownership and investment in programs. Please use the table below to tell us about the external partners involved in your most recent CHNA. In the first column, select and describe the external participants. In the second column, select the level of community engagement for each participant. In the third column, select the recommended practices that each stakeholder was engaged in. The Maryland Hospital Association worked with the HSCRC to develop this list of eight recommended practices for engaging patients and communities in the CHNA process.

Refer to the FY 2024 Community Benefit Guidelines for more detail on MHA's recommended practices. Completion of this self-assessment is mandatory for FY 2024.

[illegible]

[illegible]

|                                                                                                                                                                        |                                                                                                                                                                                                                        |                                                                                                                                    |                                                                                                                                                                                                      |                                                                                                                                                                                                          |                                                                                                            |                                                                                                                                       |                                                                        |                                                                         |                                                                  |                                                                             |                                                                      |                                                                    |                                                                 |                                                       |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|-------------------------------------------------------------------------|------------------------------------------------------------------|-----------------------------------------------------------------------------|----------------------------------------------------------------------|--------------------------------------------------------------------|-----------------------------------------------------------------|-------------------------------------------------------|
| <div>Post-Acute Care Facilities -- please list the facilities here:</div> <div>Stella Maris, Autumn Lake, St Elizabeth Hall</div>                                      | <div>Informed - To provide the community with balanced &amp; objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions</div> <input type="checkbox"/>            | <div>Consulted - To obtain community feedback on analysis, alternatives and/or solutions</div> <input checked="" type="checkbox"/> | <div>Involved - To work directly with community throughout the process to ensure their concerns and aspirations are consistently understood and considered</div> <input checked="" type="checkbox"/> | <div>Collaborated - To partner with the community in each aspect of the decision including the development of alternatives &amp; identification of the preferred solution</div> <input type="checkbox"/> | <div>Delegated - To place the decision-making in the hands of the community</div> <input type="checkbox"/> | <div>Community-Driven/Led - To support the actions of community initiated, driven and/or led processes</div> <input type="checkbox"/> | <div>Identify &amp; Engage Stakeholders</div> <input type="checkbox"/> | <div>Define the community to be assessed</div> <input type="checkbox"/> | <div>Collect and analyze the data</div> <input type="checkbox"/> | <div>Select priority community health issues</div> <input type="checkbox"/> | <div>Document and communicate results</div> <input type="checkbox"/> | <div>Plan Implementation Strategies</div> <input type="checkbox"/> | <div>Implement Improvement Plans</div> <input type="checkbox"/> | <div>Evaluate Progress</div> <input type="checkbox"/> |
| <div>Community/Neighborhood Organizations -- Please list the organizations here:</div> <div>The Y Central Maryland, Trinity House, TABCO Towers</div>                  | <div>Informed - To provide the community with balanced &amp; objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions</div> <input type="checkbox"/>            | <div>Consulted - To obtain community feedback on analysis, alternatives and/or solutions</div> <input checked="" type="checkbox"/> | <div>Involved - To work directly with community throughout the process to ensure their concerns and aspirations are consistently understood and considered</div> <input checked="" type="checkbox"/> | <div>Collaborated - To partner with the community in each aspect of the decision including the development of alternatives &amp; identification of the preferred solution</div> <input type="checkbox"/> | <div>Delegated - To place the decision-making in the hands of the community</div> <input type="checkbox"/> | <div>Community-Driven/Led - To support the actions of community initiated, driven and/or led processes</div> <input type="checkbox"/> | <div>Identify &amp; Engage Stakeholders</div> <input type="checkbox"/> | <div>Define the community to be assessed</div> <input type="checkbox"/> | <div>Collect and analyze the data</div> <input type="checkbox"/> | <div>Select priority community health issues</div> <input type="checkbox"/> | <div>Document and communicate results</div> <input type="checkbox"/> | <div>Plan Implementation Strategies</div> <input type="checkbox"/> | <div>Implement Improvement Plans</div> <input type="checkbox"/> | <div>Evaluate Progress</div> <input type="checkbox"/> |
| <div>Consumer/Public Advocacy Organizations -- Please list the organizations here:</div> <div>Nueva Vida, Student Support Network, GEDCO, Maryland Food Bank</div>     | <div>Informed - To provide the community with balanced &amp; objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions</div> <input type="checkbox"/>            | <div>Consulted - To obtain community feedback on analysis, alternatives and/or solutions</div> <input type="checkbox"/>            | <div>Involved - To work directly with community throughout the process to ensure their concerns and aspirations are consistently understood and considered</div> <input type="checkbox"/>            | <div>Collaborated - To partner with the community in each aspect of the decision including the development of alternatives &amp; identification of the preferred solution</div> <input type="checkbox"/> | <div>Delegated - To place the decision-making in the hands of the community</div> <input type="checkbox"/> | <div>Community-Driven/Led - To support the actions of community initiated, driven and/or led processes</div> <input type="checkbox"/> | <div>Identify &amp; Engage Stakeholders</div> <input type="checkbox"/> | <div>Define the community to be assessed</div> <input type="checkbox"/> | <div>Collect and analyze the data</div> <input type="checkbox"/> | <div>Select priority community health issues</div> <input type="checkbox"/> | <div>Document and communicate results</div> <input type="checkbox"/> | <div>Plan Implementation Strategies</div> <input type="checkbox"/> | <div>Implement Improvement Plans</div> <input type="checkbox"/> | <div>Evaluate Progress</div> <input type="checkbox"/> |
| <div>Consumer/Public Advocacy Organizations -- Please list the organizations here:</div> <div>Nueva Vida, Student Support Network, GEDCO, Maryland Food Bank</div>     | <div>Informed - To provide the community with balanced &amp; objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions</div> <input checked="" type="checkbox"/> | <div>Consulted - To obtain community feedback on analysis, alternatives and/or solutions</div> <input checked="" type="checkbox"/> | <div>Involved - To work directly with community throughout the process to ensure their concerns and aspirations are consistently understood and considered</div> <input checked="" type="checkbox"/> | <div>Collaborated - To partner with the community in each aspect of the decision including the development of alternatives &amp; identification of the preferred solution</div> <input type="checkbox"/> | <div>Delegated - To place the decision-making in the hands of the community</div> <input type="checkbox"/> | <div>Community-Driven/Led - To support the actions of community initiated, driven and/or led processes</div> <input type="checkbox"/> | <div>Identify &amp; Engage Stakeholders</div> <input type="checkbox"/> | <div>Define the community to be assessed</div> <input type="checkbox"/> | <div>Collect and analyze the data</div> <input type="checkbox"/> | <div>Select priority community health issues</div> <input type="checkbox"/> | <div>Document and communicate results</div> <input type="checkbox"/> | <div>Plan Implementation Strategies</div> <input type="checkbox"/> | <div>Implement Improvement Plans</div> <input type="checkbox"/> | <div>Evaluate Progress</div> <input type="checkbox"/> |
| <div>Other -- If any other people or organizations were involved, please list them here:</div> <div>St Clare Medical Outreach, Baltimore County Public Libraries</div> | <div>Informed - To provide the community with balanced &amp; objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions</div> <input checked="" type="checkbox"/> | <div>Consulted - To obtain community feedback on analysis, alternatives and/or solutions</div> <input checked="" type="checkbox"/> | <div>Involved - To work directly with community throughout the process to ensure their concerns and aspirations are consistently understood and considered</div> <input checked="" type="checkbox"/> | <div>Collaborated - To partner with the community in each aspect of the decision including the development of alternatives &amp; identification of the preferred solution</div> <input type="checkbox"/> | <div>Delegated - To place the decision-making in the hands of the community</div> <input type="checkbox"/> | <div>Community-Driven/Led - To support the actions of community initiated, driven and/or led processes</div> <input type="checkbox"/> | <div>Identify &amp; Engage Stakeholders</div> <input type="checkbox"/> | <div>Define the community to be assessed</div> <input type="checkbox"/> | <div>Collect and analyze the data</div> <input type="checkbox"/> | <div>Select priority community health issues</div> <input type="checkbox"/> | <div>Document and communicate results</div> <input type="checkbox"/> | <div>Plan Implementation Strategies</div> <input type="checkbox"/> | <div>Implement Improvement Plans</div> <input type="checkbox"/> | <div>Evaluate Progress</div> <input type="checkbox"/> |
|                                                                                                                                                                        | <div>Informed - To provide the community with balanced &amp; objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions</div> <input type="checkbox"/>            | <div>Consulted - To obtain community feedback on analysis, alternatives and/or solutions</div> <input type="checkbox"/>            | <div>Involved - To work directly with community throughout the process to ensure their concerns and aspirations are consistently understood and considered</div> <input type="checkbox"/>            | <div>Collaborated - To partner with the community in each aspect of the decision including the development of alternatives &amp; identification of the preferred solution</div> <input type="checkbox"/> | <div>Delegated - To place the decision-making in the hands of the community</div> <input type="checkbox"/> | <div>Community-Driven/Led - To support the actions of community initiated, driven and/or led processes</div> <input type="checkbox"/> | <div>Identify &amp; Engage Stakeholders</div> <input type="checkbox"/> | <div>Define the community to be assessed</div> <input type="checkbox"/> | <div>Collect and analyze the data</div> <input type="checkbox"/> | <div>Select priority community health issues</div> <input type="checkbox"/> | <div>Document and communicate results</div> <input type="checkbox"/> | <div>Plan Implementation Strategies</div> <input type="checkbox"/> | <div>Implement Improvement Plans</div> <input type="checkbox"/> | <div>Evaluate Progress</div> <input type="checkbox"/> |

Q49. Section II - CHNAs and Stakeholder Involvement Part 5 - Follow-up

Q50. Has your hospital adopted an implementation strategy following its most recent CHNA, as required by the IRS?

- ☒ Yes
- ☐ No

Q51. Please enter the date on which the implementation strategy was approved by your hospital's governing body.

November 2024

Q52. Please provide a link to your hospital's CHNA implementation strategy.

https://www.umms.org/sjmc/community/assessment

Q53. Please upload your hospital's CHNA implementation strategy.

2023\_24\_20Baltimore\_20County\_20CHNA\_FINAL\_3.19.24v2%20(3).pdf  
5.3MB  
application/pdf

Q54. Please explain why your hospital has not adopted an implementation strategy. Please include whether the hospital has a plan and/or a timeframe for an implementation strategy.

This question was not displayed to the respondent.

Q55. (Optional) Please use the box below to provide any other information about your CHNA that you wish to share.

Q56. (Optional) Please attach any files containing information regarding your CHNA that you wish to share.

q57. Section II - CHNAs and Stakeholder Involvement Part 6 - Initiatives

Q58. Were all the needs identified in your most recently completed CHNA addressed by an initiative of your hospital?

- ☒ Yes
- ☐ No

Q59. Using the checkboxes below, select the Community Health Needs identified in your most recent CHNA that were NOT addressed by your community benefit initiatives.

This question was not displayed to the respondent.

Q60. Why were these needs unaddressed?

This question was not displayed to the respondent.

Q61. Please describe the hospital's efforts to track and reduce health disparities in the community it serves.

UMMS has developed a multi-year plan, backed by a \$40 million investment, that outlines our commitment to equity in care delivery, diversity in our workforce, meaningful investments in local communities and expanded opportunities for minority-owned businesses.

Q62. Other than Charity Care, Graduate Medical Education, and the Nurse Support Programs, please select the rate supported programs in which your hospital participates:

- ☐ None
- ☒ Regional Partnership Catalyst Grant Program
- ☐ The Medicare Advantage Partnership Grant Program
- ☐ The COVID-19 Long-Term Care Partnership Grant
- ☐ The COVID-19 Community Vaccination Program

☐ The Population Health Workforce Support for Disadvantaged Areas Program

☐ Other (Describe)

Q63. (Optional) If you wish, you may upload a document describing your community benefit initiatives in more detail.

## Q64. Section III - CB Administration

Q65. Does your hospital conduct an internal audit of the annual community benefit financial spreadsheet? Select all that apply.

- ☒ Yes, by the hospital's staff
- ☒ Yes, by the hospital system's staff
- ☐ Yes, by a third-party auditor
- ☐ No

Q66. Please describe the third party audit process used.

*This question was not displayed to the respondent.*

Q67. Does your hospital conduct an internal audit of the community benefit narrative?

- ☒ Yes
- ☐ No

Q68. Please describe the community benefit narrative audit process.

The community benefit narrative is reviewed by the UMSJMC VP of Population Health, Values Based Care, UMSJMC Director of Community and Population Health as well as the UMMS Sr. Director of Community Health. It is then approved by the UMSJMC Finance Committee of the board and shared with all members of the Board of Directors.

Q69. Does the hospital's board review and approve the annual community benefit financial spreadsheet?

- ☒ Yes
- ☐ No

Q70. Please explain:

*This question was not displayed to the respondent.*

Q71. Does the hospital's board review and approve the annual community benefit narrative report?

- ☒ Yes
- ☐ No

Q72. Please explain:

*This question was not displayed to the respondent.*

Q73. Does your hospital include community benefit planning and investments in its internal strategic plan?

- ☒ Yes
- ☐ No

Q74. Please describe how community benefit planning and investments were included in your hospital's internal strategic plan during the fiscal year.

The UMSJMC 2021-2025 Strategic plan includes a goal devoted entirely to providing access to integrated, value drive care, to improve community health and wellbeing, and advance the culture of philanthropy.

Q75. If available, please provide a link to your hospital's strategic plan.

<https://www.umms.org/sjmc/about/facts-about-um-sjmc>

Q76. Do any of the hospital's community benefit operations/activities align with the Statewide Integrated Health Improvement Strategy (SIHIS)? Please select all that apply and describe how your initiatives are targeting each SIHIS goal. [More information about SIHIS may be found here.](#)

☒ Diabetes - Reduce the mean BMI for Maryland residents

We offer the Prevent T2 diabetes prevention program to prevent/delay onset of type 2 diabetes and the main goal of the program is to have all participants reduce their body weight by at least 4-7%, which also reduces their BMI.

☐ Opioid Use Disorder - Improve overdose mortality

☐ Maternal and Child Health - Reduce severe maternal morbidity rate

☐ Maternal and Child Health - Decrease asthma-related emergency department visit rates for children aged 2-17

☐ None of the Above

Q77. (Optional) Did your hospital's initiatives during the fiscal year address other state health goals? If so, tell us about them below.

Q78. Section IV - Physician Gaps & Subsidies

Q79. (Optional) Please attach any files containing further information and data justifying physician subsidies at your hospital.

(This year, all information on physician gap subsidies is collected on the financials. However, if you have additional information on these subsidies to report, you may do so through attachments here.)

Q80. Section V - Financial Assistance Policy (FAP)

Q81. Upload a copy of your hospital's financial assistance policy.

Q82. Provide the link to your hospital's financial assistance policy.

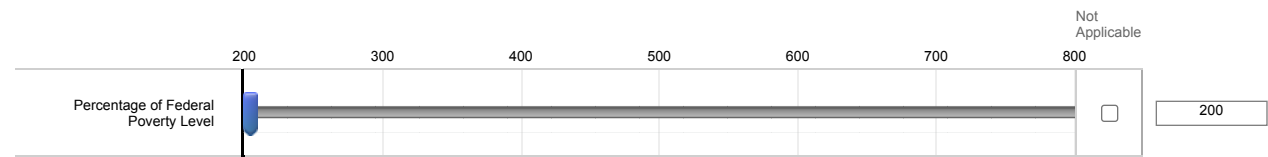
<https://www.umms.org/-/media/files/umms/patients-and-visitors/financial-assistance-policy/july-2023/umms-financial-assistance-policy-7-1-23-english.pdf?upd=20230808192913>

Q83. Has your FAP changed within the last year? If so, please describe the change.

- ☐ No, the FAP has not changed.
- ☒ Yes, the FAP has changed. Please describe:

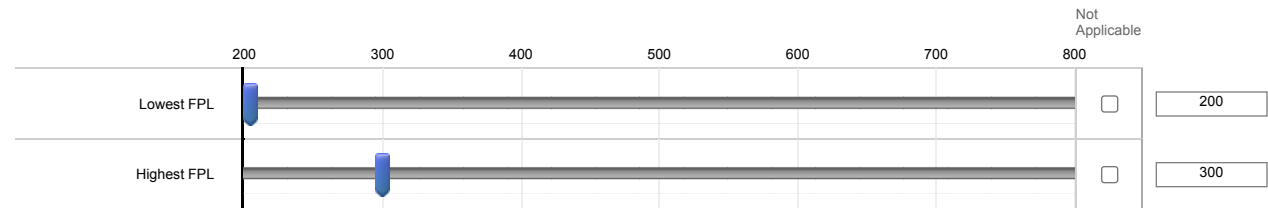
Q84. Maryland acute care and chronic care hospitals are required under Health General §19-214.1(b)(2)(i) COMAR 10.37.10.26(A-2)(2)(a)(i) to provide free medically necessary care to patients with family income at or below 200 percent of the federal poverty level (FPL).

Please select the percentage of FPL below which your hospital's FAP offers free care.



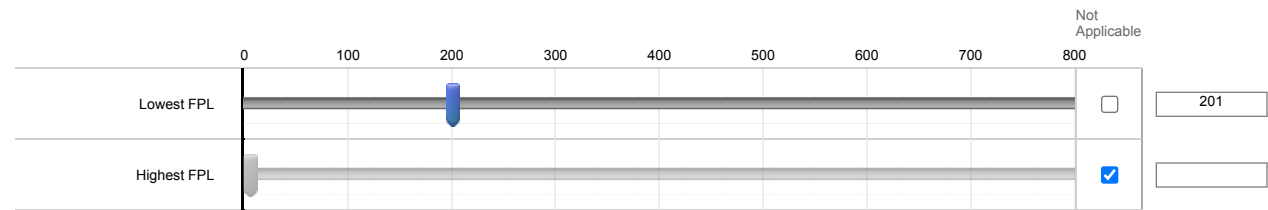
Q85. Maryland acute care and chronic care hospitals are required under COMAR 10.37.10.26(A-2)(2)(a)(ii) to provide reduced-cost, medically necessary care to low-income patients with family income between 200 and 300 percent of the federal poverty level.

Please select the range of the percentage of FPL for which your hospital's FAP offers reduced-cost care.

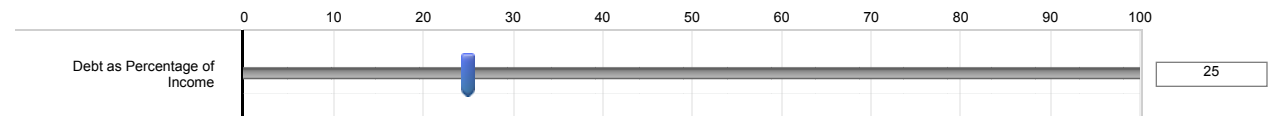


Q86. Maryland acute care and chronic care hospitals are required under Health General §19-214.1(b)(2)(iii) COMAR 10.37.10.26(A-2)(3)(a) to provide reduced-cost, medically necessary care to patients with family income below 500 percent of the federal poverty level who have a financial hardship. Financial hardship is defined in Health General §19-214.1(a)(2) and COMAR 10.37.10.26(A-2)(1)(b)(i) as a medical debt, incurred by a family over a 12-month period that exceeds 25 percent of family income.

Please select the range of the percentage of FPL for which your hospital's FAP offers reduced-cost care for financial hardship.



Q87. Please select the threshold for medical debt as a percentage of family income above which qualifies as a financial hardship.



Q88. Section VI - Tax Exemptions

Q89. Per Health General Article §19-303 (c)(4)(ix), list each tax exemption your hospital claimed in the preceding taxable year (select all that apply)

- ☒ Federal corporate income tax
- ☒ State corporate income tax
- ☒ State sales tax
- ☒ Local property tax (real and personal)
- ☐ Other (Describe)

Q90. Summary & Report Submission

Q91. **Attention Hospital Staff! IMPORTANT!**

You have reached the end of the questions, but you are not quite finished. Your narrative has not yet been fully submitted. Once you proceed to the next screen using the right arrow button below, you cannot go backward. **You cannot change any of your answers if you proceed beyond this screen.**

We strongly urge you to contact us at [hcbhelp@hilltop.umbc.edu](mailto:hcbhelp@hilltop.umbc.edu) to request a copy of your answers. We will happily send you a pdf copy of your narrative that you can share with your leadership, Board, or other interested parties. If you need to make any corrections or change any of your answers, you can use the Table of Contents feature to navigate to the appropriate section of the narrative.

Once you are fully confident that your answers are final, return to this screen then click the right arrow button below to officially submit your narrative.

Location Data

Location: [\[39.2293, -76.6907\]](#)

Source: GeoIP Estimation





# BALTIMORE COUNTY COMMUNITY HEALTH NEEDS ASSESSMENT



2023-2024



MedStar Health



## ACKNOWLEDGEMENTS

This Community Health Needs Assessment (CHNA) represents the culmination of work completed by multiple individuals and groups. The Baltimore County Department of Health (BCDH) and local health systems including Northwest Hospital of LifeBridge Health, Greater Baltimore Medical Center Healthcare (GBMC), the University of Maryland St. Joseph Medical Center (UM SJMC), and MedStar Franklin Square Medical Center (MFSMC) have served an integral role in making this comprehensive assessment possible and will be referred to as the Steering Committee throughout this CHNA. The Steering Committee would like to extend its gratitude to all the focus groups participants, key community health leaders, and community members who provided information used in the development of this assessment.

### The CHNA Steering Committee

| Name               | Title                                                   | Organization      |
|--------------------|---------------------------------------------------------|-------------------|
| D'Ambra Anderson   | Population Health and Community Benefit Project Manager | GBMC              |
| David Baker        | Executive Director of Population and Community Health   | LifeBridge Health |
| Rebecca Cohen      | Community Health Nurse Manager                          | UM SJMC           |
| Jill Brown Hong    | Director of Community and Population Health             | UM SJMC           |
| Rosemary Burrell   | Public Health Nurse Administrator – Population Health   | BCDH              |
| Terrie Dashiell    | Director of Community Health and Wellness               | LifeBridge Health |
| Phyllis Gray       | Assistant Vice President – Care Transformation          | MedStar Health    |
| Tricia Isenock     | Community Health Advisor                                | MedStar Health    |
| Della Leister      | Deputy Health Officer                                   | BCDH              |
| Sharon McClernan   | Vice President – Population Health                      | LifeBridge Health |
| Karen Polite-Lamma | Program Manager – Population and Community Health       | MedStar Health    |
| Diana Quinn        | Community Health Program Advisor                        | MedStar Health    |
| Martin Raffel      | Director of Continuing Care Services Data and Analytics | GBMC              |
| Karen Thompkins    | Director of Community Partnerships                      | GBMC              |
| Athena Visilias    | Senior Community Health Specialist                      | UM SJMC           |
| Brenda Wolcott     | Community Health System Manager                         | MedStar Health    |
| Renee Youngfellow  | PHN Bureau Director – Bureau of Clinical Services       | BCDH              |

Ascendient Healthcare Advisors served as consultants, directing the CHNA process and developing the content of this report.

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## EXECUTIVE SUMMARY

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A Community Health Needs Assessment (CHNA) helps health leaders evaluate the health and wellness of the community they serve and identify gaps and challenges that should be addressed through new programs, services and policy changes. This report was created in compliance with the Public Health Accreditation Board's Standards & Measures for Initial Accreditation, Version 2022, as well as Internal Revenue Service requirements for not-for-profit hospitals.

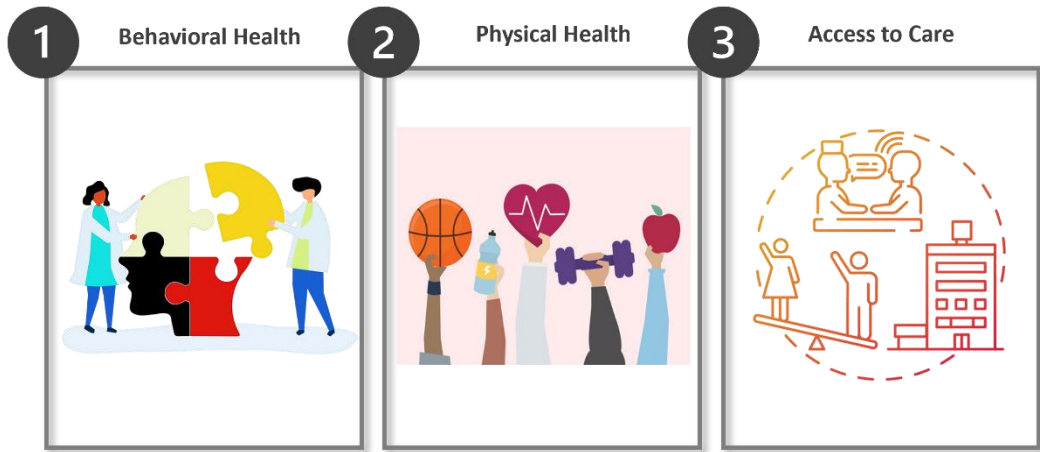
Several local health organizations came together as the CHNA Steering Committee to help develop this CHNA, including:

- Baltimore County Department of Health
- Greater Baltimore Medical Center Healthcare
- MedStar Franklin Square Medical Center
- Northwest Hospital of LifeBridge Health
- University of Maryland St. Joseph Medical Center

Secondary (existing) data is an important piece of the CHNA process. More than 100 data indicators were chosen for analysis from data sources like the Robert Wood Johnson Foundation County Health Rankings, the University of North Carolina Health Literacy Data Map, and the Centers for Disease Control and Prevention. Secondary data measures were gathered into six categories and 20 detailed sub-categories based on common themes. Each data measure was also compared to state or national benchmarks to identify areas of specific concern for Baltimore County. Top community needs identified through secondary data analysis included social determinants of health, access to healthcare, behavioral health and health equity.

Primary (new) data were collected through community-based focus groups and web-based surveys for community members and key community leaders, and included feedback from more than 2,200 people who live, work or receive healthcare in Baltimore County. Key leaders most frequently represented nonprofit organizations, but participants also included government, health, and faith leaders among others. A total of 13 focus groups were conducted, either virtually or in person, with a variety of community members from different backgrounds, age groups and life experiences. Primary data identified access to healthcare, food insecurity, and transportation as top needs that impact the health and well-being of people living in Baltimore County.

The CHNA Steering Committee worked together to identify the priorities the county should focus on over the following three-year period. Leaders evaluated the primary and secondary data collected throughout the process to identify needs based on the size and scope, severity, the ability for hospitals or health departments to make an impact, associated health disparities, and importance to the community. Although it was not possible for every single area of potential need to be identified as a priority, the CHNA Steering Committee selected three top priority health needs (behavioral health, physical health and access to care), which are shown here in no particular order:



The Steering Committee compiled a Health Resources Inventory, which describes a variety of resources available to help Baltimore County residents meet their health and social needs.

Following completion of this report, health leaders throughout Baltimore County will use its findings to collaborate with community organizations and local residents to develop effective health strategies, new implementation plans and interventions, and action plans to improve the communities they serve.

## INTRODUCTION

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### Background

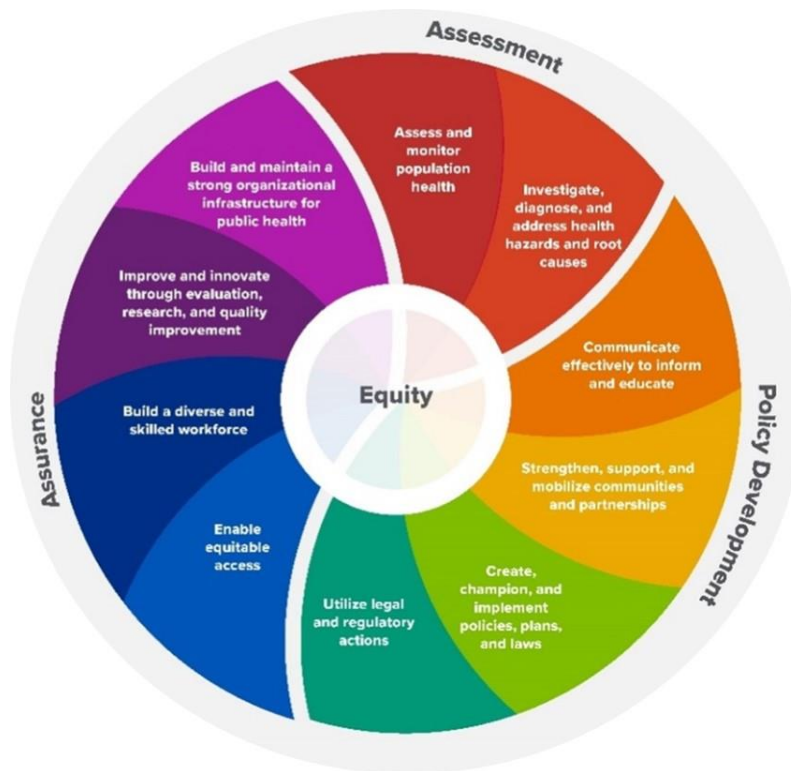
To illustrate its commitment to the health and well-being of the community, the Baltimore County CHNA Steering Committee has completed this assessment to understand and document the greatest health needs currently faced by local residents. The Committee included representatives from Baltimore County Department of Health (BCDH), Northwest Hospital of LifeBridge Health (Northwest), Greater Baltimore Medical Center HealthCare (GBMC), University of Maryland St. Joseph Medical Center (UM SJMC), and MedStar Health (MedStar) (on behalf of MedStar Franklin Square Medical Center (MFSMC)). These organizations helped gather the focus group and survey data that are detailed in this report. The CHNA process helps local leaders continuously evaluate how best to improve and promote the health of the community. The CHNA builds upon formal collaborations between the Steering Committee and other community partners to proactively identify and respond to the needs of Baltimore County residents.

This report was created in compliance with the Public Health Accreditation Board (PHAB)'s Standards & Measures for Initial Accreditation, Version 2022. The Standards "provide requirements and guidance for public health departments"<sup>1</sup> and are based on ensuring public health departments adhere their standards to the CDC's "10 Essential Public Health Services" framework. In its demonstration of data and prioritization of Baltimore County's community needs, this report aligns with all PHAB Standards and Measures for Initial Accreditation, including the need to:

- Conduct and disseminate assessments focused on population health status and public health issues facing the community;
- Participate in or conduct a collaborative process resulting in a comprehensive community health assessment;
- Collect and maintain reliable, comparable, and valid data that provide information on conditions of public health importance and on the health status of the population;
- Analyze public health data to identify trends in health problems, environmental public health hazards, and social and economic factors that affect the public's health;
- Describe disparities in health status and health behaviors, as well as inequities in the factors that contribute to health challenges; and
- Provide and use the results of health data analysis to develop recommendations regarding public health policy, processes, programs, or interventions.

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<sup>1</sup> Source: Public Health Accreditation Board, Centers for Disease Control and Prevention (2022). *Standards & Measures for Initial Accreditation*. Retrieved September 27, 2022, from <https://phaboard.org/wp-content/uploads/Standards-Measures-Initial-Accreditation-Version-2022.pdf>

**Figure 1.1: The 10 Essential Public Health Services**

Further, this process complies with Internal Revenue Service (IRS) requirements for not-for-profit hospitals to complete a CHNA every three years and to adopt an implementation strategy to meet CHNA-identified community health needs.<sup>2</sup> Specifically, the IRS requires that hospital facilities do the following:

- Define the community it serves;
- Assess the health needs of that community;
- Through the assessment process, take into account input received from people who represent the community's broad interests, including those with special knowledge of or expertise in public health;
- Document the CHNA in a written report that is reviewed and adopted by the hospital facility's authorizing body; and
- Make the CHNA widely available to the public.

<sup>2</sup> Source: *Community Health Needs Assessment for Charitable Hospital Organizations – Section 501(c)(3)* (2023). Internal Revenue Service. Retrieved February 13<sup>th</sup>, 2024 from <https://www.irs.gov/charities-non-profits/community-health-needs-assessment-for-charitable-hospital-organizations-section-501r3>.

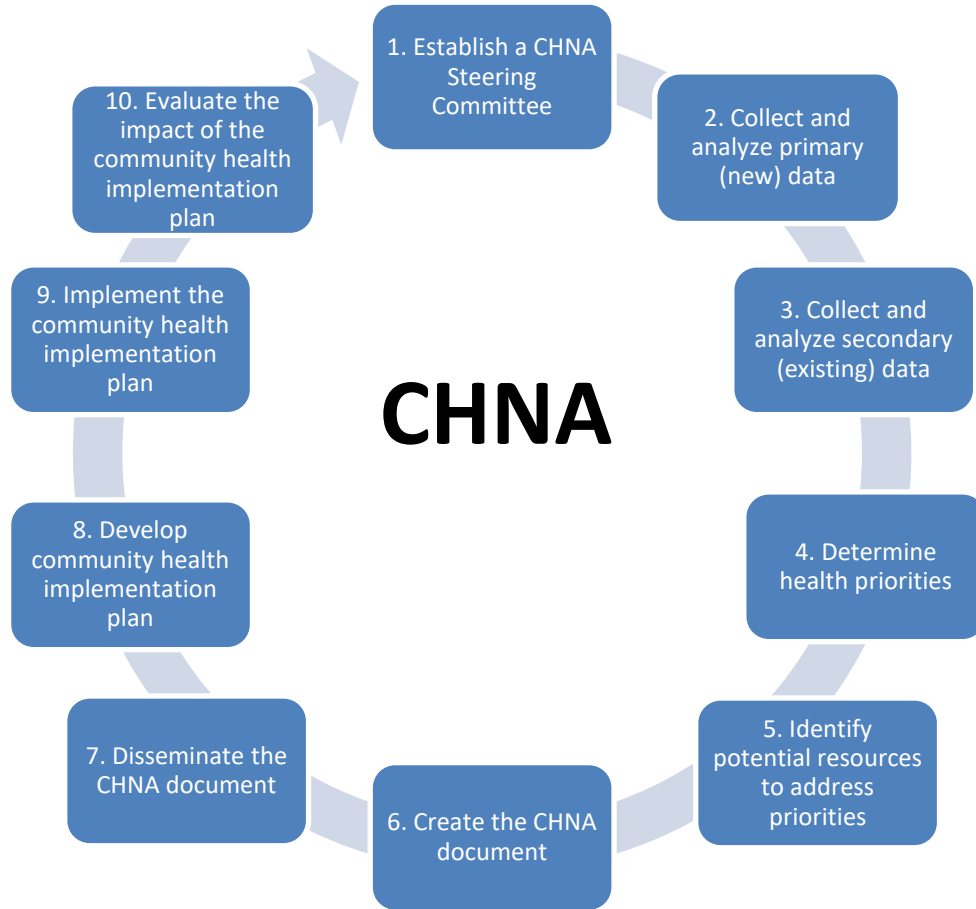
**Process Overview**

A significant amount of information has been reviewed during this planning process, and the CHNA Steering Committee has been careful to ensure that a variety of sources were used to deliver a truly comprehensive report. Both existing (secondary) data and new (primary) data were collected directly from the community throughout this process. It is also important to note that, although unique to Baltimore County, the sources and methodologies used to develop this report comply with the current PHAB and IRS requirements for health departments and not-for-profit hospital organizations.

The purpose of this study is to better understand, quantify, and articulate the health needs of Baltimore County residents. Key objectives of this CHNA include:

- Identify the health needs of Baltimore County residents.
- Identify disparities in health status and health behaviors, as well as inequities in the factors that contribute to health challenges.
- Understand the challenges residents face when trying to maintain and/or improve their health.
- Understand where underserved populations turn for services needed to maintain and/or improve their health.
- Understand what is needed to help residents maintain and/or improve their health.
- Prioritize the needs of the community and clarify/focus on the highest priorities.

There are ten phases in the CHNA process, as described in Figure 1.2 below. Results of the first seven phases are discussed throughout this assessment and the development of community health action plans and subsequent phases will take place after the completion of the CHNA report.

**Figure 1.2: The CHNA Process**

### Report Structure

The outline below provides detailed information about each section of the report.

- 1) [Methodology](#) – The methodology chapter provides an overall summary of how the priority health need areas were selected as well as how information was collected and incorporated into the development of this CHNA, including study limitations.
- 2) [County Profile](#) – This chapter details the demographic (such as age, gender, and race) and socioeconomic data of Baltimore County residents.
- 3) [Priority Health Need Areas](#) – This chapter describes each identified priority health need area for Baltimore County and summarizes the new and existing data that support these prioritizations. This chapter also describes the impact of health disparities among various sub-groups in Baltimore County.
- 4) [Health Resource Inventory](#) – This chapter documents existing health resources currently available to the Baltimore County community.

- 5) [Next Steps](#) – This chapter briefly summarizes the next steps that will occur to address the priority health need areas discussed throughout this document.

In addition, the appendices discuss all of the data used during the development of this report in detail, including:

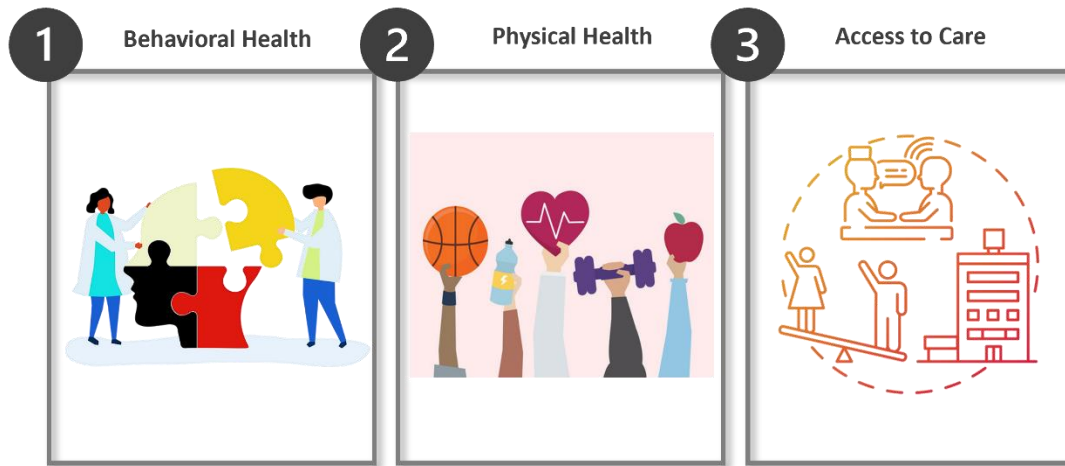
- 1) [Summary of Prior CHNA Implementation Plans](#) – Information about Steering Committee partners and actions taken to address the priority health needs identified in previous CHNAs are presented in Appendix 1.
- 2) [County Demographic and Socioeconomic Data](#) – Information regarding the population characteristics (such as age, gender, and race) of Baltimore County are presented in Appendix 2.
- 3) [Detailed Summary of Secondary Data Measures and Findings](#) – Existing data measures and findings used in the prioritization process are presented in Appendices 3-5.
- 4) [Detailed Summary of Primary Findings](#) – Summaries of new data findings from community member and key community health leader surveys as well as focus groups are presented in Appendices 6-7.

### **Summary Findings: Baltimore County Priority Health Need Areas**

To achieve the study objectives, both new and existing data were collected and reviewed. New data included information from web-based surveys of adults (18+ years) and focus groups; various local organizations, community members, and health service providers within Baltimore County participated. Existing data included information regarding the demographics, health and healthcare resources, behavioral health, disease trends, and county rankings. The data collection and analysis process began in July 2023 and continued through March 2024.

Given the size of Baltimore County, both in geography and population, significant variations in demographics and health needs exist within the county. At the same time, consistent needs are present across the whole county and serve as the basis for determining priority health needs at the county level. This document will discuss the priority health need areas for Baltimore County, as well as how the severity of those needs might vary across subpopulations based on the information obtained and analyzed during this process.

Through the prioritization process, the CHNA Steering Committee identified Baltimore County's priority health need areas from a list of over 100 health indicators. Please note that the final priority needs were not ranked in any order of importance and the Steering Committee and the Local Health Improvement Coalition (LHIC) will engage in each of the three priority need areas. After looking at all relevant data and feedback from the CHNA Steering Committee, the three focus areas identified as countywide priorities for the 2023-2024 CHNA are behavioral health, physical health and access to care, as seen in Figure 1.3.

**Figure 1.3: Priority Health Needs, 2023-2024**

Health, healthcare and associated community needs are very much interrelated, and often impact each other. Although this CHNA process considered these areas separately, their impact on each other should be considered when planning for programs or services to address community needs.

Many health needs are also related to underlying societal and socioeconomic factors. Research has consistently shown that income, education, physical environment, and other such demographic and socioeconomic factors affect the health status of individuals and communities. This CHNA acknowledges that link and focuses on identifying and documenting the greatest health needs as they present themselves today. As plans are developed to address these needs, the Committee's goal is to work with other community organizations to address underlying factors that could drive long-term improvements to the county population's health.

For additional discussion of current priority needs and the data that supports those priorities, please see Chapter 3.

## CHAPTER 1 | METHODOLOGY

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### Study Design

The process used to assess Baltimore County's community needs, challenges, and opportunities included multiple steps. Both new and existing data were used throughout the study to paint a more complete picture of Baltimore County's health needs. While the CHNA Steering Committee largely viewed the new and existing data equally, there were situations where one provided clearer evidence of community health need than the other. In these instances, the health needs identified were discussed based on the most appropriate data gathered. Data analysis, community feedback review, and stakeholder engagement were all used to identify key areas of need.

Specifically, the following data types were collected and analyzed:

#### New (Primary) Data

Public engagement and feedback were received through online community member and key community leader surveys, along with community focus groups and significant input and direction from the CHNA Steering Committee. The Steering Committee worked together to develop the survey questions for the two web-based surveys. Community members were asked to identify the most significant health and social needs in their community, as well as asked questions about their experiences seeking or receiving medical care. Key leaders were asked to answer similar questions about the community they serve. Focus group participants were also asked a standard set of questions about health and social needs, in order to identify trends across various groups and to highlight areas of concern for specific populations. In total, the Steering Committee was able to gather input from over 2,200 Baltimore County residents and other stakeholders. This included web survey responses from 2,034 community members and 115 key leaders, as well as 13 focus groups that included over 90 community members and other people who live, work or receive healthcare in Baltimore County.

For more information regarding specific questions asked as part of the focus groups and surveys, please refer to Appendix 6.

#### Existing (Secondary) Data

Key sources for existing data on Baltimore County included information provided by the Steering Committee and a variety of public data sources related to demographics, social and economic determinants of health, environmental health, health status and disease trends, mental/behavioral health trends, and individual health behaviors. Key information sources leveraged during this process included:

- *County Health Rankings*, developed in partnership by Robert Wood Johnson Foundation and University of Wisconsin Population Health Institute
- Maryland Department of Health's State Health Improvement Process (MD SHIP) and Division of Vital Records
- The Maryland Youth Risk Behavior Survey/Youth Tobacco Survey (YRBS/YTS)

- *The Opportunity Atlas*, developed in partnership by the U.S. Census Bureau, Harvard University, and Brown University
- *The National Equity Atlas*, developed by PolicyLink and the University of Southern California (USC) Equity Research Institute
- *Food Access Research Atlas*, published by the U.S. Food and Drug Administration
- *Minority Health Social Vulnerability Index*, published by U.S. Department of Health and Human Services Office of Minority Health
- *American Community Survey*, as collected and published by the U.S. Census Bureau
- Data provided by CHNA Steering Committee members and other affiliated organizations, including CHNA reports from BCDH, Northwest, Sheppard Pratt, GBMC, UM SJMC, and MFSMC.

For more information regarding data sources and data time periods, please refer to Appendix 4.

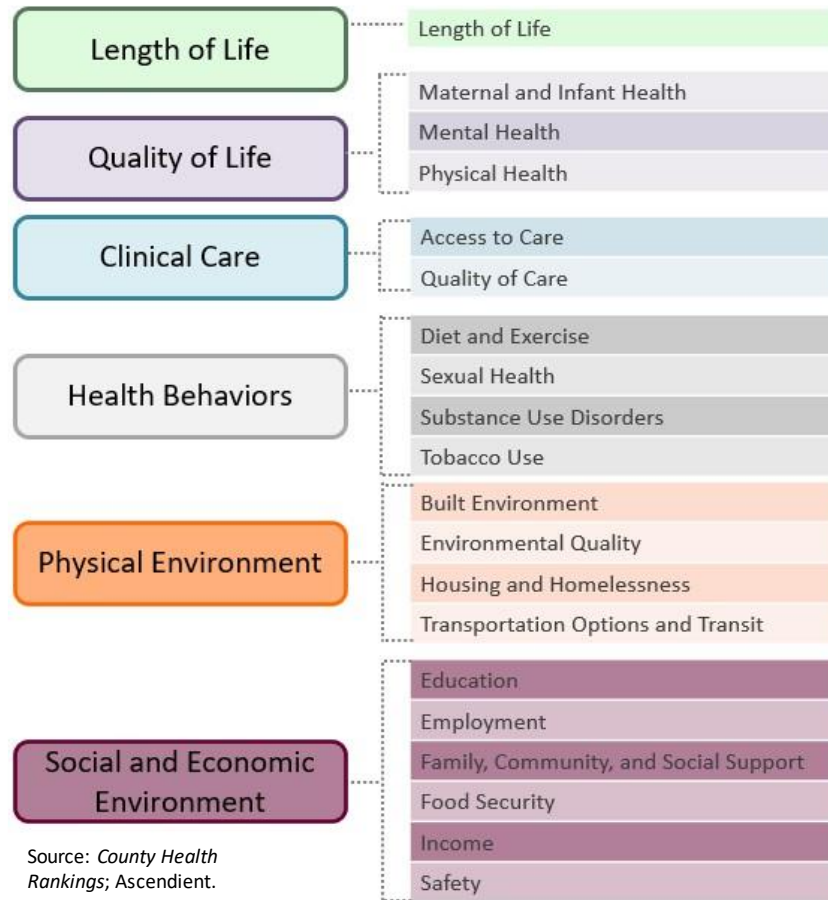
#### Comparisons

To understand the relevance of existing data collected throughout the process, each measure must be compared to a benchmark, goal, or similar geographic area. In other words, without being able to compare Baltimore County to an outside measure, it would be impossible to determine how the county is performing. For this process, each data measure was compared to outside data as available, including the following:

- *County Health Rankings Top Performers*: This is a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute that ranks counties across the nation by various health factors.
- *City of Baltimore and State of Maryland*: The Steering Committee determined that comparisons with the City of Baltimore and the state of Maryland were appropriate. While certain differences exist between the county and the city, the close proximity and overlap between resources creates a meaningful opportunity for comparison.

#### Prioritization Process Overview and Results

The process of identifying the priority health needs for the 2023-2024 CHNA began with the collection and analysis of hundreds of new and existing data measures. In order to create more easily discussable categories, all individual data measures were then grouped into six categories and 20 corresponding focus areas based on “common themes,” as seen in Figure 2.1 below. These focus areas are detailed further in Appendix 4.

**Figure 2.1: Areas of Focus**

Since a large number of individual data measures were collected and analyzed to develop these 20 focus areas, it was not reasonable to make each of them a priority. The Steering Committee considered which focus areas had data measures of high need or worsening performance, priorities from the primary data, and how possible it is for health departments or hospitals to impact the given need to help determine which health needs should be prioritized. Once the primary and secondary data had been grouped into the focus areas detailed in Appendix 4, the CHNA Steering Committee used a polling software to evaluate and prioritize the health needs of Baltimore County while considering the following factors:

- Size and scope of the health need;
- Severity and intensity of the health need;
- Whether possible interventions would be possible and effective;
- Health disparities associated with the need; and
- Importance the community places on addressing the need.

The final priority need areas were not ranked in any particular order of importance, and each will be addressed by the Steering Committee. The following three focus areas (behavioral health, physical health and access to care) were identified as Baltimore County's top priority health needs to be addressed over the next three years, as seen in Figure 2.2 below:

**Figure 2.2: Priority Health Needs, 2023-2024**

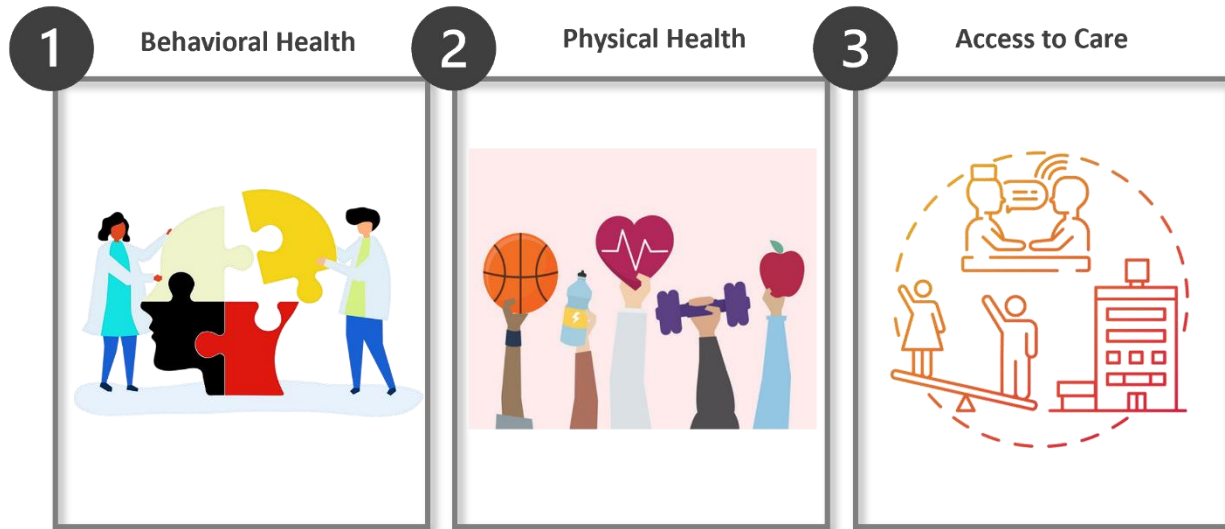


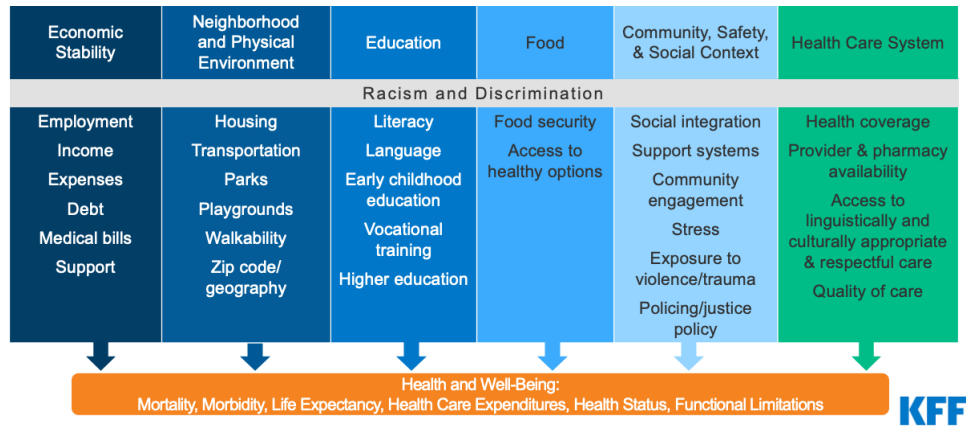
**Figure 2.3: Social Determinants of Health**

Throughout the process, the Steering Committee also considered *Healthy People 2030's* "Social Determinants of Health and Health Equity." The CDC defines social determinants of health (SDoH) as the conditions in the environments where people are born, live, learn, work, play, worship and age that affect a wide range of health, functioning and quality of life outcomes and risks. These factors can include healthcare access and quality, neighborhood and built environment, social and community context, economic stability, and education access and quality, as outlined in Figure 2.3.<sup>3</sup>

Recognizing that SDoH have an impact on health disparities and inequities in the community was a key point the Steering Committee considered throughout the CHNA process. Figure 2.4 describes the way various social and economic conditions may affect health and well-being.



<sup>3</sup> Source: CDC (2022). Social Determinants of Health at CDC. Accessed March 7th, 2024 via <https://www.cdc.gov/about/sdoh/index.html>

**Figure 2.4: SDoH and Health Disparities****Health Disparities are Driven by Social and Economic Inequities****Study Limitations**

Developing a CHNA is a long and time-consuming process. Because of this, more recent data may have been made available after the collection and analysis timeframe. Existing data typically become available between one and three years after the data is collected. This is a limitation, because the “staleness” of certain data may not depict current trends. For example, the U.S. Census Bureau’s American Community Survey is a valuable source of demographic information, however data for a particular year is not published until late the following year. This means 2022 data on community characteristics, such as languages spoken at home, did not become available until late fall 2023. The Steering Committee tried to account for these limitations by collecting new data, including focus groups and web-based community member and key community leader surveys. Another limitation of existing data is that, depending on the source, it may have limited demographic information, such as gender, age, race, and ethnicity.

Given the size of Baltimore County in both population and geography, this study was limited in its ability to fully capture health disparities and health needs across racial and ethnic groups. While efforts were made to include diverse community members in survey efforts, roughly 60% of all respondents were white, and another 36% of respondents were Black or African American. Although survey respondents could choose from multiple race or ethnicity categories,<sup>4</sup> limited responses were received from these groups. This made it difficult for the Steering Committee to assess health needs and disparities for other racial/ethnic minority groups in the community.

In addition, there are existing gaps in information for some population groups. Many available datasets are not able to isolate historically underserved populations, including the uninsured, low-income persons, and/or certain minority groups. Despite the lack of available data, attempts were made to include underserved sub-segments of the greater population through the new data gathered throughout the CHNA process. For example, the Steering Committee chose to focus on Spanish-speaking members of the community by providing a Spanish language version of the web-based community survey and facilitating

<sup>4</sup> Categories included Asian, American Indian/Alaskan Native (AIAN), Black or African American, Hispanic/Latino, Native Hawaiian/Other Pacific Islander (NHPI) and White.

Spanish-language focus groups. Paper surveys were also distributed in an effort to reach as much of the community as possible, although usage of paper surveys was low. To increase future survey responses, members of the Steering Committee should consider working directly with partner organizations in the community who can connect directly with populations who are hard to access through traditional outreach methods, including people with disabilities, the uninsured and people who are disengaged.

In the future, assessments should make efforts to include other underserved communities whose needs are not specifically discussed here because of data and input limitations during this CHNA cycle. Of note, residents in the disabled, blind, deaf, and hard-of-hearing communities can be a focus of future new data collection methods. Using a primarily web-based survey collection method might have also impacted response rates of community members with no internet access or low technological literacy. Additionally, more input from both patients and providers of SUD services would also be helpful in future assessments.

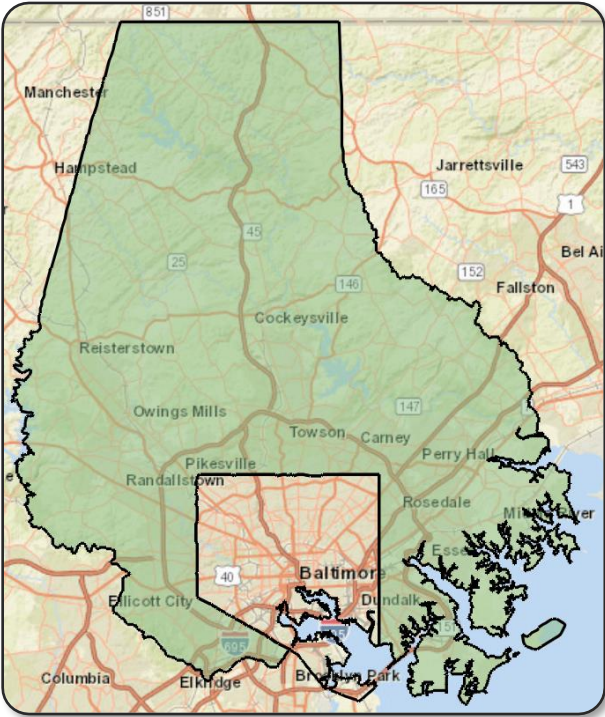
Finally, parts of this assessment have relied on input from community members and key community health leaders through web-based surveys and focus groups. Since it would be unrealistic to gather input from every single member of the community, the community members that participated have offered their best expertise and understanding on behalf of the entire community. As such, the CHNA Steering Committee has assumed that participating community members accurately and completely represented their fellow residents.

CHAPTER 2 | COUNTY PROFILE

Geography

Baltimore County occupies 612 square miles of land — plus an additional 28 square miles of water — in the geographic center of Maryland. Baltimore County surrounds most of Baltimore City, however, the city was separated from the county in 1851. Today, Baltimore City is an independent city on par with county jurisdictions.

Figure 3.1: Baltimore County Map



Population

Population figures discussed throughout this chapter were obtained from Esri, a leading GIS provider that utilizes U.S. Census data projected forward using proprietary methodologies.

With a population of roughly 860,000 people, the county is the largest jurisdiction in the Central Maryland Metropolitan Area.

| Table 3.1: 2023 Total Population |                  |                |           |               |
|----------------------------------|------------------|----------------|-----------|---------------|
|                                  | Baltimore County | Baltimore City | Maryland  | United States |
| Population                       | 859,710          | 573,794        | 6,259,408 | 337,470,185   |

Source: Esri 2023

## Age and Sex Distribution

Data on age and sex helps health providers understand who lives in the community and informs planning for needed health services. The age distribution of Baltimore County skews slightly older than that of Baltimore City, Maryland, and the U.S. While people of all ages can benefit from preventive services and health education, older people may need higher acuity healthcare and specialized services like cancer care or chronic disease management.

| Table 3.2: 2023 Age Distribution |                  |                |          |               |
|----------------------------------|------------------|----------------|----------|---------------|
|                                  | Baltimore County | Baltimore City | Maryland | United States |
| Percentage below 15              | 16.4%            | 16.8%          | 17.6%    | 18.0%         |
| Percentage between 15 and 44     | 38.9%            | 43.7%          | 39.2%    | 39.6%         |
| Percentage between 45 and 64     | 24.9%            | 23.0%          | 25.7%    | 24.6%         |
| Percentage 65 and older          | 19.7%            | 16.5%          | 17.5%    | 17.8%         |

Source: Esri 2023

The populations of Baltimore County and Baltimore City skew more heavily female compared to the state of Maryland, and the U.S.

| Table 3.3 2023 Sex Distribution |                  |                |          |               |
|---------------------------------|------------------|----------------|----------|---------------|
|                                 | Baltimore County | Baltimore City | Maryland | United States |
| Female                          | 52.2%            | 52.8%          | 51.3%    | 50.6%         |
| Male                            | 47.8%            | 47.2%          | 48.7%    | 49.4%         |

Source: Esri 2023

## Race and Ethnicity

Data on race and ethnicity help us understand the need for healthcare services as well as cultural factors that can impact how care is delivered. A greater proportion of residents in Baltimore County identify as Black or African American compared to the U.S. overall. However, the proportion of county residents that identify as Black or African American is roughly half the proportion of the city.

**Table 3.4: 2023 Racial Distribution**

|                    | Baltimore County |               | Baltimore City |               | Maryland  |               | United States |               |
|--------------------|------------------|---------------|----------------|---------------|-----------|---------------|---------------|---------------|
|                    | Count            | Pct. of Total | Count          | Pct. of Total | Count     | Pct. of Total | Count         | Pct. of Total |
| Non-Hispanic White | 431,552          | 50.2%         | 146,924        | 25.6%         | 2,867,623 | 45.8%         | 191,314,266   | 56.7%         |
| Non-Hispanic Black | 260,766          | 30.3%         | 332,377        | 57.9%         | 1,834,049 | 29.3%         | 40,898,542    | 12.1%         |
| Asian              | 57,506           | 6.7%          | 21,210         | 3.7%          | 439,514   | 7.0%          | 20,811,620    | 6.2%          |
| AIAN               | 1,921            | 0.2%          | 1,270          | 0.2%          | 11,977    | 0.2%          | 2,284,715     | 0.7%          |
| NHPI               | 255              | 0.0%          | 152            | 0.0%          | 2,635     | 0.0%          | 643,202       | 0.2%          |

Source: Esri 2023

By ethnicity, less than 10% of Baltimore County's population is Hispanic.<sup>5</sup> Baltimore County has a smaller Hispanic population than Baltimore City, Maryland, and the U.S. overall.

**Table 3.5: 2023 Ethnic Distribution**

|              | Baltimore County |               | Baltimore City |               | Maryland  |               | United States |               |
|--------------|------------------|---------------|----------------|---------------|-----------|---------------|---------------|---------------|
|              | Count            | Pct. of Total | Count          | Pct. of Total | Count     | Pct. of Total | Count         | Pct. of Total |
| Non-Hispanic | 793,133          | 92.3%         | 525,925        | 91.7%         | 5,470,733 | 87.4%         | 271,934,049   | 80.6%         |
| Hispanic     | 66,577           | 7.7%          | 47,869         | 8.3%          | 788,675   | 12.6%         | 65,536,136    | 19.4%         |

Source: Esri 2023

The proportion of foreign-born individuals residing in Baltimore County is higher than that of Baltimore City but lower than that of the state of Maryland. This measure is also slightly lower than the U.S. overall.

**Table 3.6: 2022 Foreign Born Population**

|              | Baltimore County | Baltimore City | Maryland | United States |
|--------------|------------------|----------------|----------|---------------|
| Foreign Born | 13.0%            | 9.7%           | 16.7%    | 13.9%         |

Source: U.S. Census Bureau (2022), American Community Survey (2018-2022)

The diversity of Baltimore County and Baltimore City is reflected in the languages that residents speak at home. According to the most recent American Community Survey, approximately 15% of Baltimore County and 10% of Baltimore City residents speak a language other than English at home, compared to around 20% of Maryland and U.S. residents. Less than 5% of county or city residents speak Spanish at home. Spanish is more commonly spoken at home in the state of Maryland and the U.S. overall.

<sup>5</sup> Race and ethnicity (Hispanic origin) are two separate concepts, according to federal guidelines. People who are Hispanic may be of any race, and people in each race group may be either Hispanic or Not Hispanic. Source: [U.S. Census Bureau Guidance on the Presentation and Comparison of Race and Hispanic Origin Data](#).

**Table 3.7: 2022 Language Spoken at Home**

|                                      | Baltimore County | Baltimore City | Maryland | United States |
|--------------------------------------|------------------|----------------|----------|---------------|
| English Only                         | 85.8%            | 89.0%          | 79.3%    | 78.0%         |
| Spanish                              | 4.0%             | 4.7%           | 8.9%     | 13.3%         |
| Indo-European Languages              | 4.5%             | 2.5%           | 4.7%     | 3.8%          |
| Asian and Pacific Islander Languages | 2.7%             | 1.9%           | 3.9%     | 3.6%          |
| Other Languages                      | 3.0%             | 1.8%           | 3.2%     | 1.2%          |

Source: American Community Survey 2022 1-Year Estimates

**Economic Indicators**

In addition to demographic data, socioeconomic factors in the community such as income, poverty, and food scarcity play a significant role in identifying health-related needs. The median household income in Baltimore County is higher than in Baltimore City and the U.S. overall, but lower than Maryland.

**Table 3.8: 2023 Median Household Income**

|        | Baltimore County | Baltimore City | Maryland | United States |
|--------|------------------|----------------|----------|---------------|
| Income | \$82,607         | \$55,224       | \$93,432 | \$72,603      |

Source: Esri 2023

In 2021, approximately 10% of Baltimore County households were below the federal poverty level (FPL). The share of households below the FPL was higher in Baltimore City and the U.S. overall but equal to the state of Maryland. Poverty has a significant impact on health. Across the lifespan, people who live in impoverished communities have a higher risk of poor health outcomes, including mental illness, chronic diseases, higher mortality and lower life expectancy. Poverty is a concern across the lifespan; children who live in poverty are at risk for developmental delays, toxic stress and poor nutrition, and are likely to live in poverty as adults as well. Unmet social needs, including having low or no income, can also limit people's ability to access healthcare when they need it, or to provide for basic necessities needed to live healthy lives, such as safe housing or healthy food.<sup>6</sup>

**Table 3.9: 2021 Percent of Households Below the Federal Poverty Level**

|                   | Baltimore County | Baltimore City | Maryland | United States |
|-------------------|------------------|----------------|----------|---------------|
| Percent Below FPL | 9.1%             | 19.6%          | 9.1%     | 12.4%         |

Source: Esri 2023

<sup>6</sup> Source: Healthy People 2030 (2023). *Poverty*. Accessed March 7<sup>th</sup>, 2024 via: <https://health.gov/healthypeople/priority-areas/social-determinants-health/literature-summaries/poverty>

Similar to the percentage of households below the FPL, approximately 10% of Baltimore County households received Food Stamps/SNAP<sup>7</sup> in 2021. This percentage was comparable with the state of Maryland and the United States but significantly less than Baltimore City.

| Table 3.10: 2021 Households Receiving Food Stamps/SNAP |                  |                |           |               |
|--------------------------------------------------------|------------------|----------------|-----------|---------------|
|                                                        | Baltimore County | Baltimore City | Maryland  | United States |
| Number of Households Receiving Food Stamps/SNAP        | 34,031           | 56,208         | 238,288   | 14,105,231    |
| Total Number of Households                             | 326,932          | 244,893        | 2,294,270 | 124,010,992   |
| Percentage of Households receiving Food Stamps/SNAP    | 10.4%            | 23.0%          | 10.4%     | 11.4%         |

Source: Esri 2023

Baltimore County is relatively well-educated, with 67.1% of residents having received some education beyond high school. Baltimore County's proportion of the population with a bachelor's degree was slightly higher than that of Baltimore City, Maryland, and the U.S.

| Table 3.11: 2023 Educational Attainment |                  |                |          |               |
|-----------------------------------------|------------------|----------------|----------|---------------|
|                                         | Baltimore County | Baltimore City | Maryland | United States |
| Less than 9 <sup>th</sup> Grade         | 2.6%             | 3.5%           | 3.2%     | 4.1%          |
| Some High School/No Diploma             | 4.8%             | 8.8%           | 4.9%     | 5.5%          |
| High School Diploma                     | 22.1%            | 23.9%          | 21.4%    | 22.9%         |
| GED/Alternative Credential              | 3.3%             | 5.2%           | 3.1%     | 4.1%          |
| Some College/No Diploma                 | 17.1%            | 16.9%          | 16.4%    | 17.7%         |
| Associate's Degree                      | 7.8%             | 5.7%           | 7.5%     | 9.5%          |
| Bachelor's Degree                       | 23.8%            | 18.3%          | 23.3%    | 22.3%         |
| Graduate/ Professional Degree           | 18.4%            | 17.7%          | 20.2%    | 13.9%         |

Source: Esri 2023

The overall unemployment rate in Baltimore County was higher than Maryland, and the U.S. overall in 2023, but lower than Baltimore City. The highest rate of unemployment in the county was among people ages 25 to 54.

<sup>7</sup> The Supplemental Nutrition Assistance Program (SNAP) provides nutrition assistance to eligible, low-income individuals and households. It is the largest Federal nutrition assistance program. Source: [USDA Supplemental Assistance Program fact sheet](#).

**Table 3.12: 2023 Unemployment**

|                                       | Baltimore County | Baltimore City | Maryland | United States |
|---------------------------------------|------------------|----------------|----------|---------------|
| Percentage unemployed ages 16 to 24   | 1.3%             | 1.7%           | 1.2%     | 1.3%          |
| Percentage unemployed ages 25 to 54   | 1.9%             | 2.8%           | 1.9%     | 2.2%          |
| Percentage unemployed ages 55 to 64   | 0.6%             | 0.7%           | 0.5%     | 0.6%          |
| Percentage unemployed ages 65 or more | 0.3%             | 0.5%           | 0.2%     | 0.2%          |
| Total unemployment                    | 4.1%             | 5.7%           | 3.8%     | 3.7%          |

Source: Esri 2023

In 2023, the age group in both Baltimore County and Baltimore City least likely to have health insurance was adults ages 35 to 64. Baltimore County has proportions of uninsured individuals across almost every age group lower than the U.S. as a whole, but similar to both Baltimore City and Maryland.

**Table 3.13: 2023 Health Insurance Status**

|                                       | Baltimore County | Baltimore City | Maryland | United States |
|---------------------------------------|------------------|----------------|----------|---------------|
| Percentage uninsured ages 18 or below | 0.9%             | 0.8%           | 0.9%     | 1.3%          |
| Percentage uninsured ages 19 to 34    | 1.9%             | 2.2%           | 2.1%     | 3.2%          |
| Percentage uninsured ages 35 to 64    | 2.3%             | 2.9%           | 2.8%     | 4.2%          |
| Percentage uninsured ages 65 or more  | 0.1%             | 0.1%           | 0.1%     | 0.1%          |

Source: Esri 2023

### Social Determinants of Health

In addition to the considerations noted above, there are many other factors that can positively or negatively influence a person's health. The Steering Committee recognizes this and believes that, to portray a complete picture of the county's health status, it first must address the factors that impact community health. The Centers for Disease Control and Prevention (CDC) defines social determinants of health (SDoH) as the conditions in the environments where people are born, live, learn, work, play, worship and age that affect a wide range of health, functioning and quality of life outcomes and risks. According to the CDC's "Social Determinants of Health" from its *Healthy People 2030* public health priorities initiative, factors contributing to an individual's health status can include the following: healthcare access and quality, neighborhood and built environment, social and community context, economic stability, and education access and quality.

**Figure 3.2: Social Determinants of Health**

As seen in Figure 3.2, many of the factors that contribute to health are hard to control or societal in nature. As such, health and healthcare organizations need to consider many underlying factors that may impact an individual's health and not simply their current health conditions.

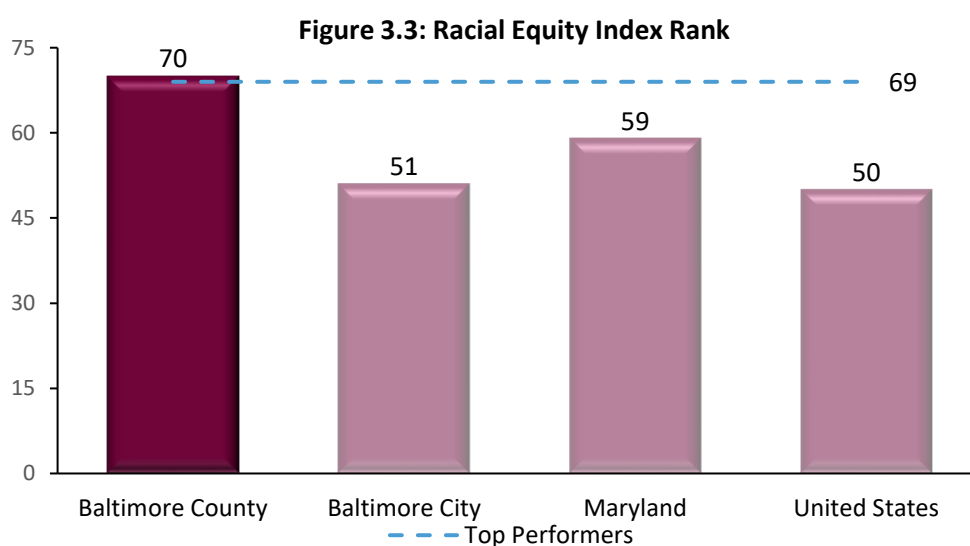
It is widely acknowledged that people with lower income, social status and levels of education find it harder to access healthcare services compared to people in the community with more resources. Being unable to access healthcare services is a factor that contributes to poor health status. Further, people in communities with fewer resources may also experience high levels of stress, which also contributes to worse health outcomes, particularly related to mental or behavioral health.

The CHNA Steering Committee collected new data via focus groups and surveys to ensure that residents and key community health leaders could provide input regarding the needs of their specific communities. An analysis of the racial and geographic disparities that emerged in the information obtained and analyzed during this process is detailed below.

### Disparities

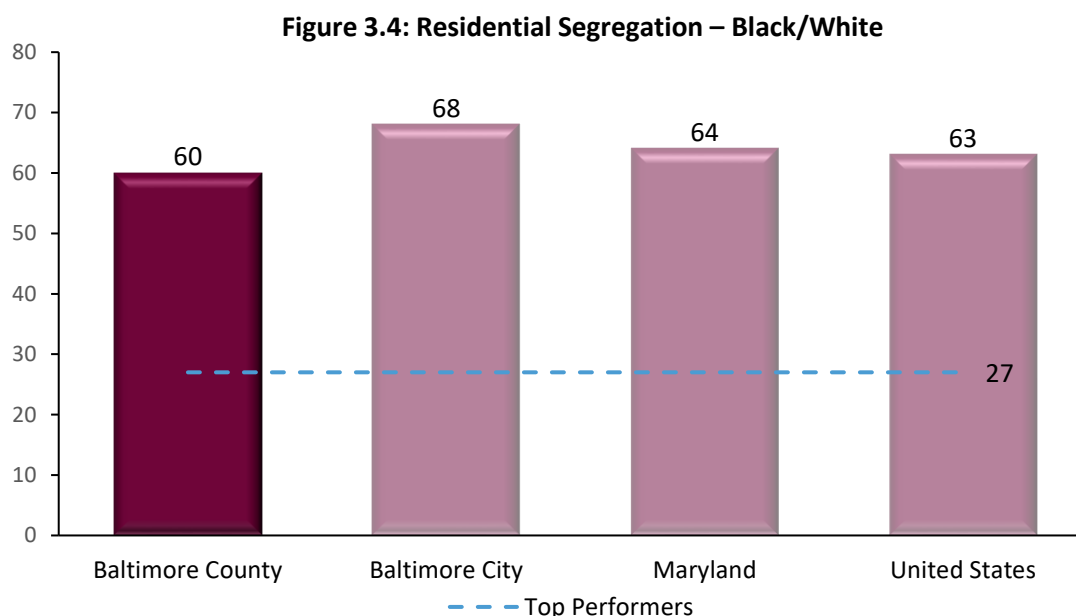
Recognizing the diversity of Baltimore County, as discussed above, the Steering Committee evaluated factors that may contribute to health disparities in its community. These included racial equity; racial segregation; financial barriers; nutrition; social, behavioral, and economic factors that influence health; and English language proficiency.

The Racial Equity Index measures disparities between racial groups based on inclusion and prosperity. As seen in Figure 3.3, Baltimore County performs higher than Baltimore City, Maryland and the U.S. Higher scores are better and indicate smaller racial gaps. In this graphic and the following, the blue line indicates geographies that perform best in that indicator.



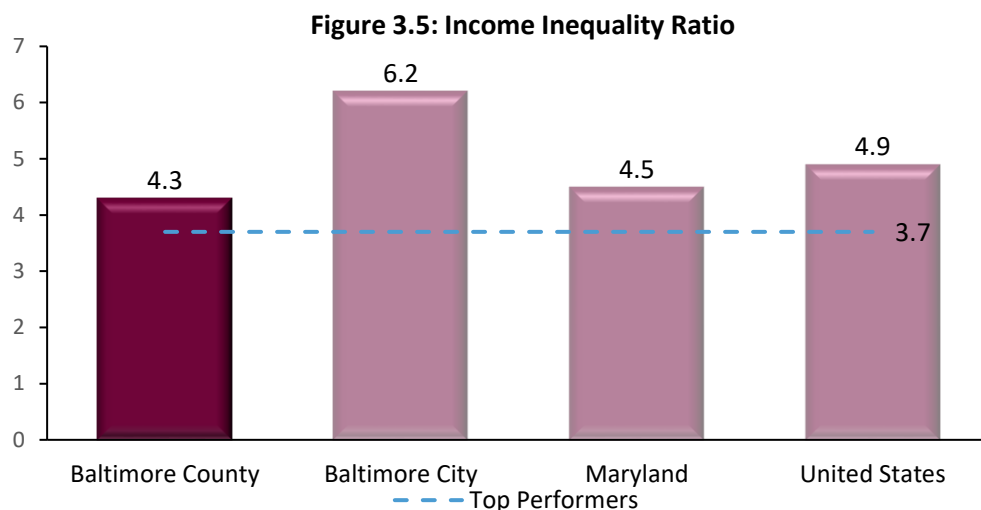
Source: National Equity Atlas 2020

Residential segregation is measured by the index of dissimilarity, a demographic measure ranging from 0 to 100 that represents how evenly two demographic groups are distributed across a county's census tracts. Lower scores represent a higher level of integration. Baltimore County has a lower level of segregation between Black and white residents than Baltimore City, Maryland and the U.S. overall, as seen in Figure 3.4.



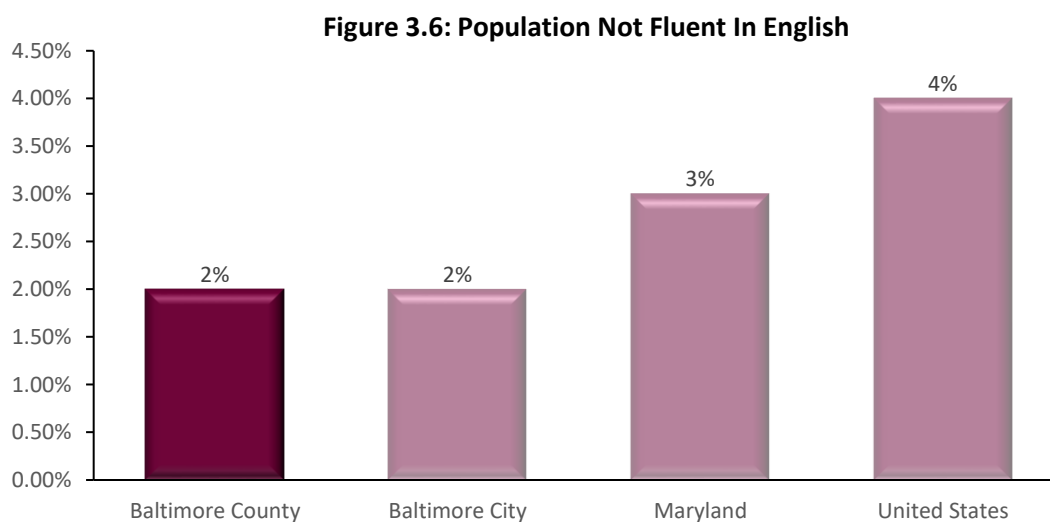
Source: Robert Wood Johnson County Health Rankings 2023

Income inequality is measured as the ratio of household income at the 80<sup>th</sup> percentile to household income at the 20<sup>th</sup> percentile. Communities with greater income inequality may have worse outcomes on a variety of metrics, including mortality, poor health, sense of community, and social support. As seen in Figure 3.5, Baltimore County's income inequality ratio is much lower than Baltimore City's, and lower than the state of Maryland and the U.S.



Source: Robert Wood Johnson County Health Rankings 2023

People with limited English proficiency (LEP) may face challenges accessing care and resources that fluent English speakers do not. Language barriers may make it hard to access transportation, medical, and social services as well as limit opportunities for education and employment. Importantly, LEP community members may not understand critical public health and safety notifications, such as safety-focused communications during the COVID-19 pandemic. In 2022, just 2% of Baltimore County residents reported speaking English less than “very well.” This is comparable to the rate of Baltimore City, but lower than the rates in Maryland and the U.S., as seen in Figure 3.6.



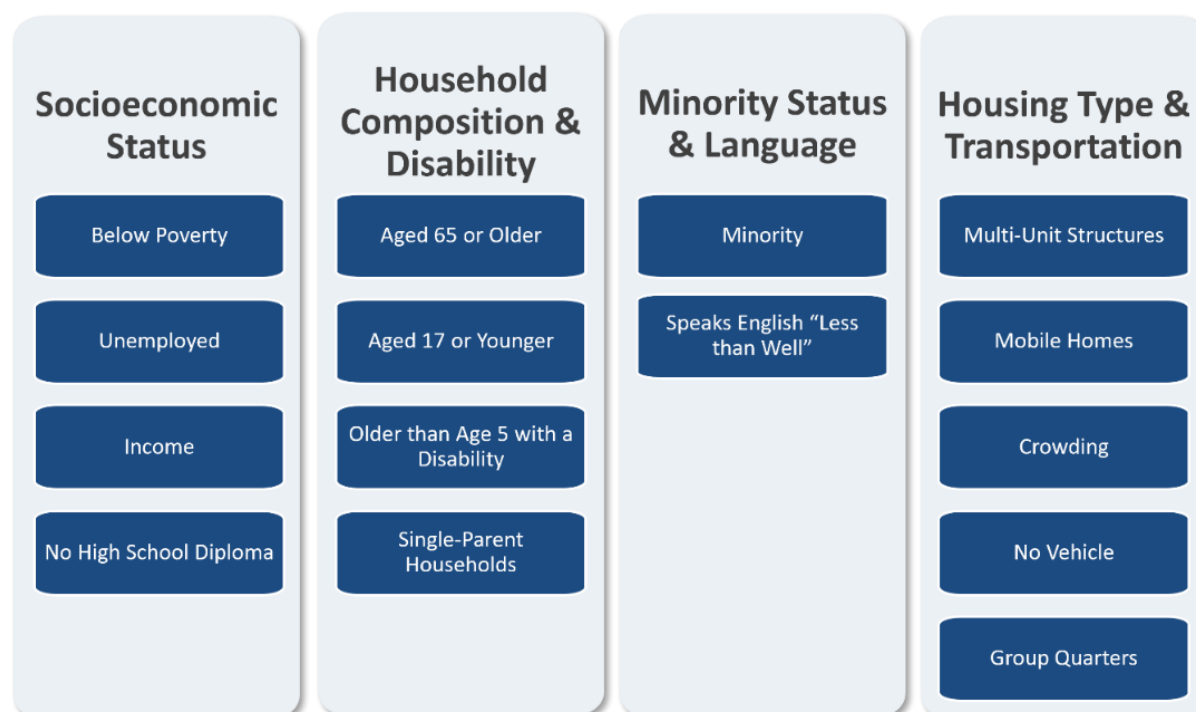
Source: American Community Survey 5-year estimates (2017-2022)

## Social Vulnerability Index

One resource that can help show variation and disparities between geographic areas is the Social Vulnerability Index (SVI), which was developed by the CDC and the Agency for Toxic Substances and Disease Registry (ATSDR). Social vulnerability refers to negative effects communities may experience due to external stresses that impact human health, like natural or human-caused disasters, or disease outbreaks. Socially vulnerable populations are at especially high risk during public health emergencies.

The SVI uses 16 U.S. Census variables to help local officials identify communities that may need support before, during, or after a public health emergency.<sup>8</sup> Communities with a higher SVI score are generally at a higher risk for poor health outcomes. Instead of relying on public health data alone, the SVI accounts for underlying economic and structural conditions that affect overall health, including SDoH. SVI scores are calculated at the census tract level and based on U.S. Census variables across four related themes: socioeconomic status, household characteristics, racial and ethnic minority status, and housing type/transportation. Figure 3.7 outlines the variables used to calculate SVI scores.

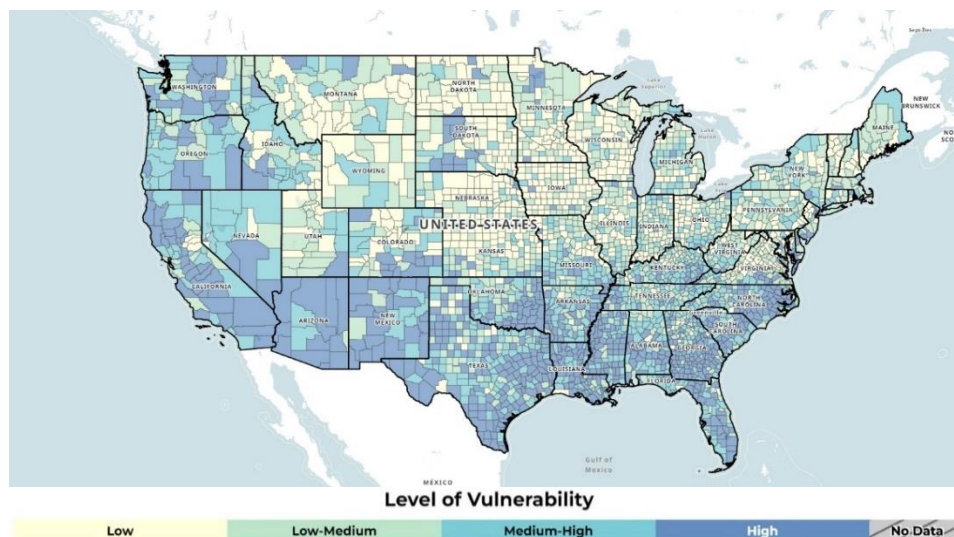
**Figure 3.7: Social Vulnerability Index Variables**



<sup>8</sup> Tsai, et al (2022). CDC/ATSDR Social Vulnerability Index (SVI). Retrieved from <https://www.atsdr.cdc.gov/placeandhealth/svi/index.html>.

The United States SVI by county is shown in Figure 3.8 below. As shown, a lot of variation exists across the country, and even within individual states.

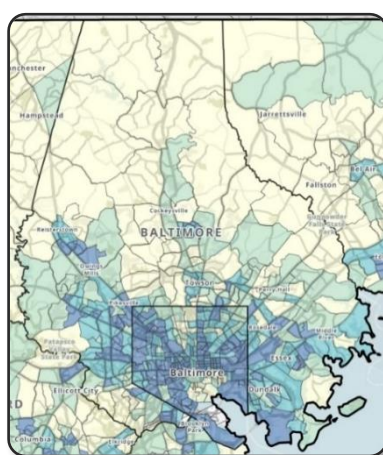
**Figure 3.8: Social Vulnerability Index by County, 2020**



Source: CDC/ATSDR Social Vulnerability Index (SVI) 2020 SVI by County; accessed at [https://www.atsdr.cdc.gov/placeandhealth/svi/interactive\\_map.html](https://www.atsdr.cdc.gov/placeandhealth/svi/interactive_map.html).

The 2020 SVI scores for Baltimore County and Baltimore City are shown in Figure 3.9 below. Possible scores range from 0 (lowest vulnerability) to 1 (highest vulnerability), and these scores show a relative comparison with other counties and census tracts in Maryland. Given this, the vulnerability of Baltimore County overall is fairly high compared to the state, with an SVI score of 0.70. However, specific regions within the county, particularly those closest to the city border, demonstrate higher vulnerability.

**Figure 3.9: Baltimore County Social Vulnerability Index, 2020**



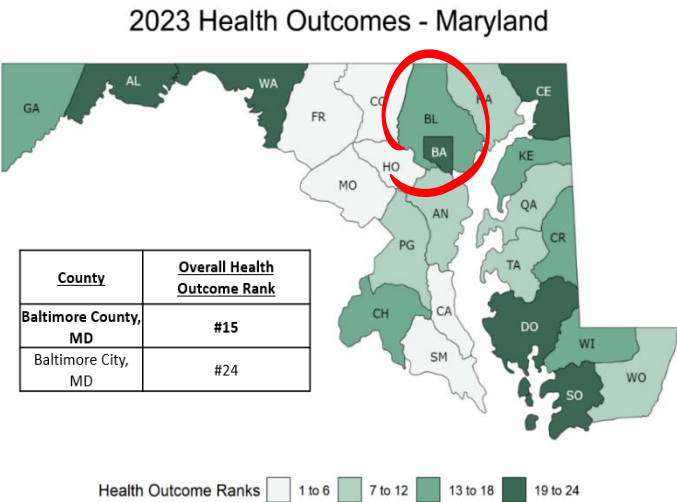
| Area             | State | U.S. |
|------------------|-------|------|
| Baltimore County | 0.70  | 0.52 |
| Baltimore City   | 0.91  | 0.87 |

Source: CDC/ATSDR Social Vulnerability Index (SVI) 2020 SVI by County; accessed at [https://www.atsdr.cdc.gov/placeandhealth/svi/interactive\\_map.html](https://www.atsdr.cdc.gov/placeandhealth/svi/interactive_map.html).

Health Outcome and Health Factor Rankings

The Steering Committee also reviewed and analyzed data from the Robert Wood Johnson Foundation and the University of Wisconsin County Health Rankings for the year 2023. Out of 24 reported counties in Maryland for health outcomes, Baltimore County ranks 15<sup>th</sup> overall, as seen in Figure 3.10 below. This includes ranking 13<sup>th</sup> among 24 reported counties on Length of Life, and 16<sup>th</sup> overall for Quality of Life. These categories are discussed further in Appendices 2 through 4.

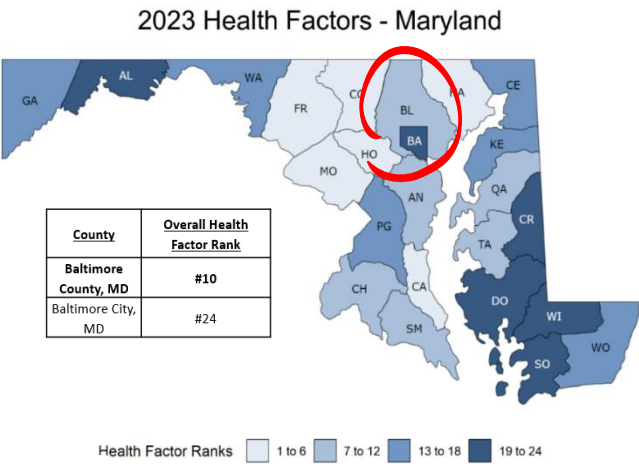
Figure 3.10



Source: Robert Wood Johnson Foundation, 2023 County Health Rankings.

Lastly, out of 24 reported counties in Maryland for health factors, Baltimore County ranks 10<sup>th</sup> overall as seen in Figure 3.11.

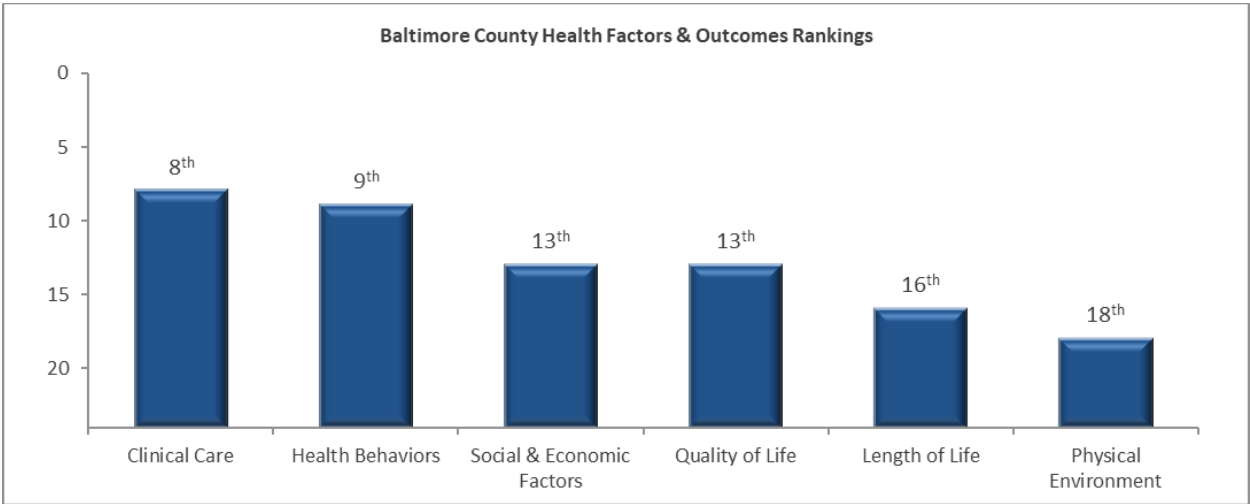
Figure 3.11



Source: Robert Wood Johnson Foundation, 2023 County Health Rankings.

Figure 3.12 shows that Baltimore County ranks 8<sup>th</sup> among 24 reported Maryland counties for Clinical Care, 9<sup>th</sup> for Health Behaviors, and 13<sup>th</sup> for Social & Economic factors. Baltimore County also ranked 18<sup>th</sup> for Physical Environment. These categories are also discussed further in Appendices 2 through 4.

**Figure 3.12: Baltimore County Health Factors and Outcomes**



Source: Robert Wood Johnson Foundation, 2023 County Health Rankings.

## CHAPTER 3 | PRIORITY NEED AREAS

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This chapter describes each of the three priority areas in more detail and discusses the data that supports each priority. The information in this section includes context and national perspective, secondary data findings, and primary data findings (including key leader survey, community member survey, and focus groups).

As mentioned previously, these priority needs areas are not listed in any hierarchical order of importance and all will be addressed by the Steering Committee in health improvement plans guided by this CHNA. As noted in Chapter 1, the Steering Committee considered the following factors when determining the priority needs reported in this assessment:

- Size and scope of the health need;
- Severity and intensity of the health need;
- Estimated feasibility and effectiveness of possible interventions;
- Health disparities associated with the need; and
- Importance the community places on addressing the need.

### Priority Need: Behavioral Health

#### Context and National Perspective

The definition of behavioral health often describes conditions related to both mental health and substance use.<sup>9</sup> After evaluating data from a variety of sources including surveys and focus groups conducted throughout the assessment process, the Steering Committee identified behavioral health, including both mental health and substance use, to be an area of urgent need within Baltimore County.

Mental illnesses are common in the United States: in 2021, an estimated 57.8 million U.S. adults – nearly one in five – were living with a mental illness.<sup>10</sup> Four years following the onset of the COVID-19 pandemic, concerns about mental health and substance use remain high nationwide. The pandemic impacted public mental health and well-being in many ways. Community members continue to grapple with the pandemic-related effects of isolation and loneliness, financial instability, long-term health impacts and grief. In addition, both drug overdose and suicide deaths have sharply increased over the past several years – often disproportionately impacting younger people and communities of color.<sup>11</sup>

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<sup>9</sup> Source: American Medical Association (2022). *What is behavioral health?* Retrieved September 13<sup>th</sup>, 2023, from <https://www.ama-assn.org/delivering-care/public-health/what-behavioral-health>.

<sup>10</sup> Source: National Institute of Mental Health (2023). *Mental Illness*. Retrieved September 13<sup>th</sup>, 2023, from <https://www.nimh.nih.gov/health/statistics/mental-illness>.

<sup>11</sup> Source: Panchal, N., Saunders H., Rudowitz, R. and Cox, C. (2023). The Implications of COVID-19 for Mental Health and Substance Use. *Kaiser Family Foundation*. Retrieved from <https://www.kff.org/mental-health/issue-brief/the-implications-of-covid-19-for-mental-health-and-substance-use>.

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Access to services that address mental health and substance use is an ongoing challenge across the U.S. According to the Substance Abuse and Mental Health Services Administration (SAMHSA), in 2021, less than half (47.2%) of U.S. adults who reported having a mental illness utilized any type of mental health services, including inpatient, outpatient or telehealth services or prescription drug therapies.<sup>12</sup> Demand for mental health services, particularly anxiety and depression treatment, remains high across the nation, while the prevalence of stress- and trauma-related disorders, along with substance use disorders, continues to grow. The American Psychological Association reports that the percentage of psychologists in the U.S. seeing more patients than they did before the pandemic increased from 15% in 2020 to 38% in 2021 to 43% in 2022. Further, 60% of psychologists reported having no openings for new patients and 38% maintained a waitlist for their services.<sup>13</sup>

Substance use disorders (SUDs) are one of the fastest rising categories of behavioral health disorders. According to the American Psychiatric Association, SUDs are a complex condition in which there is uncontrolled use of a substance, despite harmful consequences.<sup>14</sup> SUDs often occur in conjunction with other mental illness. In 2022, 17 million (48.8%) young adults aged 18-25 reported having either a SUD or Acute Mental Illness (AMI) in the past year.<sup>15</sup> In that same year, 17.3% (48.7 million) of all U.S. adults were reported as having an SUD.<sup>15</sup> These trends have been increasing in recent years. According to the National Center for Drug Abuse Statistics, in 2018 (3.7%) of all adults aged 18 and older (9.2 million) had both an AMI and at least one SUD.<sup>16</sup> By 2021, this had increased to 13.5% of U.S. adults, with the highest incidence among Multiracial adults.

### Secondary Data Findings

Secondary data collected through the CHNA process identified behavioral health as an area of particular concern for residents of Baltimore County. In 2021, 20.7% of Baltimore County residents self-reported that a health professional has told them that they have a depressive disorder, higher than both the state of Maryland (16.6%) and the US (20.5%).<sup>17</sup> Multiple mental health indicators in Baltimore County were higher than the state and national averages, with 15% of the population experiencing frequent mental distress (compared to 13% for the state and 14% nationally), and residents reporting an average of 4.5 poor mental health days per month (4.1 for state and 4.4 for national respectively). Drug overdoses in Baltimore County accounted for 51 deaths per 100,000 individuals, higher than the state rate (41 deaths

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<sup>12</sup> Source: SAMHSA (2023). *Highlights from the 2021 National Survey on Drug Use and Health*. Retrieved September 13<sup>th</sup>, 2023, from <https://www.samhsa.gov/data/sites/default/files/2022-12/2021NSDUHFRHighlights092722.pdf>.

<sup>13</sup> Source: American Psychological Association (2022). *2022 COVID-19 Practitioner Impact Survey*. Retrieved September 13<sup>th</sup>, 2023, from <https://www.apa.org/pubs/reports/practitioner/2022-covid-psychologist-workload.pdf>.

<sup>14</sup> Source: American Psychiatric Association (2024). *Addiction and Substance Use Disorders*. Retrieved January 16, 2024, from <https://www.psychiatry.org/patients-families/addiction-substance-use-disorders>.

<sup>15</sup> Source: SAMHSA (2023). *Highlights from the 2022 National Survey on Drug Use and Health*. Retrieved January 16<sup>th</sup>, 2023, from <https://www.samhsa.gov/data/sites/default/files/reports/rpt42731/2022-nsduh-main-highlights.pdf>.

<sup>16</sup> Source: National Center for Drug Abuse Statistics (2023). *Drug Abuse Statistics*. Retrieved January 8<sup>th</sup>, 2024, from <https://drugabusestatistics.org/>.

<sup>17</sup> Source: CDC (2022). *Behavioral Risk Factor Surveillance System*. Retrieved January 9<sup>th</sup>, 2024, from [https://data.cdc.gov/Behavioral-Risk-Factors/Behavioral-Risk-Factor-Surveillance-System-BRFSS-P/dttw-Syxu/data\\_preview](https://data.cdc.gov/Behavioral-Risk-Factors/Behavioral-Risk-Factor-Surveillance-System-BRFSS-P/dttw-Syxu/data_preview)

per 100,000), and more than double the national rate (23 deaths per 100,000). Excessive drinking among adults was lower than the national rate, (17% vs. 19% respectively), but higher than the rate in Maryland (15%).

| Table 4.1: Behavioral Health Indicators                     |                  |                |          |               |
|-------------------------------------------------------------|------------------|----------------|----------|---------------|
| Indicator                                                   | Baltimore County | Baltimore City | Maryland | United States |
| Drug Overdose Deaths per 100,000                            | 51               | 124            | 41       | 23            |
| Percent of Population Experiencing Frequent Mental Distress | 15%*             | 16%            | 13%      | 14%           |
| Number of Poor Mental Health Days in the Past Month         | 4.5*             | 5.4            | 4.1      | 4.4           |
| Percent of Adults Reporting Excessive Drinking              | 17%              | 18%            | 15%      | 19%           |

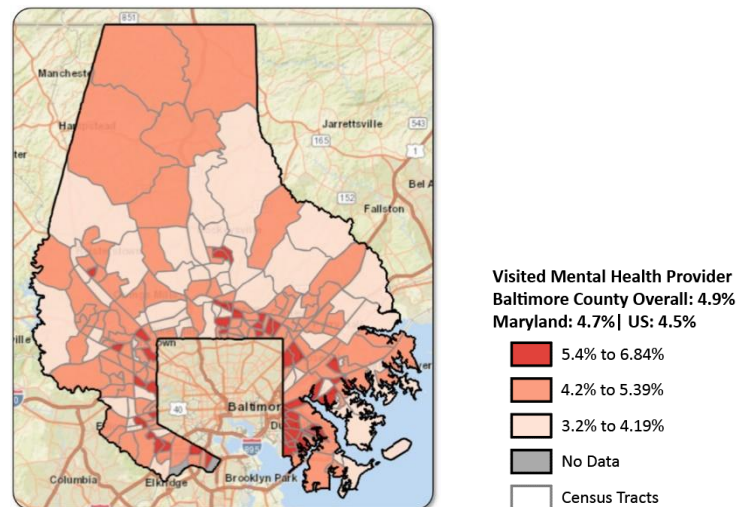
Source: Robert Wood Johnson Foundation, County Health Rankings 2023

\*Indicates areas of high need

When compared to the previous CHNA, which was conducted in 2020, each of these statistics have increased. The population experiencing frequent mental distress increased from 12% in 2020 to 15% in 2023. The average monthly number of poor mental health days reported by residents increased as well, from 3.8 to 4.5 days. In 2023, 4.9% of residents in Baltimore County reported visiting a mental health provider, slightly higher than the state average of 4.7%, and the national average of 4.5%.

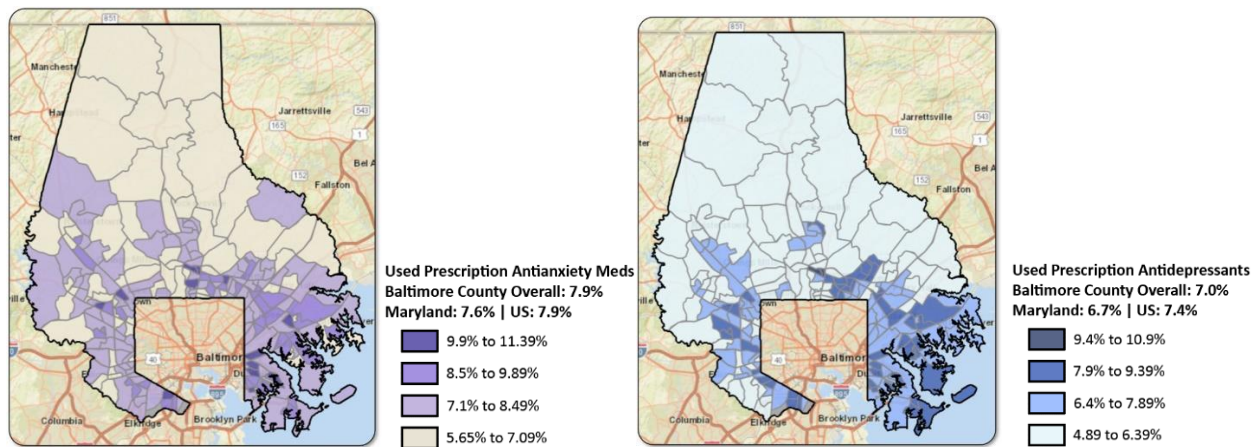
Figure 4.1 shows that, in 2021, there were more visits to mental health providers concentrated towards the city border, with fewer visits occurring in the outlying regions of the county.

**Figure 4.1: Percentage of Population who Visited a Mental Health Provider, 2021**



In 2021, 7.0% of Baltimore County residents used prescription antidepressants, which was slightly higher than the state average of 6.7%, and lower than the national average of 7.4%. There is a similar geographic trend in the usage of antidepressants and anti-anxiety medication as there is in mental health visits. As Figure 4.2 shows, the highest concentrations of medication usage were in neighborhoods adjacent to the border with the City of Baltimore, especially the southeastern region closest to Chesapeake Bay.

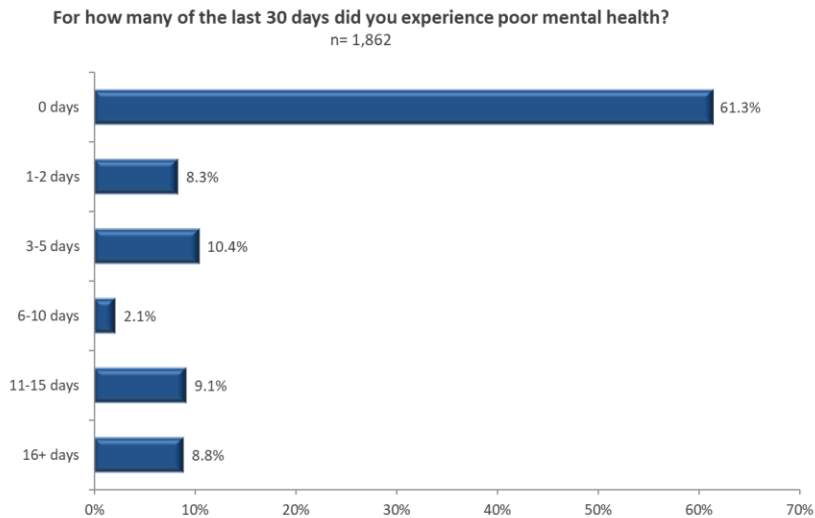
**Figure 4.2: Percentage of Population who Used Prescription Antidepressants or Anti-Anxiety Medications, 2021**



#### Primary Data Findings – Community Member Survey

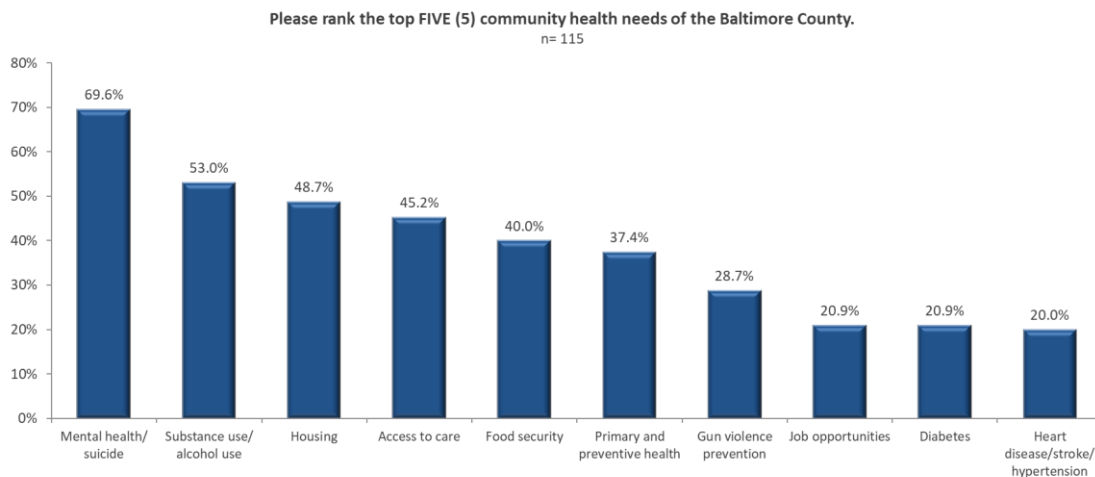
More than 2,000 people who live, work or receive healthcare in Baltimore County responded to the community member survey. When asked to identify the top five community health needs in Baltimore County, mental health was identified as a top concern by 57.4% of respondents, and 41.6% identified alcohol and drug addiction.

As seen in Figure 4.3, responses related to individual mental health concerns were largely positive, with 61.3% of respondents reporting that they had not experienced any poor mental health days the prior 30-day period. Nearly one-quarter of respondents reported that they had experienced 10 or fewer poor mental health days in the previous month (21%), while 18% reported having poor mental health on 11 days or more. While most Baltimore County residents reported fewer poor mental health days than the state average (4.1 days per month), a significant proportion of residents (18%) spent more than one-third of the month experiencing mental health concerns.

**Figure 4.3**

### Primary Data Findings – Key Leader Survey

Key leaders surveyed during the CHNA process identified mental health/suicide and substance or alcohol use as the top two health issues impacting residents of Baltimore County. Among 115 key leaders from various organizations who responded to the survey, 69.6% identified mental health and suicide as a top community health need in Baltimore County. Substance and alcohol use ranked second in the survey and was identified as a top concern by 53% of respondents. Multiple community resources to address behavioral and mental health were identified in this survey as being both helpful to address these concerns and insufficient to meet existing levels of community need. Key leaders described a need for more comprehensive resources or easier access to existing resources. Respondents were also asked to identify the five most significant social needs in the community they serve, and the need for expanded substance and alcohol use treatment was selected by 41% of respondents.

**Figure 4.4**

A lack of resources to address behavioral health was also noted when respondents were asked to indicate how strongly they agreed or disagreed with statements about different types of providers in the community. The majority (60%) of key leaders disagreed when asked to evaluate the statement “there are enough substance abuse treatment providers.” When looking at health and social needs as a whole, key leaders noted mental health and substance use issues as particularly prevalent in the southeastern and southwestern portions of the County. This aligns with the geographic trends previously described in the secondary data findings, which show concentrations in utilization of mental health providers and prescription medication usage in those areas as well.

#### Primary Data Findings – Focus Groups

Thirteen focus groups were conducted during the CHNA process, with more than 90 community members and other stakeholders providing input on a variety of health and social concerns. Five of these focus groups identified mental health as being a top health concern in Baltimore County, and three identified substance use disorders as a major concern as well. However, the most significant concerns identified by the focus groups focused more heavily on social and environmental concerns, such as food insecurity, overall access to healthcare, and transportation to appointments and health services.

Focus group participants were given the opportunity to share their personal experiences surrounding mental health and substance use. For example, one focus group featured clients at a clinic that serves individuals experiencing homelessness and participants provided some commentary on their experiences with providers in their community. One participant shared a situation where they told their provider they did not want a certain medication due to the risk of addiction or dependence, but it was prescribed to them anyway. This comment led to other focus group members to speak out in agreement, and voice their wish for providers to develop a greater level of trust with their patients to better understand their concerns – particularly as it relates to behavioral health.

Another focus group featured participants living with various behavioral health conditions. Participants expressed concerns about a lack of awareness of the connection between substance use, mental health, and childhood trauma. Participants noted that, often, individuals are unable or unwilling to recognize the impact of their own past traumas, and that there is a lack of reliable mental health providers or social workers available in the community to help address their trauma and find reliable pathways for accessing help.

#### **Priority Need: Physical Health**

##### Context and National Perspective

Physical health is the monitoring and maintenance of the human body. There are many factors involved in an individual’s overall physical health status, such as disease prevention, timely access to primary and preventive healthcare, exercise, and maintaining a healthy diet. Physical health can also involve the management of chronic health conditions. As society has changed and people live longer, chronic health conditions have become more common than communicable diseases like typhoid and cholera. As defined by the World Health Organization (WHO), chronic diseases are those with a long duration, that are

influenced by a combination of genetic, environmental, psychological, or behavioral factors.<sup>18</sup> Chronic health conditions are extremely common in the United States, with 6 in 10 Americans living with at least one chronic disease, such as diabetes, obesity, cancer, hypertension, or heart disease.<sup>19</sup>

Chronic diseases are the leading cause of death and disability in the United States.<sup>18</sup> According to the WHO, chronic health conditions kill 41 million people globally each year and are responsible for 7 in 10 deaths in the U.S. annually.<sup>18</sup> The number of individuals living with a chronic health condition is expected to increase as the U.S. population continues to age. The population over the age of 50 is expected to increase by 61% to 221.1 million people by 2050.<sup>20</sup> Among those 221 million, nearly two-thirds (142.7 million people) are expected to have at least one chronic health condition, with approximately 15 million people living with multiple chronic health conditions.<sup>20</sup>

Cancer is a group of diseases characterized by the uncontrolled growth and spread of abnormal cells that can result in death if not treated. While the risk of dying from cancer has declined significantly over the past 30 years, it remains the second most common cause of death in the U.S. Incidence of new cancer cases has continued to rise, with 2 million new cases expected to be identified in 2024.<sup>21</sup> This trend is largely affected by the aging and growth of the population and by a rise in diagnoses of 6 of the 10 most common cancers—breast, prostate, endometrial, pancreatic, kidney, and melanoma. Some research has attributed this rise to the impact of the obesity epidemic.<sup>21</sup> Cigarette smoking is another significant risk factor for cancer, and is responsible for about 20% of all cancers and 30% of cancer deaths in the U.S. each year.<sup>22</sup>

The WHO defines overweight and obesity as abnormal or excessive fat accumulation that presents risks to a person's health.<sup>18</sup> Obesity is one of the fastest rising chronic conditions in the United States. According to the CDC, the U.S. obesity prevalence rate between 2017-2020 was 41.9%, which represents a significant increase from 30.5% in 2000.<sup>23</sup> Obesity is often a factor in other chronic health conditions, such as stroke, diabetes, heart disease, and in some types of cancer.

The CDC recommends four ways to prevent chronic conditions and maintain good physical health. Recommended healthy behaviors include stopping or refraining from smoking, eating low-fat whole food diets, exercising moderately for at least 150 minutes a week, and limiting or refraining from consuming

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<sup>18</sup> Source: World Health Organization (WHO) (2023). *Noncommunicable diseases*. Retrieved January 23<sup>rd</sup>, 2024, from: <https://www.who.int/news-room/fact-sheets/detail/noncommunicable-diseases>.

<sup>19</sup> Source: CDC (2024). *National Center for Chronic Disease Prevention and Health Promotion*. Retrieved January 23, 2024, from: <https://www.cdc.gov/chronicdisease/index.htm>.

<sup>20</sup> Source: Ansah, J.P. & Chiu, T.C., (2022). Projecting the chronic disease burden among the adult population in the United States using a multi-state population model. *Frontiers in Public Health*. Retrieved January 23, 2024, from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9881650/>.

<sup>21</sup> Source: American Cancer Society (ACS) (2024). *ACS Fast & Figures 2024*. Retrieved January 24<sup>th</sup>, 2024, from <https://www.cancer.org/research/acs-research-news/facts-and-figures-2024.html>.

<sup>22</sup> ACS (2020). *Health Risks of Smoking Tobacco*. Retrieved March 7<sup>th</sup>, 2024 from <https://www.cancer.org/cancer/risk-prevention/tobacco/health-risks-of-tobacco/health-risks-of-smoking-tobacco.html>

<sup>23</sup> Source: CDC (2022). *Adult Obesity Facts*. Retrieved January 23<sup>rd</sup>, 2024, from <https://www.cdc.gov/obesity/data/adult.html>.

alcohol.<sup>24</sup> Annual physicals with a primary care provider are also necessary to help prevent or treat chronic health conditions. Yearly screenings can allow providers to identify any warning signs for developing conditions and enable patients to correct or develop healthy behaviors to avoid developing a physical health condition. A CDC study noted that one-third of visits to health centers in 2020 were for preventive care.<sup>25</sup> For those living with chronic conditions, the CDC recommends some general steps people can take to manage their diseases. These include taking medications as prescribed by a provider, self-monitoring symptoms as needed (such as conducting home blood sugar checks), and regularly seeing a provider for check-ups.

### Secondary Data Findings

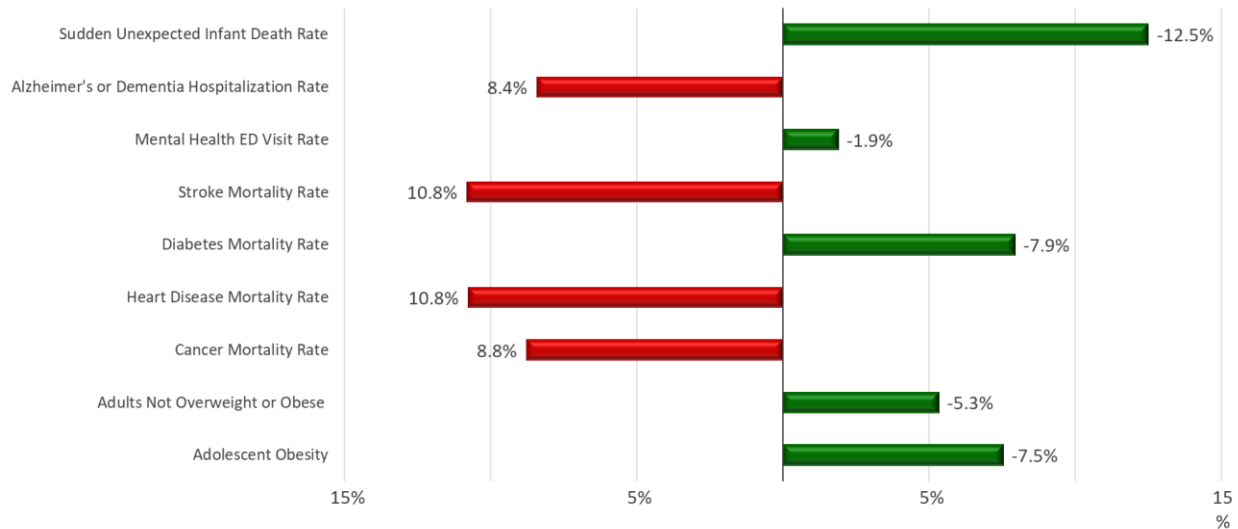
Baltimore County performed worse than the state of Maryland in nearly all physical health indicators, as shown in Table 4.2. This includes a higher percentage of residents experiencing frequent physical distress, or self-reporting poor or fair health status. Baltimore County also had slightly higher prevalence of diabetes and obesity among adults when compared to the state.

| Table 4.2: Physical Health Indicators                            |                  |                |          |               |
|------------------------------------------------------------------|------------------|----------------|----------|---------------|
| Indicator                                                        | Baltimore County | Baltimore City | Maryland | United States |
| Percentage of Population Experiencing Frequent Physical Distress | 8%               | 10%            | 7%       | 9%            |
| Number of Poor Physical Health Days in the Last 30 Days          | 2.5              | 3.3            | 2.5      | 3             |
| Percentage of Population Reporting Poor or Fair Health           | 12%              | 17%            | 11%      | 12%           |
| Percent of Population Reporting Insufficient Sleep               | 34%              | 40%            | 34%      | 33%           |
| Adult Diabetes Prevalence                                        | 9%               | 13%            | 9%       | 9%            |
| Adult Obesity Prevalence                                         | 32%              | 37%            | 31%      | 32%           |

When compared to the state overall, Baltimore County had measurably worse rates of hospitalization for Alzheimer’s disease or other dementias, as well as higher rates of mortality due to stroke, heart disease and cancer.

<sup>24</sup> Source: CDC (2023). *Top 4 tips to Prevent Chronic Diseases*. Retrieved January 31, 2024, from: <https://www.cdc.gov/chronicdisease/about/top-four-tips/index.htm>.

<sup>25</sup> CDC (2022). *Characteristics of visits to health centers: United States, 2020*. Retrieved January 31, 2024, from <https://www.cdc.gov/nchs/products/databriefs/db438.htm>.

**Figure 4.5: Physical Health Indicators: Variance from State**

Baltimore County also underperformed relative to the state in a number of health behaviors that have an impact on physical health. Baltimore County residents had higher rates of physical inactivity and smoking – both of which have been shown to increase the risk of various chronic health conditions. Despite having a higher rate of physical inactivity than the state, Baltimore County does have a higher proportion of its population with access to exercise opportunities. Food insecurity was also a concern for Baltimore County residents, which is notable due to the impact diet has on overall physical health.

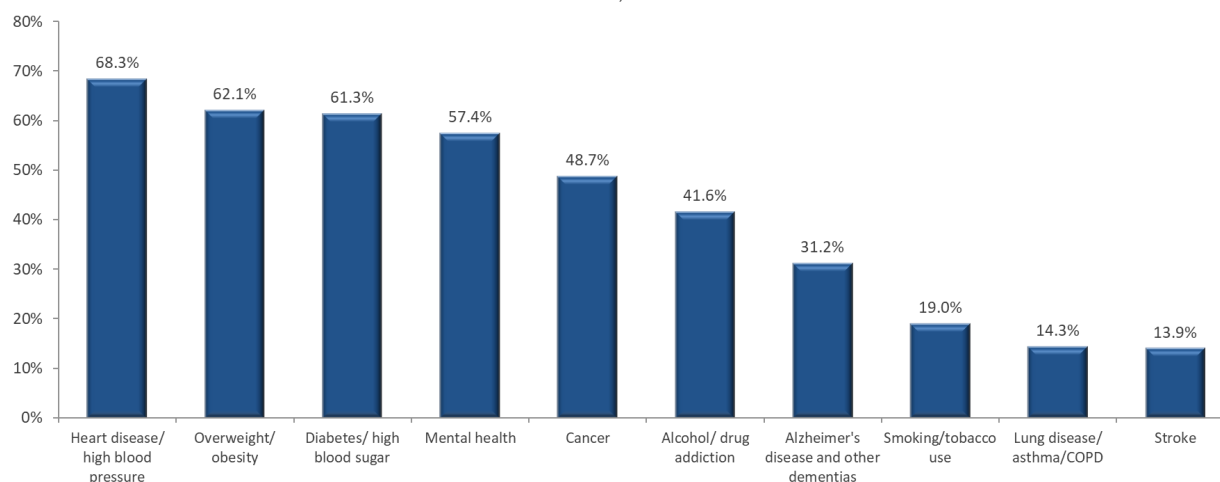
| Table 4.3: Health Behavior and Food Security Indicators     |                  |                |          |               |
|-------------------------------------------------------------|------------------|----------------|----------|---------------|
| Indicator                                                   | Baltimore County | Baltimore City | Maryland | United States |
| Percent of Physically Inactive Adults                       | 22%              | 25%            | 21%      | 22%           |
| Percent of Adult Smokers                                    | 14%              | 19%            | 11%      | 16%           |
| Food Environment Index                                      | 8.3              | 7.5            | 8.7      | 7             |
| Percent of Population with Access to Exercise Opportunities | 97%              | 99%            | 92%      | 84%           |
| Percent of Population Experiencing Food Insecurity          | 10%              | 16%            | 9%       | 12%           |
| Percent with Limited Access to Healthy Foods                | 4%               | 2%             | 4%       | 6%            |
| Percent of Children Eligible for Free or Reduced Lunch      | 52%              | 66%            | 45%      | 53%           |

### Primary Data Findings – Community Member Survey

Community members who responded to the survey identified various conditions related to physical health among the top community health needs in Baltimore County. Heart disease and high blood pressure were identified as the top community health need overall, having been selected by 68.3% of respondents. Overweight and obesity was identified as the second highest need by 62.1% of respondents, while diabetes and high blood sugar ranked third (61.3%). Other physical health conditions were also ranked among the top ten community health needs, including cancer (48.7%), Alzheimer’s disease and other dementias (31.2%), lung conditions (14.3%) and stroke (13.9%). In addition, nearly one in five respondents identified smoking or tobacco use as a primary concern, which is of note due to the significant health impacts that can result from tobacco exposure.

**Figure 4.6**

Please select the top FIVE (5) community health needs of Baltimore County.  
n= 1,914



### Primary Data Findings – Key Leader Survey

Among respondents to the key leader survey, approximately 21% identified diabetes and 20% identified heart disease, stroke, or hypertension among the most pressing health needs in Baltimore County. The need for primary and preventive healthcare, which helps promote physical health and well-being, was identified as a top need by 37.4% of respondents. In addition, more than half of Baltimore County key leaders (56%) indicated that there were not enough indoor places to get physical activity, one-third felt there were not enough outdoor places to get physical activity (30%) and 56% felt that children did not have enough opportunities to play and socialize outside of school.

### Primary Data Findings – Focus Groups

Participants in the focus groups came from a wide variety of backgrounds, ranging from military veterans to those involved with a local YCMA, independent seniors, and those living with various physical health conditions. When asked to identify the most serious health issues impacting their community, participants

described an array of physical health conditions, including diabetes (type 1 and type 2), hypertension, obesity, cancer, and dehydration.

Access to healthy food was noted as a contributing factor that directly impacts many of these health concerns. Multiple focus groups described a lack of access to grocery stores as well as a lack of healthy, convenient food options within walking distance of their homes or workplaces. One focus group featuring military veterans noted that subscription healthy meal services were a helpful option, however the cost may not be accessible to those with lower incomes. This group also noted a lack of access to fresh food in the winter, and that less healthy canned food was more commonly eaten. Participants in a focus group featuring clients at a clinic that provides services to individuals experiencing homelessness also expressed that it can be difficult to carry multiple or large items on public transportation. This presents a challenge for some to be able to transport healthy groceries home, especially those who are elderly or have mobility challenges.

Focus group participants also described other challenges that impact the physical health of the community. Participants living with type 2 diabetes, in particular, cited a need for safe outdoor spaces where they can exercise without having to pay for a gym membership. These community members also expressed a need for providers to better educate their patients on preventive screenings and healthy behaviors, to help patients understand how to prevent certain chronic health conditions. This group felt that not enough attention was given to preventive health education, and that providers are often more focused on treating acute conditions.

### **Priority Need: Access to Care**

#### Context and National Perspective

Access to care means patients are able to get high quality, affordable healthcare in a timely fashion to achieve the best possible health outcomes. It includes several components, including coverage (i.e. insurance), a physical location where care is provided, the ability to receive timely care, and enough providers in the workforce. The CHNA Steering Committee identified access to care as a high priority need for residents of Baltimore County

From a national perspective, according to Healthy People 2030, approximately one in ten people in the U.S. do not have health insurance, which means they are less likely to have a primary care provider or to be able to afford the services or medications they need.<sup>26</sup> Access is a challenge even for those who are insured.<sup>27</sup>

The availability and distribution of health providers in the U.S. contributes to healthcare access challenges. According to the Association of American Medical Colleges (AAMC), there is estimated to be a shortage

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<sup>26</sup> Source: U.S. Department of Health and Human Services Office of Disease Prevention and Health Promotion (2023). *Healthy People 2030: Health Care Access and Quality*. Retrieved September 14<sup>th</sup>, 2023 from <https://health.gov/healthypeople/objectives-and-data/browse-objectives/health-care-access-and-quality>.

<sup>27</sup> Source: Phillips, K.A., Marshall, D.A., Adler, L., Figueroa, J., Haeder, S.F., Hamad, R., Hernandez, I., Moucheraud, C., Nikpay, S. (2023). Ten health policy challenges for the next ten years. *Health Affairs Scholar*. Retrieved from: <https://academic.oup.com/healthaffairsscholar/article/1/1/qxad010/7203673>.

of 37,800 to 124,000 physicians in the U.S. by 2034, which will impact both primary and specialty care.<sup>28</sup> Access issues are anticipated to increase in coming years. Growing shortages of both nurses and doctors are being driven by several factors, including population growth, the aging U.S. population requiring higher levels of care, provider burnout (physical, mental and emotional exhaustion) made worse by the COVID-19 pandemic, and a lack of clinical training programs and faculty – particularly for nurses.<sup>29</sup> The aging of the current physician workforce is also driving anticipated personnel shortages. In Maryland, 35.8% of actively practicing physicians were over the age of 60 in 2020.<sup>30</sup> Access is also impacted by the number of actively practicing physicians overall. In 2020, there were just 7,075 primary care physicians in Maryland, with 23,791 physicians actively practicing overall.<sup>30</sup>

The ability to access healthcare is not evenly distributed across groups in the population. Groups who may have trouble accessing care include the chronically ill and disabled (particularly those with mental health or substance use disorders), low-income or homeless individuals, people located in certain geographical areas (rural areas; tribal communities), members of the LGBTQIA+ community, and certain age groups – particularly the very young or the very old.<sup>31</sup> In addition, individuals with limited English proficiency (LEP) face barriers to accessing care, experience lower quality care and have worse outcomes for health concerns. LEP is known to worsen health disparities and can make challenges related to other SDoH (access to housing, employment, etc.) worse.<sup>32</sup> Both primary and secondary data resources analyzed for this report highlight the need for greater access to health services within Baltimore County.

Access to care and overall community health are affected by SDoH, which have a critical impact on health needs and outcomes. The World Health Organization defines SDoH as the non-medical factors that influence health outcomes. These are the conditions in which people are born, grow, work, live and age, and the wider set of external forces and systems shaping the conditions of daily life. Examples of SDoH that can influence health equity in positive or negative ways include income, education, unemployment/job security, food insecurity, housing, early childhood development, social inclusion or non-discrimination, structural conflict and access to affordable, high-quality healthcare.<sup>33</sup>

As seen in Figure 4.7, the American Hospital Association categorizes SDoH factors into the following domains: food, housing, transportation, health behaviors, violence, education, social support and employment.

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<sup>28</sup> Source: Association of American Medical Colleges (AAMC) (2021). *The complexities of physician supply and demand: Projections from 2019 to 2034*. Retrieved from:

<https://www.aamc.org/media/54681/download?attachment>.

<sup>29</sup> Source: University of Southern California Keck School of Medicine (2023). *A Public Health Crisis: Staffing Shortages in Health Care*. Retrieved September 14<sup>th</sup>, 2023, from <https://mphdegree.usc.edu/blog/staffing-shortages-in-health-care>.

<sup>30</sup> Source: AAMC (2021). *Maryland physician workforce profile*. Retrieved January 24, 2024, from <https://www.aamc.org/media/58211/download>

<sup>31</sup> Source: Joszt, L. (2018). 5 Vulnerable Populations in Healthcare. *American Journal of Managed Care*. Retrieved September 14<sup>th</sup>, 2023 from <https://www.ajmc.com/view/5-vulnerable-populations-in-healthcare>.

<sup>32</sup> Source: Espinoza, J. and Derrington, S. (2021). How Should Clinicians Respond to Language Barriers That Exacerbate Health Inequity? *AMA Journal of Ethics*. Retrieved from: <https://journalofethics.ama-assn.org/article/how-should-clinicians-respond-language-barriers-exacerbate-health-inequity/2021-02>.

<sup>33</sup> Source: WHO (2023). *Social Determinants of Health*. Retrieved September 14<sup>th</sup>, 2023, from [https://www.who.int/health-topics/social-determinants-of-health#tab=tab\\_1](https://www.who.int/health-topics/social-determinants-of-health#tab=tab_1).

**Figure 4.7: Social Determinants of Health**

Source: American Hospital Association

SDoH are not experienced equally by all people and are often linked to one another. The impacts of SDoH on populations are profound, can persist across generations, and often drive health inequities based on race, ethnicity or socioeconomic status. When health systems use their resources to address SDoH among patient populations, it can strengthen the quality of the care they provide while reducing health inequities.<sup>34</sup> Evidence-based SDoH programs that can be adopted by hospitals or health systems that may reduce healthcare costs and improve outcomes include supportive housing for individuals with chronic health conditions, food and nutrition access, patient transportation services, cash payment or income support for individuals with disabilities, and multidisciplinary patient care coordination teams.<sup>35</sup> Research published in JAMA suggests that collecting patient data on social adversity and health-related social needs (HRSN) can not only be used to develop better trust and support for their patients but can also help identify broader social needs in the community.<sup>36</sup>

Throughout the primary and secondary data findings below, various SDoH emerged as areas of priority need that impact Baltimore County residents' ability to live healthy lives or to access medical care. Specifically, based on these findings, key concerns include dynamics related to transportation, food insecurity, housing and homelessness, and neighborhood safety and violence. County health leaders will continue to evaluate their potential to play a role in impacting these domains in the years to come.

<sup>34</sup> Source: American Medical Association (2022). *What are social determinants of health?* Retrieved September 14<sup>th</sup>, 2023, from <https://www.ama-assn.org/delivering-care/health-equity/what-are-social-determinants-health>.

<sup>35</sup> Source: Whitman, A., De Lew, N., Chappel, A., Aysola, V., Zuckerman, R. & Sommers, B. (2022). *Addressing Social Determinants of Health: Examples of Successful Evidence-Based Strategies and Current Federal Efforts*. Retrieved from <https://aspe.hhs.gov/sites/default/files/documents/e2b650cd64cf84aae8ff0fae7474af82/SDOH-Evidence-Review.pdf>.

<sup>36</sup> Chen, A., Gwynn, K. & Schmidt, S. (2023). Addressing health-related social needs in the clinical, community, and policy domains. *JAMA Network*. Retrieved January 31, 2024 from: <https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2804105>.

### Secondary Data Findings

Various factors contribute to healthcare access, not all of which were determined to be of high need for Baltimore County, as detailed in Appendix 4. Relative to the state of Maryland U.S., Baltimore County performs well on a number of access to care metrics, including the ratios of population to primary care physicians, non-physician primary care providers, and mental health providers. However, Baltimore County has a number of large hospitals and health systems located within its borders, so these ratios suggest that many people who reside outside the county travel there to receive care. Access to care may not be equitable across all county populations, particularly those with socioeconomic or transportation-related challenges. The total population ratio per primary physician worsened from 2020 to 2023 in Baltimore County, growing from 990 to 1,100. Baltimore County also had a higher ratio of population to dental providers when compared to the state, suggesting that some residents may have difficulty caring for their oral health.

While Baltimore County performed better than the state of Maryland on preventive health measures such as annual mammograms or flu vaccines for the Medicare population, it performed worse than the state for preventable hospital stays. A high rate of hospital stays for health conditions that are typically treated in an outpatient situation, such as diabetes, suggests that community members are not able to consistently access primary care, which could help them manage their condition without being admitted to the hospital.

| Table 4.4: Access to Care Indicators                           |                  |                |          |               |
|----------------------------------------------------------------|------------------|----------------|----------|---------------|
| Indicator                                                      | Baltimore County | Baltimore City | Maryland | United States |
| Total Population per Primary Care Physician                    | 1,100            | 800            | 1,130    | 1,310         |
| Total Population per non-Physician Primary Care Provider       | 770              | 320            | 770      | 810           |
| Total Population per Dentist                                   | 1,300            | 1,210          | 1,260    | 1,380         |
| Total Population per Mental Health Provider                    | 260              | 170            | 310      | 340           |
| Annual Percentage of Medicare Enrollees Receiving Mammograms   | 41%              | 36%            | 37%      | 37%           |
| Annual Percentage of Medicare Enrollees Receiving Flu Vaccines | 59%              | 51%            | 55%      | 51%           |

As previously described in the Context and National Perspective section above, SDoH have an impact on individual health status, and many SDoH factors can influence a person's ability to access healthcare. A lack of access to reliable transportation or transit is a key barrier that can prevent someone from being able to see their provider, and can influence their ability to thrive in other areas of their life as well (such as getting to school or work). Baltimore County has high proportions of the population commuting long distances to work and driving alone to do so. While not a direct indicator of healthcare access issues, individuals who must travel long distances for work may also need to travel significantly for other essential needs, including medical care. Baltimore County also has higher traffic volume when compared to the

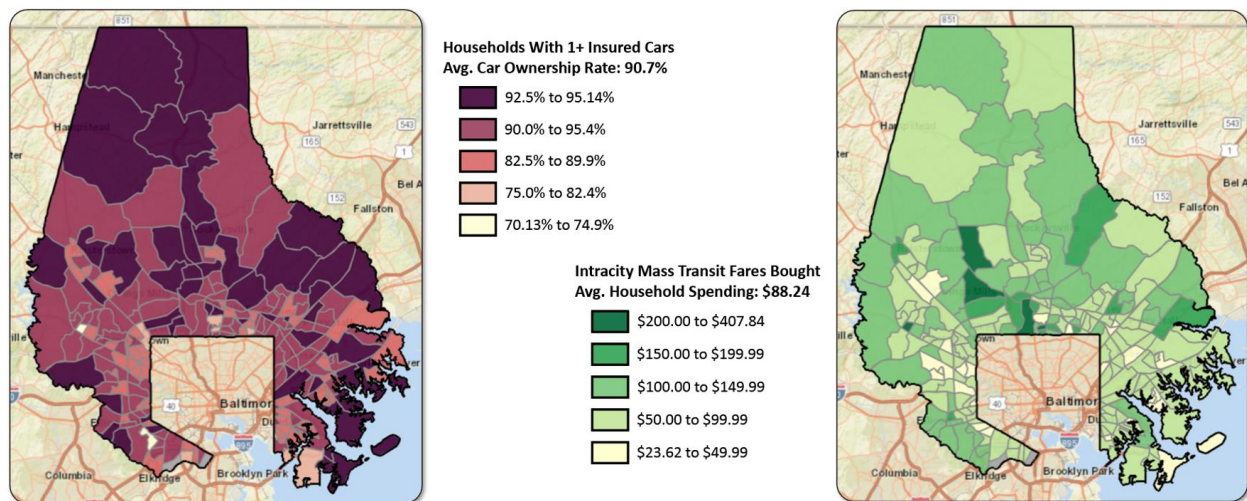
state of Maryland, which has the potential to impact health via air pollution and overall quality of life as well.

**Table 4.5: Social Determinants of Health – Transportation Indicators**

| Indicator                   | Baltimore County | Baltimore City | Maryland | United States |
|-----------------------------|------------------|----------------|----------|---------------|
| Driving Alone to Work       | 75%              | 58%            | 70%      | 73%           |
| Long Commute- Driving Alone | 45%              | 43%            | 50%      | 37%           |
| Traffic Volume              | 835              | 1,443          | 695      | 505           |

Car ownership is not uniform across the county. Households located further from the city border are most likely to own at least one vehicle. As seen in Figure 4.8, low rates of car ownership are correlated with higher spending on mass transit. Baltimore County residents who are reliant on mass transportation to get around may be limited as to where they can seek care based on where bus or other transit lines are available.

**Figure 4.8: Percentage of Car Ownership and Amount of Mass Transit Spending**



Access to healthy food is a key SDoH that directly impacts an individual's health status. One in ten Baltimore County residents is food insecure – higher than the state of Maryland but lower than Baltimore City or the U.S. overall. In addition, just over half of children in Baltimore County are eligible for free or reduced lunch programs. Families with limited resources may find it difficult to provide nutritious meals to their children at home, which could contribute to chronic health conditions later in life.

**Table 4.6: Social Determinants of Health – Food Insecurity Indicators**

| Indicator                                   | Baltimore County | Baltimore City | Maryland | United States |
|---------------------------------------------|------------------|----------------|----------|---------------|
| Food Environment Index                      | 8.3              | 7.5            | 8.7      | 7             |
| Food Insecurity                             | 10%              | 16%            | 9%       | 12%           |
| Limited Access to Healthy Foods             | 4%               | 2%             | 4%       | 6%            |
| Children Eligible for Free or Reduced Lunch | 52%              | 66%            | 45%      | 53%           |

Access to safe, affordable housing is another SDoH that can contribute to overall health status. Individuals who struggle to afford housing may be forced to make difficult choices between paying housing bills or paying for needed medications or health services. While Baltimore County has a higher proportion of affordable housing and a lower proportion of people living with severe housing problems compared to the city or the state, it has a slightly lower proportion of homeowners compared to Maryland overall.

**Table 4.7: Social Determinants of Health – Housing and Homelessness Indicators**

| Indicator                                              | Baltimore County | Baltimore City | Maryland | United States |
|--------------------------------------------------------|------------------|----------------|----------|---------------|
| Percentage of Households with Severe Housing Problems  | 15%              | 21%            | 16%      | 17%           |
| Percentage of Owner-Occupied Housing                   | 66%              | 48%            | 67%      | 65%           |
| Percent of Renters with Severe Housing Cost Burden     | 14%              | 20%            | 14%      | 14%           |
| Percentage of Sold Housing Units Considered Affordable | 64.1%            | 91.9%          | 56.7%    | N/A           |

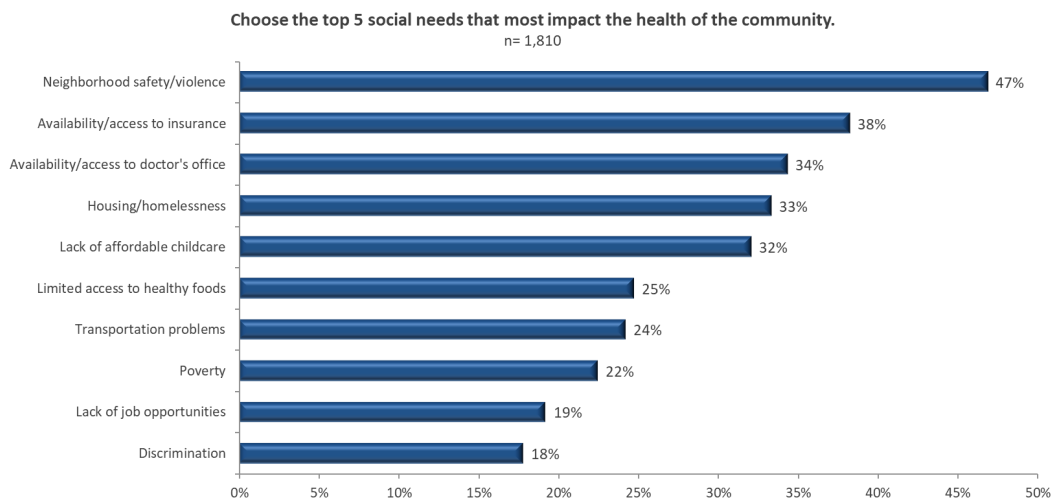
Neighborhood safety and violence is another significant SDoH concern in Baltimore County. All countywide safety indicators were higher than state and national levels, with the exception of motor vehicle crash deaths. Rates of firearm fatalities and deaths due to injuries were both higher than the rate for the state of Maryland, although significantly lower than in Baltimore City. Notably, the juvenile arrest rate in Baltimore County is much higher than the rates in the city, the state or the U.S. overall.

**Table 4.8: Social Determinants of Health – Neighborhood Safety and Violence Indicators**

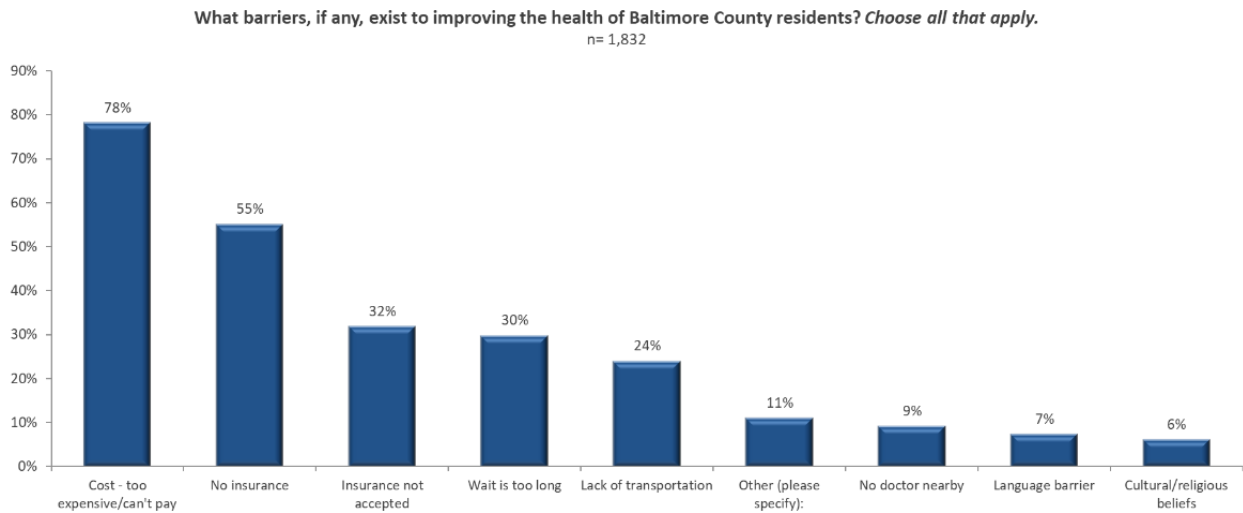
| Indicator                                           | Baltimore County | Baltimore City | Maryland | United States |
|-----------------------------------------------------|------------------|----------------|----------|---------------|
| Injury Mortality (per 100,000 population)           | 109              | 200            | 88       | 76            |
| Homicides (per 100,000 population)                  | 9                | 43             | 9        | 6             |
| Firearm Fatalities (per 100,000 population)         | 13               | 44             | 12       | 12            |
| Motor Vehicle Crash Deaths (per 100,000 population) | 8                | 9              | 9        | 12            |
| Juvenile Arrests per 1,000 Juveniles                | 39               | 25             | 27       | 24            |

### Primary Data Findings – Community Member Survey

Respondents to the community member survey identified several social needs related to access to care and other SDoH factors. Availability and access to health insurance (38%) and the doctor's office (34%) were identified among the top five social needs impacting community health. Neighborhood safety and violence was identified as the top social need impacting community health (47%). Figure 4.9 shows high levels of concern related to multiple SDoH and access factors, such as access to healthy food, housing and homelessness, and neighborhood safety.

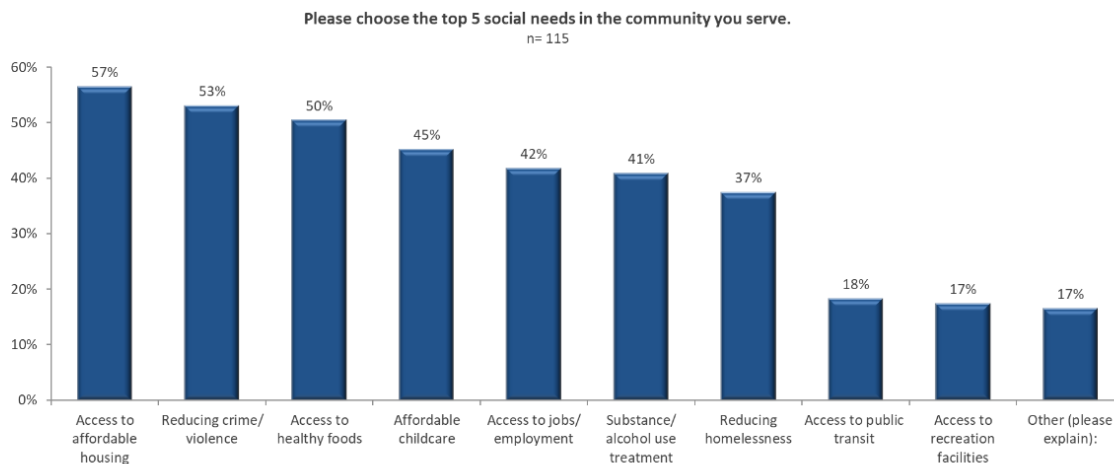
**Figure 4.9**

Community members were also asked to identify top barriers to improving and accessing care, as seen in Figure 4.10 below. Cost of care (78%) and inability to obtain insurance (55%) were the top two barriers to care. The overall cost of healthcare was identified as a consistent barrier in both the key leader survey and the community member survey.

**Figure 4.10**

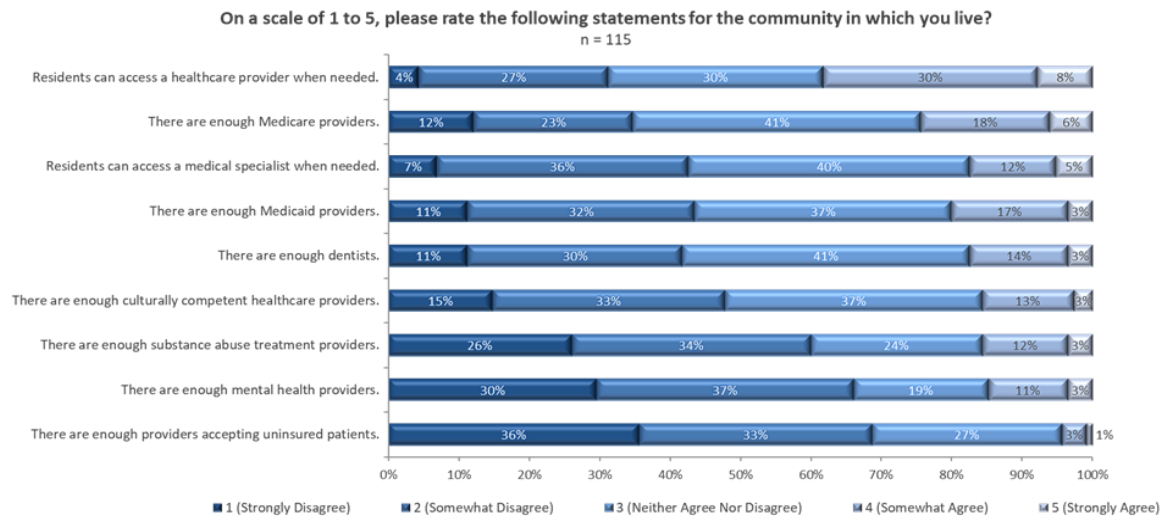
### Primary Data Findings – Key Leader Survey

Nearly half (45.2%) of respondents to the key leader survey ranked access to care among the highest priority health needs in Baltimore County, while 37.4% identified the need for primary and preventive healthcare as a top concern. Access to care and its impact on other SDoH factors was a significant focus when respondents were asked to identify the top social needs in Baltimore County as well. The most significant social need identified by key leaders was access to affordable housing at 57%. Reducing crime and violence was noted as well, with 53% of respondents identifying that need as a priority. While access to healthcare was not specifically identified as a top social need, many of the top social needs have the potential to impact an individual's ability to access high quality medical care. This includes access to jobs or employment, affordable childcare and access to public transit. Other top identified social concerns that medical providers may be able to impact through referrals to community resources include access to healthy foods and services to address homelessness.

**Figure 4.11**

Overall, a high percentage of respondents (38%) agreed that residents could access a healthcare provider when needed. However, respondents did not find this to be consistent across all provider or patient types. Over half of respondents (69%) felt that there were not enough providers that accepted uninsured patients. Just under half (43%) of key leaders felt that Baltimore County residents were not able to access a medical specialist when needed, and the same percentage of respondents also felt that there were not enough providers serving the Medicaid population.

**Figure 4.12**



Respondents were also asked to identify any barriers to improving the health of residents in the communities they serve, as seen in Figure 4.13. Nearly three-quarters (72%) of respondents identified the cost of care as a top barrier to community health improvement. This was followed by health literacy (63%) and appointment availability (54%). Transportation was also noted as a barrier by more than half of respondents, underscoring the impact this particular SDoH has on health and well-being.

**Figure 4.13**

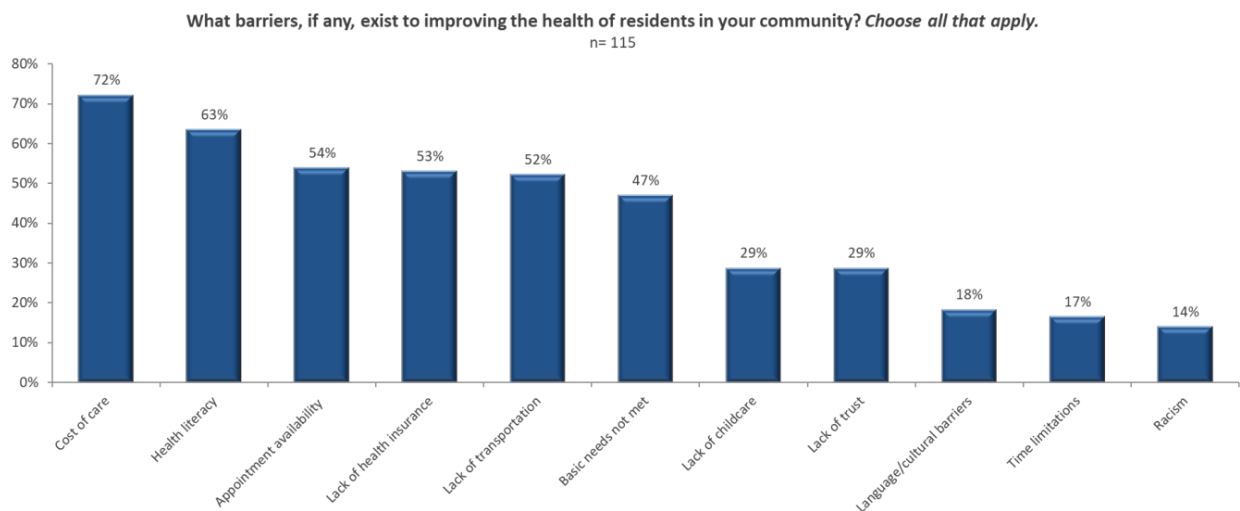
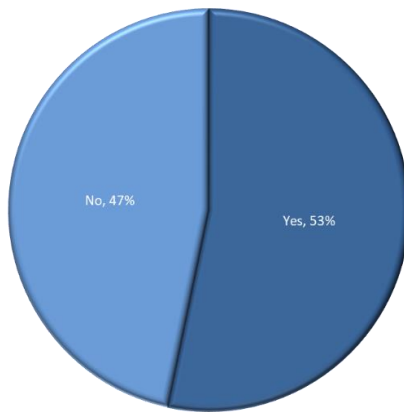


**Figure 4.14**

Do you feel that the residents of the community you serve are health literate? n = 115

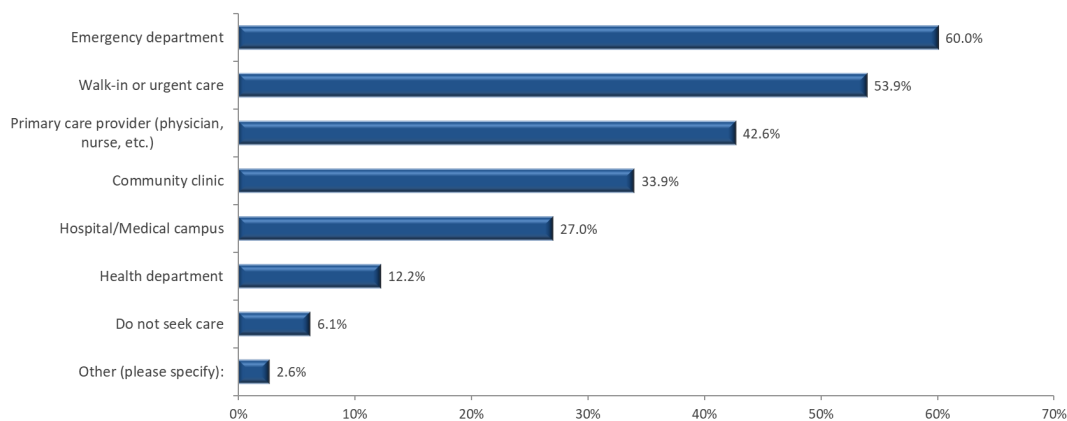


Health literacy was identified as the second highest barrier to improving community health in the key leader survey. As a follow up question, key leaders were asked whether they felt that the residents of the community they serve were health literate, or able to understand health-related information when it is presented to them. Nearly half of respondents (47%) indicated that they felt their community members were not able to understand health-related information, as seen in Figure 4.14.

Finally, key leaders were asked to identify the most common settings where community members seek care. Figure 4.15 shows that the majority of respondents (60%) selected the emergency department as the most common location of care. The second most common was walk in/urgent care, at 53.9%. This aligns with community survey results that noted a lack of appointment availability and the high cost of care as major barriers. Individuals cannot be turned away at emergency departments for care, and many low-income individuals may not be able to see a primary care provider in a timely fashion, or may lack health insurance to access primary care in the first place.

**Figure 4.15**

Members of your community typically seek medical care through... Please select all that apply  
n = 115

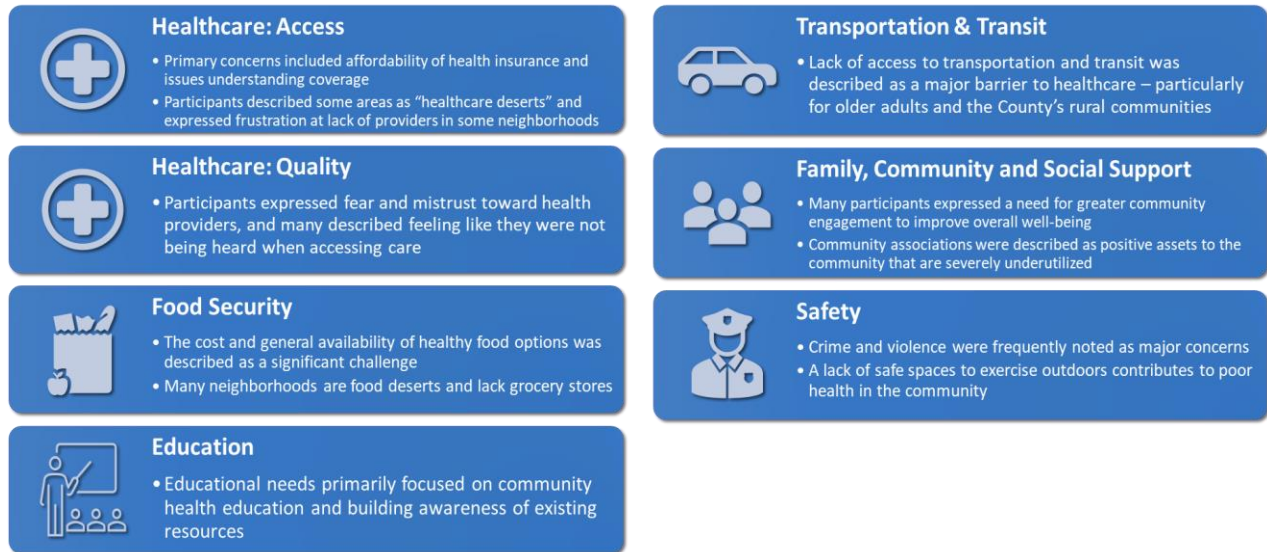


### Primary Data Findings – Focus Groups

Focus groups conducted during the CHNA process identified access to care and quality of care as two significant health factors impacting Baltimore County residents. Other SDoH factors that may impact health or the ability to access healthcare were also noted, such as housing and homelessness, transportation, community health education, food security, and family, community, and social support.

Seven specific needs related to access to care or SDoH were identified through the focus groups as priority concerns for the community. Figure 4.16 below illustrates the major focus group themes related to each health or social need. Many of these needs were cross-identified through the key leader and community surveys as well.

**Figure 4.16: Key Focus Group Findings**



Focus group participants were asked to describe some of the reasons members of their community may not seek out healthcare, even when it’s needed. Three key themes emerged around these topics: access and availability to transportation; obtaining and maintaining health insurance; and the ease in scheduling appointments or seeing their provider in a timely manner. Participants cited a lack of access to transportation as a theme when discussing their inability to not only reach medical services, but to access other supportive services who can provide health education or additional resources. Community members also expressed concerns around accessing, obtaining, or ensuring that their insurance was enough to cover necessary medical expenses, and understanding how to access their benefits or find financial assistance to pay medical bills. A third concern raised by community members was around the difficulty in not only getting an appointment, but how long they needed to wait to see their provider. Participants also described SDoH as impacting community members’ ability to access care. Food insecurity was a particular concern, as the cost of food and other necessities may force individuals to de-prioritize healthcare to meet their basic needs.

Participants were also asked about their experiences with the medical services in their community. Various concerns were raised, including frustration at receiving an automated response when they call their provider, instead of receiving assistance from a physical person. Other concerns were around the amount of time spent with providers and the thoroughness of the exams they received. Community members generally expressed happiness with the central location of their providers.

In addition to transportation, focus group participants noted other SDoH challenges that directly impact their ability to access healthcare and live healthy lives. The high cost of healthy food was described as a driver of poor health in the community, as well as an important basic need that may force people to make difficult choices between paying for food or paying for prescriptions or medical care. Community members

also described a need for increased levels of family, community and social support as a way to improve overall community health and well-being. Some participants noted that their neighborhoods did not feel as tight knit as they had in the past and felt that this lack of connection contributed to negative mental health impacts or social isolation for vulnerable people. Finally, many community members who participated in the focus groups described community violence as a significant challenge that impacts community members' ability to walk or exercise outdoors, and as a contributor to high levels of stress that impact overall health and well-being.

Community members who participated in focus groups were asked how they best thought the above issues could be addressed. Multiple suggestions were provided, such as adjusting income qualifications for assistance programs to align with the cost of living, creating better navigation services to connect community members with resources, providing and advertising in-home visits, and standardizing more frequent welfare and support checks for vulnerable community members.

## CHAPTER 4 | HEALTH RESOURCE INVENTORY

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The following section details existing resources, facilities, and programs throughout Baltimore County.

### Health Resources

The list of resources below is representative of the services available in Baltimore County; however, this list is not exhaustive. Additionally, while the resources, facilities, and programs listed in this section have been categorized into common groups, these organizations and programs may offer additional services as well. Please note that while the county overall may be adequately served by existing capacity in some areas, not every area of the county is equally served, and the need for additional resources may be greater in one geography as compared to another.

As shown, this health resource inventory was compiled based on input and information from all Steering Committee partners and have been categorized into the following areas, including Healthcare Facilities, Home-based Health Services, Other Healthcare Services, and Community Services.

#### Healthcare Facilities

- Baltimore County Department of Health – Offers a variety of health services for the general public and specialty groups, including general health services, children’s health services, senior health services, uninsured health services, and women’s health services. Services are provided via four clinical bureaus.
- Northwest Hospital of LifeBridge Health – 231-bed hospital offering a variety of services at its hospital location as well as nearby outpatient facilities offering service such as outpatient surgery, adult day care, and physical rehabilitation.
- Sheppard Pratt – Provider of mental health, substance use, special education, developmental disability, and social services offering services in inpatient, outpatient, and virtual settings.
- Greater Baltimore Medical Center Healthcare – 228-bed medical center offering a variety of services at its hospital and main campus medical office buildings as well as primary care offices throughout the community. GBMC also provides and operates integrated behavioral health services, The Geckle Diabetes and Nutrition Center, and the Bariatric Surgery and Comprehensive Obesity Management Program.
- University of Maryland St. Joseph Medical Center – 218-bed hospital offering a variety of services at its hospital and associated practices. UM SJMC also offers many community programs to support families, chronic disease and pain management, physical activity and fall prevention. Additionally, the Barbara Posner Wellness and Support Center offers many support services for cancer patients. St. Clare Medical Outreach is a devoted team that provides primary care and health education to those who have no access to healthcare.
- MedStar Franklin Square Medical Center – 338-bed hospital offering a variety of services at its hospital location as well as primary care, family health, diabetes prevention, nutrition, and smoking cessation services in outpatient settings. Additionally, MedStar Health operates numerous Diabetes Institute locations, the MedStar Health Research Institute, and various behavioral health and outpatient psychiatry services. MedStar Health also offers numerous support groups including those focused on living well with chronic pain, diabetes, and stroke.

Home-based Health Services

| Organization                                                 | Example Service Offerings                                                               |
|--------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| Affiliated Santé Group's Baltimore County Mobile Crisis Team | Dispatches to assist in crisis events related to mental health                          |
| Baltimore County Department of Aging                         | Many evidence-based programs such as Stepping On Fall Prevention, BeCAUSE, senior meals |
| Baltimore County Department of Health                        | Community Health Workers, Nurse home visiting case management                           |
| Baltimore County Department of Social Services               | In-home aides and case management for specific populations, guardianship unit           |
| Meals on Wheels of Central Maryland                          | Home-delivered meals, Grocery Assistance Program                                        |
| Sheppard Pratt                                               | In-home medication management                                                           |

Other Healthcare Services

Other healthcare services are offered by the following organizations.

| Organization                                   |
|------------------------------------------------|
| Baltimore County Department of Health          |
| Baltimore County Department of Social Services |
| Baltimore County Public Schools                |
| Baltimore Medical Systems, Inc.                |
| Center for Family Success                      |
| Chase Brexton                                  |
| Gilchrist                                      |
| House of Ruth                                  |
| Maryland Department of Health                  |
| Nueva Vida                                     |
| Planned Parenthood                             |
| St. Clare Medical Outreach                     |
| Total Health Care                              |
| Towson University Institute for Well Being     |

Community Services

Additional community services are offered by the following organizations.

| Organization                                  |
|-----------------------------------------------|
| Alzheimer's support group                     |
| American Cancer Society                       |
| American Diabetes Association                 |
| American Heart Association                    |
| Assistance Center of Towson Churches          |
| Baltimore County Communities for the Homeless |
| Baltimore County Public Library               |

| Organization                                     |
|--------------------------------------------------|
| Baltimore County Recreation and Parks            |
| Baltimore County Senior Centers                  |
| Baltimore Hunger Project                         |
| Baltimore Jobs Program                           |
| BCPS Allied Health Magnets                       |
| CCBC                                             |
| Community Assistance Network                     |
| Epiphany Community Services                      |
| Food distribution sites (various)                |
| Gilchrist Grief Counseling and Support Resources |
| Harbel Prevention and Recovery Center            |
| Healthy Babies Collaborative                     |
| Healthcare Access Maryland                       |
| Healthcare for the Homeless                      |
| Humanim                                          |
| Hungry Harvest                                   |
| League for People with Disabilities              |
| MD Food Bank                                     |
| Mental Health Association of Maryland            |
| Mosaic Community Services                        |
| Moveable Feast                                   |
| NAMI                                             |
| Orokawa Y at Towson                              |
| Pro Bono Counseling                              |
| Southeast Network                                |
| Streets of Hope                                  |
| Student Support Network                          |
| United Way                                       |

## CHAPTER 5 | NEXT STEPS

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The CHNA findings are used to develop effective community health improvement strategies to address the priority needs identified throughout the process. The next and final step in the CHNA process is to develop community-based health improvement strategies and action plans to address the priorities identified in this assessment. The organizations making up the Steering Committee will leverage information from this CHNA to develop implementation and action plans for their local community, while also working together with other members of the Steering Committee to ensure the priority need areas are being addressed in the most efficient and effective way. The Steering Committee believes that the most effective strategies will be those that have the collaborative support of community organizations and residents. The strategies developed will include measurable objectives through which progress can be measured.

**APPENDICES**

## APPENDIX 1 | SUMMARY OF PRIOR CHNA IMPLEMENTATION PLANS

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A CHNA is an ongoing process that begins with an evaluation of the previous CHNA. In 2021, Baltimore County completed its previous assessment. Associated implementation strategies focused on three priority areas, as listed below:

### Priority Health Need Areas

- Behavioral Health, including Mental Health and Substance Use Disorders
- Physical Health
- Health Disparities

Each member organization of the Steering Committee developed goals and implementation plans to address these priority health needs. Below are brief summaries of each organization's 2021-2024 CHNA implementation plans.

#### Baltimore County Department of Health

BCDH's vision is healthy people living, working and playing in Baltimore County. To achieve this, BCDH works to promote health and well-being among individuals and families; provide quality health, housing and social services; prevent disease through education, advocacy, outreach and connection to resources and treatment; administers entitlement and benefits programs; conducts investigations and inspections; and offers clinical and case management services.

The BCDH fiscal year (FY) 2021 Community Health Improvement Plan (CHIP) addresses the following priority areas: Behavioral Health (including Mental Health and Substance Use Disorders (SUDs)), Physical Health/Chronic Disease and Health Disparities. Due to ongoing challenges related to the COVID-19 pandemic, some planned action items still need to be conducted. However, BCDH has continued to provide and increased harm reduction services to individuals with SUDs along with enhanced crisis response services for those with mental health disorders. The Health Department has increased services for those with chronic disease with the implementation of a chronic disease program focusing on hypertension and diabetes. To address health disparities, the chronic disease program provides screening for hypertension and diabetes to those at highest risk, addressing the disparity. The Department implemented a TOPS (Take Off Pounds Sensibly) program in conjunction with a predominantly African American church. In addition, the Department is participating in a countywide task force for New Americans. The Department continues to expand the use of bilingual staff and enhance cultural competencies.

#### Greater Baltimore Medical Center Healthcare

GMBC offers a variety of services through its three work systems: a 228-bed licensed facility; GBMC Health Partners, a group of 30+ physician practices; and Gilchrist, dedicated to geriatric primary care, hospice,

and bereavement counseling. GBMC also provides and operates integrated behavioral health services, The Geckle Diabetes and Nutrition Center, and the Bariatric Surgery and Comprehensive Obesity Management Program.

The GBMC 2022-2024 CHNA Implementation Plan addressed the following priority need areas: Health Disparities, Behavioral Health (including mental health and SUDs), and Physical Health. Activities undertaken to address health disparities included providing healthy meals to food-insecure patients through Moveable Feast and an aging-in-place initiative developed with Maryland Volunteer Lawyers Service. To address behavioral health, GBMC and Sheppard Pratt provided integrated behavioral health at all primary care practices through the Collaborative Care Model; partnered with organizations of the CHNA Committee and the Baltimore County Police Department to promote National Prescription Drug Takeback Day events; and assisted with community engagement initiatives to implement the Greater Baltimore Regional Integrated Crisis System to expand the capacity of mobile crisis teams and community-based providers to reduce police interaction and overreliance on emergency departments. Physical health-focused initiatives included collaborative efforts to improve the built environment, Walk with a Doc events, promotion of pre-diabetes risk assessments for patients, and providing affordable healthy produce to patients, staff and the community through Hungry Harvest.

### **MedStar Franklin Square Medical Center**

MFSMC is located in eastern Baltimore County, and offers comprehensive, technology-based surgical services, including the latest, most innovative treatment for patients with various medical conditions. Its specialty service lines include medicine, oncology, neurosciences, cardiology, obstetrics and gynecology, orthopedics, neonatal intensive care, behavioral health, and ambulatory services.

MedStar's 2021 CHNA process identified three overarching community health needs: health and wellness, access to care and services, and SDoH. The hospitals conduct many community programs related to chronic disease including diabetes prevention and management classes, blood pressure screenings, tobacco cessation programming, and stroke support groups. To address behavioral health issues, MedStar Health has expanded the SBIRT (Screening, Brief Intervention & Referral to Treatment) strategy in emergency department and primary care settings and embedded Peer Recovery Coaches on hospital care teams. Relative to maternal and child health, the hospital has supported and coordinated an expanded Healthy Babies Collaborative and increased its Birth and Family education scope. To better provide access to care and services, MedStar Health has included mental health services as part of its primary care model and conducted social needs screenings and support linkages as part of care delivery. It has partnered with outside organizations to address social determinants of health (SDoH), including the MedStar Health Uber transportation program and workforce development initiatives. MedStar Health assumed the full cost for continuing the Public Health Workforce Support for Disadvantaged Areas post-collaboration grant. To address food access challenges, the Food Rx program is now available through three hospitals with added community partnerships.

### **Northwest Hospital of LifeBridge Health**

Northwest Hospital is a nonprofit hospital with 367 private rooms, which has been dedicated to the needs of the greater northwest Baltimore community for over 50 years, caring for the citizens of Baltimore County, western Baltimore City, Carroll County, Howard County and beyond. Northwest Hospital's 2021-

2024 implementation plan addressed the following priority areas: chronic heart disease, diabetes, mental health and SUDs, community health and wellness education, health disparities, and workforce development.

To address these respective issues, LifeBridge and Northwest Hospital staff implemented virtual and in-person chronic disease management education classes, increased staff to expand reach into surrounding communities, provided staff to assist patients with navigating and applying for Medicaid health insurance, utilized Sinai Hospital of Baltimore's vocational services and workforce readiness program (VSP) for training and workforce development services, and created new partnerships while strengthening existing ones with community based organizations--including with local faith-based organizations--to improve access and trust for patients needing medical and behavioral health services.

Some examples of programs and services implemented in the Northwest service area supporting community health include:

- *SBIRT Program:* Peer recovery coaches stationed in the hospital's Emergency Department who connect SUD patients with treatment and community resources. In FY23, Northwest Hospital provided over 8,000 screenings.
- *Cardiovascular Telemonitoring Program:* Remote patient monitoring program to improve the quality of care, patient outcomes, and reduce hospital utilization for patients with chronic diseases by improving patient-provider communication, improving coordination of care, and improving time of follow up with a Primary Care Provider. In FY23, Northwest enrolled 102 patients in the GetWell Loop Chronic Disease Management program.
- *Community Care Coordination:* Care management services provided to high-risk community members. This program includes collaboration with internal and external mental health practices and referrals to community support resources. The initiative also coordinates transportation to medical appointments and social services. In FY23, this service provided 16,559 encounters.
- *Community Pastoral Outreach:* Community Pastoral Outreach provides supportive leadership with members of the faith community within Northwest's catchment area and beyond. This program assists congregations (all faiths) to develop health and wellness ministries; provides community pastoral care with participants of established programs; helps faith communities develop workshops, seminars, classes in relation to faith and health, along with specific health concerns; and engages in faith relations (e.g., with local governments, nonprofits, colleges and universities) throughout LifeBridge service areas.

### **University of Maryland St. Joseph Medical Center**

UM SJMC is a 221-licensed bed, Catholic acute care hospital located in Towson, Maryland. UM SJMC is a member of the University of Maryland Medical System, a multi-hospital system with academic, community and specialty service missions reaching every part of the state and beyond.

In its 2022–2024 Community Health Improvement Implementation Plan, UM SJMC outlined a number of key objectives and action items to address each of the main priority areas identified by the county's 2020-

2021 CHNA. UM SJMC offered community health screenings for a variety of conditions, including breast cancer, cervical cancer, blood pressure, type 2 diabetes and stroke or abdominal aortic aneurysm, as well as bone density and body composition screenings. UM SJMC also hosted community events, including blood drives in partnership with the Red Cross, a community market featuring fresh fruits and vegetables, wellness fairs, vaccination clinics, and virtual community health education events. To address chronic health needs in the community, UM SJMC offered its Chronic Disease Self-Management Program and Prevent T2 – a CDC-developed diabetes prevention program. UM SJMC also completed the development of a new, evidence-based behavioral health curriculum, which will launch in Spring 2024.

## APPENDIX 2 | COUNTY DEMOGRAPHIC AND SOCIOECONOMIC DETAIL

Detailed information regarding the demographics and socioeconomics of Baltimore County can be found in the tables below.

### County Demographics

#### Age and Total Population

The table below shows the total population in Baltimore County, Baltimore City, Maryland and the United States.

| Table A2.1: Total Population, 2023 |                  |                |           |               |
|------------------------------------|------------------|----------------|-----------|---------------|
|                                    | Baltimore County | Baltimore City | Maryland  | United States |
| Population                         | 859,710          | 573,794        | 6,259,408 | 337,470,185   |

Source: ESRI 2023

The table below shows the percentage of Baltimore County, Baltimore City, Maryland and United States residents by age cohort.

| Table A2.2: Age Distribution, 2023 |                  |                |          |               |
|------------------------------------|------------------|----------------|----------|---------------|
|                                    | Baltimore County | Baltimore City | Maryland | United States |
| Percentage below 15                | 16.4%            | 16.8%          | 17.6%    | 18.0%         |
| Percentage between 15 and 44       | 38.9%            | 43.7%          | 39.2%    | 39.6%         |
| Percentage between 45 and 64       | 24.9%            | 23.0%          | 25.7%    | 24.6%         |
| Percentage 65 and older            | 19.7%            | 16.5%          | 17.5%    | 17.8%         |

Source: ESRI 2023

#### Sex

The table below shows the total population in Baltimore County, Baltimore City, Maryland and the United States by sex.

| Table A2.3: Sex Distribution, 2023 |                  |                |          |               |
|------------------------------------|------------------|----------------|----------|---------------|
|                                    | Baltimore County | Baltimore City | Maryland | United States |
| Female                             | 52.2%            | 52.8%          | 51.3%    | 50.6%         |
| Male                               | 47.8%            | 47.2%          | 48.7%    | 49.4%         |

Source: ESRI 2023

The table below shows the percentage and total population of Baltimore County, Baltimore City, Maryland and the United States by sex and age cohort.

| Table A2.4: Sex and Age Distribution, 2023 |                  |               |                |               |                  |               |                    |               |
|--------------------------------------------|------------------|---------------|----------------|---------------|------------------|---------------|--------------------|---------------|
|                                            | Baltimore County |               | Baltimore City |               | Maryland         |               | United States      |               |
|                                            | Count            | Pct. of Total | Count          | Pct. of Total | Count            | Pct. of Total | Count              | Pct. of Total |
| <b>Total</b>                               | <b>859,710</b>   | <b>100.0%</b> | <b>573,794</b> | <b>100.0%</b> | <b>6,259,408</b> | <b>100.0%</b> | <b>337,470,185</b> | <b>100.0%</b> |
| 0-14 years                                 | 141,397          | 16.4%         | 96,327         | 16.8%         | 1,104,084        | 17.6%         | 60,750,786         | 18.0%         |
| 15-44 years                                | 334,433          | 38.9%         | 250,740        | 43.7%         | 2,451,298        | 39.2%         | 133,591,630        | 39.6%         |
| 45-65 years                                | 214,154          | 24.9%         | 131,800        | 23.0%         | 1,606,433        | 25.7%         | 83,061,508         | 24.6%         |
| 65+ years                                  | 169,726          | 19.7%         | 94,927         | 16.5%         | 1,097,593        | 17.5%         | 60,066,261         | 17.8%         |
| <b>Males</b>                               | <b>411,367</b>   | <b>47.8%</b>  | <b>270,691</b> | <b>47.2%</b>  | <b>3,046,001</b> | <b>48.7%</b>  | <b>166,821,938</b> | <b>49.4%</b>  |
| 0-14 years                                 | 71,977           | 17.5%         | 48,640         | 18.0%         | 563,396          | 18.5%         | 31,023,901         | 51.1%         |
| 15-44 years                                | 164,997          | 40.1%         | 120,887        | 44.7%         | 1,223,965        | 40.2%         | 67,793,310         | 50.7%         |
| 45-65 years                                | 101,173          | 24.6%         | 62,390         | 23.0%         | 773,251          | 25.4%         | 40,903,399         | 49.2%         |
| 65+ years                                  | 73,220           | 17.8%         | 38,774         | 14.3%         | 485,389          | 15.9%         | 27,101,328         | 45.1%         |
| <b>Females</b>                             | <b>448,343</b>   | <b>52.2%</b>  | <b>303,103</b> | <b>52.8%</b>  | <b>3,213,407</b> | <b>51.3%</b>  | <b>170,648,247</b> | <b>50.6%</b>  |
| 0-14 years                                 | 69,420           | 15.5%         | 47,687         | 15.7%         | 540,688          | 16.8%         | 29,726,885         | 48.9%         |
| 15-44 years                                | 169,436          | 37.8%         | 129,853        | 42.8%         | 1,227,333        | 38.2%         | 65,798,320         | 49.3%         |
| 45-65 years                                | 112,981          | 25.2%         | 69,410         | 22.9%         | 833,182          | 25.9%         | 42,158,109         | 50.8%         |
| 65+ years                                  | 96,506           | 21.5%         | 56,153         | 18.5%         | 612,204          | 19.1%         | 32,964,933         | 54.9%         |

Source: ESRI 2023

### Race

The table below shows the total population in Baltimore County, Baltimore City, Maryland and the United States by race.

| Table A2.5: 2023 Racial Distribution    |                  |               |                |               |           |               |               |               |
|-----------------------------------------|------------------|---------------|----------------|---------------|-----------|---------------|---------------|---------------|
|                                         | Baltimore County |               | Baltimore City |               | Maryland  |               | United States |               |
|                                         | Count            | Pct. of Total | Count          | Pct. of Total | Count     | Pct. of Total | Count         | Pct. of Total |
| White Non-Hispanic                      | 431,552          | 50.2%         | 146,924        | 25.6%         | 2,867,623 | 45.8%         | 191,314,266   | 56.7%         |
| Black Non-Hispanic                      | 260,766          | 30.3%         | 332,377        | 57.9%         | 1,834,049 | 29.3%         | 40,898,542    | 12.1%         |
| Asian                                   | 57,506           | 6.7%          | 21,210         | 3.7%          | 439,514   | 7.0%          | 20,811,620    | 6.2%          |
| American Indian & Alaska Native         | 1,921            | 0.2%          | 1,270          | 0.2%          | 11,977    | 0.2%          | 2,284,715     | 0.7%          |
| Native Hawaiian/ Other Pacific Islander | 255              | 0.0%          | 152            | 0.0%          | 2,635     | 0.0%          | 643,202       | 0.2%          |

Source: ESRI 2023

### Ethnicity

The table below shows the total population in Baltimore County, Baltimore City, Maryland and the United States by ethnicity.

| Table A2.6: 2023 Ethnic Distribution |                  |               |                |               |           |               |               |               |
|--------------------------------------|------------------|---------------|----------------|---------------|-----------|---------------|---------------|---------------|
|                                      | Baltimore County |               | Baltimore City |               | Maryland  |               | United States |               |
|                                      | Count            | Pct. of Total | Count          | Pct. of Total | Count     | Pct. of Total | Count         | Pct. of Total |
| Hispanic                             | 66,577           | 7.7%          | 47,869         | 8.3%          | 788,675   | 12.6%         | 65,536,136    | 19.4%         |
| Non-Hispanic                         | 793,133          | 92.3%         | 525,925        | 91.7%         | 5,470,733 | 87.4%         | 271,934,049   | 80.6%         |

Source: ESRI 2023

### Language

The table below shows the total population in Baltimore County, Baltimore City, Maryland and the United States by language spoken at home.

| Table A2.7: 2022 Language Spoken at Home |                  |                |          |               |
|------------------------------------------|------------------|----------------|----------|---------------|
|                                          | Baltimore County | Baltimore City | Maryland | United States |
| English Only                             | 85.8%            | 89.0%          | 79.3%    | 78.0%         |
| Spanish                                  | 4.0%             | 4.7%           | 8.9%     | 13.3%         |
| Indo-European Languages                  | 4.5%             | 2.5%           | 4.7%     | 3.8%          |
| Asian and Pacific Islander Languages     | 2.7%             | 1.9%           | 3.9%     | 3.6%          |
| Other Languages                          | 3.0%             | 1.8%           | 3.2%     | 1.2%          |

Source: ACS 2022

## **Socioeconomic Detail**

### Household Income

The table below shows the median household income of Baltimore County, Baltimore City, Maryland and the United States.

| Table A2.8: 2023 Median Household Income |                  |                |          |               |
|------------------------------------------|------------------|----------------|----------|---------------|
|                                          | Baltimore County | Baltimore City | Maryland | United States |
| Income                                   | \$82,607         | \$55,224       | \$93,432 | \$72,603      |

Source: ESRI 2023

### Poverty

The table below shows the percentage of households living below the federal poverty level in Baltimore County, Baltimore City, Maryland and the United States.

**Table A2.9: 2021 Percent of Households Below the Federal Poverty Level**

|                   | Baltimore County | Baltimore City | Maryland | United States |
|-------------------|------------------|----------------|----------|---------------|
| Percent Below FPL | 9.1%             | 19.7%          | 9.1%     | 12.4%         |

Source: ESRI 2023

**Food Stamps/SNAP**

The table below shows the percentage of households receiving food stamps or SNAP in Baltimore County, Baltimore City, Maryland and the United States.

**Table A2.10: 2021 Percent of Households Receiving Food Stamps/SNAP**

|                                                     | Baltimore County | Baltimore City | Maryland  | United States |
|-----------------------------------------------------|------------------|----------------|-----------|---------------|
| Households Receiving Food Stamps/SNAP               | 34,031           | 56,208         | 238,288   | 14,105,231    |
| Total Households                                    | 333,180          | 248,855        | 2,363,944 | 124,010,992   |
| Percentage of Households receiving Food Stamps/SNAP | 10.2%            | 22.6%          | 10.1%     | 11.37%        |

Source: ESRI 2023

**Educational Attainment**

The table below shows the percentage of the population in Baltimore County, Baltimore City, Maryland and the United States and the United States broken out by educational attainment.

**Table A2.11: 2023 Educational Attainment**

|                                 | Baltimore County | Baltimore City | Maryland | United States |
|---------------------------------|------------------|----------------|----------|---------------|
| Less than 9 <sup>th</sup> Grade | 2.6%             | 3.5%           | 3.2%     | 4.1%          |
| Some High School/No Diploma     | 4.8%             | 8.8%           | 4.9%     | 5.5%          |
| High School Diploma             | 22.1%            | 23.9%          | 21.4%    | 22.9%         |
| GED/Alternative Credential      | 3.3%             | 5.2%           | 3.2%     | 4.1%          |
| Some College/No Diploma         | 17.1%            | 16.9%          | 16.4%    | 17.7%         |
| Associate's Degree              | 7.8%             | 6.5.7%         | 7.5%     | 9.5%          |
| Bachelor's Degree               | 23.8%            | 18.4%          | 23.3%    | 22.3%         |
| Graduate/ Professional Degree   | 18.4%            | 17.7%          | 20.2%    | 13.9%         |

Source: ESRI 2023

### Unemployment

The table below shows the percentage of the population that is unemployed in Baltimore County, Baltimore City, Maryland and the United States and the United States broken out by age cohort.

| Table A2.12: 2023 Unemployment        |                  |                |          |               |
|---------------------------------------|------------------|----------------|----------|---------------|
|                                       | Baltimore County | Baltimore City | Maryland | United States |
| Percentage unemployed ages 16 to 24   | 1.3%             | 1.7%           | 1.2%     | 1.3%          |
| Percentage unemployed ages 25 to 54   | 1.9%             | 2.8%           | 1.9%     | 2.2%          |
| Percentage unemployed ages 55 to 64   | 0.6%             | 0.7%           | 0.5%     | 0.6%          |
| Percentage unemployed ages 65 or more | 0.3%             | 0.5%           | 0.2%     | 0.2%          |

Source: ESRI 2023

### Uninsured Population

The table below shows the percentage of the population that is uninsured in Baltimore County, Baltimore City, Maryland and the United States and the United States broken out by age cohort.

| Table A2.13: 2021 Uninsured Population |                  |                |          |               |
|----------------------------------------|------------------|----------------|----------|---------------|
|                                        | Baltimore County | Baltimore City | Maryland | United States |
| Percentage uninsured ages 18 or below  | 0.9%             | 0.8%           | 0.9%     | 1.3%          |
| Percentage uninsured ages 19 to 34     | 1.9%             | 2.2%           | 2.1%     | 3.2%          |
| Percentage uninsured ages 35 to 64     | 2.3%             | 2.9%           | 2.8%     | 4.2%          |
| Percentage uninsured ages 65 or more   | 0.1%             | 0.1%           | 0.1%     | 0.1%          |

Source: ACS 2021

## APPENDIX 3 | SECONDARY DATA METHODOLOGY AND SOURCES

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Many individual secondary data measures were analyzed as part of the CHNA process. These data provide detailed insight into the health status and health-related behavior of residents in the county. These secondary data are based on statistics of actual occurrences, such as the incidence of certain diseases, as well as statistics related to SDoH.

### Methodology

All individual secondary data measures were grouped into six categories and 20 corresponding focus areas based on “common themes.” In order to draw conclusions about the secondary data for Baltimore County, its performance on each data measure was compared to targets/benchmarks. If Baltimore County’s performance was more than five percent worse than the comparative benchmark, it was concluded that improvements could be needed to better the health of the community. Conversely, if an area performed more than five percent better than the benchmark, it was concluded that while a need is still present, the significance of that need relative to others is likely less acute. The most recently available data were compared to these targets/benchmarks in the following order (as applicable):

- For all available data sources, state and national averages were compared.
- Peer County for Comparison: For the purposes of this analysis, Baltimore City has been identified as a peer county for comparison, due to the two counties’ relatively similar population density and demographic makeup.

The following methodology was used to assign a priority level to each individual secondary data measure:

- If the data were more than 5 percent worse = High need
- If the data were within or equal to 5 percent (better or worse) = Medium need
- If the data were more than 5 percent better = Low need

These measures are noted with an asterisk.

Additionally, data measures were also viewed with regard to performance over time and whether the measure has improved or worsened compared to the prior CHNA timeframe.

## Data Sources

The following tables are organized by each of the twenty focus areas and contain information related to the secondary data measures analyzed including a description of each measure, the data source, and most recent data time periods.

**Table A3.1: Access to Care**

| Measure                                                                                                          | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Data Source                                                                                                                                 | Most Recent Data Year(s) |
|------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| Uninsured (percent of population < 65 without health insurance)                                                  | Percentage of the population under age 65 without health insurance coverage.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | ESRI Business Analyst. Data accessed September 2023.                                                                                        | 2021                     |
| Primary Care (ratio of population to primary care physicians - population per one provider)                      | Ratio of the population to primary care physicians. Primary care physicians include practicing non-federal physicians (M.D.'s and D.O.'s) under age 75 specializing in general practice medicine, family medicine, internal medicine, and pediatrics. The ratio represents the number of individuals served by one physician in a county, if the population was equally distributed across physicians. Prior to the 2013 County Health Rankings, primary care physicians were defined only as M.D.s. In 2013, D.O.s were incorporated into the definition of primary care physicians and obstetrics/gynecology was removed as a primary care physician type. | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2020                     |
| Dentists (ratio of population to dentists - population per one dentist)                                          | Ratio of the population to dentists. The ratio represents the population served by one dentist if the entire population of a county was distributed equally across all practicing dentists.                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | ESRI Business Analyst. Data accessed September 2023.                                                                                        | 2021                     |
| Other primary care providers (ratio of population to other primary care providers - population per one provider) | Ratio of the county population to the number of other primary care providers. Other primary care providers include nurse practitioners (NP), physician assistants (PA), and clinical nurse specialists. Please note that the methods for calculating this measure changed in the 2017 Rankings.                                                                                                                                                                                                                                                                                                                                                              | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2022                     |
| Children receiving dental care (ages 0 to 20)                                                                    | This indicator reflects the percentage of children (aged 0-20 years) enrolled in Medicaid (320+ days) who                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Maryland Department of Health, State Health Improvement Process                                                                             | 2021                     |

| Measure                                                                                                | Description                                                                                                                                                                                                                                                                                                                                        | Data Source                                                                                                                                 | Most Recent Data Year(s) |
|--------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
|                                                                                                        | received at least one dental visit during the past year.                                                                                                                                                                                                                                                                                           | (SHIP). Data accessed September 2023.                                                                                                       |                          |
| ED visit rate due to addiction-related conditions                                                      | This indicator shows the rate of emergency department visits related to substance use disorders (per 100,000 population).                                                                                                                                                                                                                          | Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.                                       | 2017                     |
| ED visit rate due to asthma                                                                            | This indicator shows the rate of emergency department visits due to asthma (per 10,000 population).                                                                                                                                                                                                                                                | Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.                                       | 2017                     |
| ED visit rate due to diabetes                                                                          | This indicator shows the emergency department visit rate due to diabetes (per 100,000 population).                                                                                                                                                                                                                                                 | Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.                                       | 2017                     |
| ED visit rate due to hypertension                                                                      | This indicator shows the rate of emergency department visits due to hypertension (per 100,000 population).                                                                                                                                                                                                                                         | Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.                                       | 2017                     |
| ED visit rate due to dental problems                                                                   | This indicator shows the emergency department visit rate related to dental problems (per 100,000 population).                                                                                                                                                                                                                                      | Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.                                       | 2017                     |
| Persons with a usual primary care provider                                                             | This indicator shows the percentage of people who reported that they had one person they think of as their personal doctor or healthcare provider.                                                                                                                                                                                                 | Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.                                       | 2021                     |
| Uninsured ED visits                                                                                    | This indicator shows the percentage of persons without health (medical) insurance.                                                                                                                                                                                                                                                                 | Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.                                       | 2017                     |
| Mental health providers (ratio of population to mental health providers - population per one provider) | Ratio of the population to mental health providers. Mental health providers are defined as psychiatrists, psychologists, licensed clinical social workers, counselors, marriage and family therapists, and mental health providers that treat alcohol and other drug abuse, as well as advanced practice nurses specializing in mental healthcare. | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2022                     |

| Measure | Description                                                                                                                                                                                                                                                                                           | Data Source | Most Recent Data Year(s) |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|--------------------------|
|         | The ratio represents the number of individuals served by one mental health provider in a county, if the population were equally distributed across providers. In 2015, marriage and family therapists and mental health providers that treat alcohol and other drug abuse were added to this measure. |             |                          |

**Table A3.2: Built Environment**

| Measure                                                                                                         | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Data Source                                                                                                                                 | Most Recent Data Year(s) |
|-----------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| Food environment index (index of factors that contribute to a healthy food environment, 0 (worst) to 10 (best)) | <p>The Food Environment Index measures the quality of the food environment in a county on a scale from 0 to 10. The Food Environment Index is comprised of two variables: Limited access to healthy foods from the USDA's Food Environment Atlas estimates the percentage of the population who are low income and do not live close to a grocery store. Living close to a grocery store is defined differently in rural and nonrural areas: in rural areas, it means living less than 10 miles from a grocery store whereas in nonrural areas, it means less than 1 mile. Low income is defined as having an annual family income of less than or equal to 200 percent of the federal poverty threshold for the family size. Food insecurity from Feeding America estimates the percentage of the population who did not have access to a reliable source of food during the past year. The two variables are scaled from 0 to 10 (zero being the worst value in the nation, and 10 being the best) and averaged to produce the Food Environment Index. In 2016, the average value for counties was 7.0 and most counties fell between about 5.4 and 8.3.</p> | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2019 & 2020              |
| Access to exercise opportunities (percent of                                                                    | Percentage of individuals in a county who live reasonably close to a                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Robert Wood Johnson Foundation & University                                                                                                 | 2022 & 2020              |

| Measure                                                                 | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Data Source                                                                                                                                 | Most Recent Data Year(s) |
|-------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| the population with adequate access to locations for physical activity) | <p>location for physical activity. Locations for physical activity are defined as parks or recreational facilities. Individuals are considered to have access to exercise opportunities if they: reside in a census block that is within a half mile of a park or reside in an urban census block that is within one mile of a recreational facility or reside in a rural census block that is within three miles of a recreational facility. The numerator is the number of individuals who live in census blocks meeting at least one of the above criteria. The denominator is the total county population. Locations for physical activity are defined as parks or recreational facilities. Parks include local, state, and national parks. Recreational facilities include YMCAs as well as businesses identified by the following Standard Industry Classification (SIC) codes and include a wide variety of facilities including gyms, community centers, dance studios and pools: 799101, 799102, 799103, 799106, 799107, 799108, 799109, 799110, 799111, 799112, 799201, 799701, 799702, 799703, 799704, 799707, 799711, 799717, 799723, 799901, 799908, 799958, 799969, 799971, 799984, or 799998. The way this measure is calculated has changed over time. In 2018, County Health Rankings switched from using North American Information Classification System (NAICS) codes to using Standard Industry Classification (SIC) codes due to lack of availability of a nationally reliable and updated data source.</p> | of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023.                                             |                          |
| % Broadband Access                                                      | Percentage of households with broadband internet connection.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2017-2021                |

**Table A3.4: Diet and Exercise**

| Measure                                                                                  | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Data Source                                                                                                                                 | Most Recent Data Year(s) |
|------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| Physical inactivity<br>(percent of adults that report no leisure time physical activity) | Percentage of adults ages 20 and over reporting no leisure-time physical activity in the past month. Examples of physical activities include running, calisthenics, golf, gardening, or walking for exercise. The method for calculating Physical Inactivity changed. Data for Physical Inactivity are provided by the CDC Interactive Diabetes Atlas which combines 3 years of survey data to provide county-level estimates. In 2011, BRFSS changed their methodology to include cell phone and landline participants. Previously only landlines were used to collect data. Physical Inactivity is created using statistical modeling. | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2020                     |
| Physical Activity<br>(percentage)                                                        | This indicator shows the percentage of persons who reported at least 150 minutes of moderate physical activity or at least 75 minutes of vigorous physical activity per week.                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.                                       | 2019                     |

**Table A3.5: Education**

| Measure                                       | Description                                                                                                                                                                                                                                                                                                                                                                                                                      | Data Source                                                                                                                                 | Most Recent Data Year(s) |
|-----------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| Students entering kindergarten ready to learn | This indicator shows the percentage of students who enter Kindergarten ready to learn.                                                                                                                                                                                                                                                                                                                                           | Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.                                       | 2017                     |
| School Segregation                            | The extent to which students within different race and ethnicity groups are unevenly distributed across schools when compared with the racial and ethnic composition of the local population. The index ranges from 0 to 1 with lower values representing a school composition that approximates race and ethnicity distributions in the student populations within the county, and higher values representing more segregation. | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2021-2022                |

| Measure                           | Description                                                                                                                                                                                                       | Data Source                                                                                                                                 | Most Recent Data Year(s) |
|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| School Funding Adequacy           | The average gap in dollars between actual and required spending per pupil among public school districts. Required spending is an estimate of dollars needed to achieve U.S. average test scores in each district. | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2020                     |
| % Less than 9 <sup>th</sup> Grade | Percentage of adults over age 25 who have less than a 9 <sup>th</sup> grade education.                                                                                                                            | ESRI Business Analyst. Data accessed September 2023.                                                                                        | 2023                     |
| % Some High School                | Percentage of adults over age 25 who attended some high school but did not earn their diploma or alternative credential.                                                                                          | ESRI Business Analyst. Data accessed September 2023.                                                                                        | 2023                     |
| % High School Diploma             | Percentage of adults over age 25 who earned a high school diploma.                                                                                                                                                | ESRI Business Analyst. Data accessed September 2023.                                                                                        | 2023                     |
| % GED/Alternative Credential      | Percentage of adults over age 25 who earned a GED or an alternative credential.                                                                                                                                   | ESRI Business Analyst. Data accessed September 2023.                                                                                        | 2023                     |
| % Some College                    | Percentage of adults over age 25 who attended some college but did not earn their diploma.                                                                                                                        | ESRI Business Analyst. Data accessed September 2023.                                                                                        | 2023                     |
| % Associate's Degree              | Percentage of adults over age 25 who earned an Associate's degree.                                                                                                                                                | ESRI Business Analyst. Data accessed September 2023.                                                                                        | 2023                     |
| % Bachelor's Degree               | Percentage of adults over age 25 who earned a four-year college Bachelor's degree.                                                                                                                                | ESRI Business Analyst. Data accessed September 2023.                                                                                        | 2023                     |
| % Graduate/ Professional Degree   | Percentage of adults over age 25 who earned a graduate or professional degree.                                                                                                                                    | ESRI Business Analyst. Data accessed September 2023.                                                                                        | 2023                     |

**Table A3.6: Employment**

| Measure                                                      | Description                                                                                                                                                                                                                                                                                                                                                                      | Data Source                                          | Most Recent Data Year(s) |
|--------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|--------------------------|
| Unemployment rate (percent of population age 16+ unemployed) | Percentage of a county's workforce that is not employed. The numerator is the number of individuals over age 16 in a county who are seeking work but do not have a job. The denominator is the total labor force, which includes all individuals over age 16 who are actively searching for work and unemployed plus those who are employed. Unemployment estimates are modeled. | ESRI Business Analyst. Data accessed September 2023. | 2023                     |

**Table A3.7: Environmental Quality**

| Measure                                                                                    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Data Source                                                                                                                                 | Most Recent Data Year(s) |
|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| Air pollution (avg daily measure of fine particulate matter in micrograms per cubic meter) | <p>Average daily density of fine particulate matter in micrograms per cubic meter. Fine particulate matter is defined as particles of air pollutants with an aerodynamic diameter less than 2.5 micrometers (PM2.5).</p> <p>Air Pollution is modeled. For 2017, County Health Rankings is using data provided by the EPHT Network. From 2013-2016 the County Health Rankings used data provided by the NASA Applied Sciences Program, which used a similar methodology but also incorporates satellite data. For 2012 and prior years of the County Health Rankings, data were obtained from the EPHT Network, but the measures of air quality differed from the current measure: County Health Rankings reported the average number of days annually that both PM2.5 and ozone pollution were reported to be over the accepted limit.</p> | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2019                     |
| Presence of Water Violation                                                                | Indicator of the presence of health-related drinking water violations. 'Yes' indicates the presence of a violation, 'No' indicates no violation.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2021                     |
| Days with Unhealthy Air Quality                                                            | Number of days where the daily 8-hour maximum concentration of ozone exceeded 71 parts per billion, the minimum value deemed by the Environmental Protection Agency as unhealthy for sensitive groups.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | American Lung Association. Data accessed September 2023.                                                                                    | 2019-2021                |
| Days with Unhealthy Particle Pollution                                                     | Number of days where the daily 24-hour maximum concentration for particles with diameter less than 2.5 micrometers exceeded 33.5 micrograms per cubic meter, the minimum value deemed by the Environmental Protection Agency as unhealthy for sensitive groups.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | American Lung Association. Data accessed September 2023.                                                                                    | 2019-2021                |

**Table A3.8: Family, Community, and Social Support**

| Measure                                                                       | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Data Source                                                                                                                                 | Most Recent Data Year(s) |
|-------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| Percentage of children that live in single-parent household                   | Percentage of children (less than 18 years of age) in family households that live in a household headed by a single parent. The single parent could be a male or female and is without the presence of a spouse. Foster children and children living in non-family households or group quarters are not included in either the numerator or denominator.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2017-2021                |
| Social associations (number of membership associations per 10,000 population) | Number of organizations per 10,000 population in a county. The numerator is the number of organizations or associations in a county. Associations include membership organizations such as civic organizations, bowling centers, golf clubs, fitness centers, sports organizations, political organizations, labor organizations, business organizations, and professional organizations. The denominator is the population of a county. Social Associations does not measure all of the social support available within a county. Data and business codes are self-reported by businesses in a county. We use the primary business code of organizations, which in some cases may not match up with our notion of what should be labeled as a civic organization. This measure does not take into account other important social connections offered via family support structures, informal networks, or community service organizations, all of which are important to consider when understanding the amount of social support available within a county. | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2020                     |
| Disconnected youth                                                            | Percentage of teens and young adults ages 16-24 who are neither working nor in school.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2017-2021                |

| Measure                               | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Data Source                                                                                                                                 | Most Recent Data Year(s) |
|---------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| Residential segregation - black/white | Degree to which two or more groups live separately from one another in a geographic area. The index of dissimilarity is a demographic measure of the evenness with which two groups (black and white residents, in this case) are distributed across the component geographic areas (census tracts, in this case) that make up a larger area (counties, in this case). The index score can be interpreted as the percentage of either black or white residents that would have to move to different geographic areas in order to produce a distribution that matches that of the larger area. | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2017-2021                |
| Percentage not proficient in English  | Percentage of population that is not proficient in English.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2017-2021                |
| Childcare Cost Burden                 | Childcare costs for a household with two children as a percent of median household income.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2022 & 2021              |
| Childcare Centers                     | Number of childcare centers per 1,000 population under 5 years old.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2010-2022                |
| Diversity Index                       | Likelihood of two people chosen at random being from a different race/ethnicity.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | ESRI Business Analyst. Data accessed September 2023.                                                                                        | 2023                     |

**Table A3.9: Food Security**

| Measure                                               | Description                                                                                             | Data Source                                                         | Most Recent Data Year(s) |
|-------------------------------------------------------|---------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|--------------------------|
| Percentage of households experiencing food insecurity | Percentage of the population who did not have access to a reliable source of food during the past year. | Robert Wood Johnson Foundation & University of Wisconsin Population | 2020                     |

| Measure                                                             | Description                                                                                                                                                                                                                                                                 | Data Source                                                                                                                                 | Most Recent Data Year(s) |
|---------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
|                                                                     | This measure was modeled using information from the Community Population Survey, Bureau of Labor Statistics, and American Community Survey. More detailed information can be found here. This is one of two measures that are used to construct the Food Environment Index. | Health Institute, County Health Rankings. Data accessed September 2023.                                                                     |                          |
| Limited access to healthy foods                                     | Percentage of population who are low-income and do not live close to a grocery store.                                                                                                                                                                                       | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2019                     |
| Children eligible for free or reduced-price lunch                   | Percentage of children enrolled in public schools, grades PK - 12, eligible for free (family income less than 130 percent of federal poverty level) or reduced price (family income less than 185 percent of federal poverty level) lunch.                                  | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2020-2021                |
| Food Insecurity Among Middle School Students: All races/ethnicities | Percentage of students who, when asked, said they were worried that their food money would run out before they could buy more, and/or if the food their family bought did not last and they did not have money to get more.                                                 | The Maryland Youth Risk Behavior Survey/Youth Tobacco Survey (YRBS/YTS). Data accessed September 2023.                                      | 2021-2022                |
| Food Insecurity Among High School Students: All races/ethnicities   | Percentage of students who, when asked, said they were worried that their food money would run out before they could buy more, and/or if the food their family bought did not last and they did not have money to get more.                                                 | The Maryland Youth Risk Behavior Survey/Youth Tobacco Survey (YRBS/YTS). Data accessed September 2023.                                      | 2021-2022                |

**Table A3.10: Housing and Homelessness**

| Measure                                                                                                                                                               | Description                                                                                                                                                                                                                                              | Data Source                                                                                                                                 | Most Recent Data Year(s) |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| Severe housing problems (percentage of households with at least 1 of 4 housing problems: overcrowding, high housing costs, or lack of kitchen or plumbing facilities) | Percentage of households with one or more of the following housing problems: Housing unit lacks complete kitchen facilities; Housing unit lacks complete plumbing facilities; Household is severely overcrowded; or Household is severely cost burdened. | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2015-2019                |

| Measure                                                                              | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Data Source                                                                                                                                 | Most Recent Data Year(s) |
|--------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
|                                                                                      | Incomplete kitchen facilities is defined as a unit which lacks a sink with running water, a range or a refrigerator. Incomplete plumbing facilities is defined as lacking hot and cold piped water, a flush toilet, or a bathtub/shower. Severe overcrowding is defined as more than 1.5 persons per room. Severe cost burden is defined as monthly housing costs (including utilities) that exceed 50 percent of monthly income. The numerator is the number of households in a county with at least one of the above housing problems and the denominator is the number of total households in a county. |                                                                                                                                             |                          |
| Percentage of owner-occupied housing                                                 | Percentage of occupied housing units that are owned.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2017-2021                |
| Percentage of people spending more than 50 percent of their income on rental housing | Number of renter-occupied housing units spending 50 or more percent of household income on rent as a percentage of total renter-occupied housing units.                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2017-2021                |
| Affordable Housing (percentage)                                                      | This indicator shows the percentage of housing units sold that are affordable on the median teacher's salary.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.                                       | 2016                     |

**Table A3.11: Income**

| Measure                                                           | Description                                                                                                                                                                                                                                            | Data Source                                                                                                                                 | Most Recent Data Year(s) |
|-------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| Children in poverty (percent of children under age 18 in poverty) | Percentage of children under age 18 living in poverty. Poverty status is defined by family size and income and is measured at the household level. If a household's income is lower than the poverty threshold for a household of their size, they are | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2021                     |

| Measure                                                                                               | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Data Source                                                                                                                                 | Most Recent Data Year(s) |
|-------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
|                                                                                                       | considered to be in poverty. Poverty thresholds differ by household size and geography. For more information on how poverty thresholds are calculated please see the Census poverty page. Children in Poverty estimates are modeled.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                             |                          |
| Median household income                                                                               | Income where half of households in a county earn more and half of households earn less. Income, defined as “Total income”, is the sum of the amounts reported separately for: wage or salary income; net self-employment income; interest, dividends, or net rental or royalty income or income from estates and trusts; Social Security or Railroad Retirement income; Supplemental Security Income (SSI); public assistance or welfare payments; retirement, survivor, or disability pensions; and all other income. Receipts from the following sources are not included as income: capital gains; money received from the sale of property (unless the recipient was engaged in the business of selling such property); the value of income “in kind” from food stamps, public housing subsidies, medical care, employer contributions for individuals, etc.; withdrawal of bank deposits; money borrowed; tax refunds; exchange of money between relatives living in the same household; gifts and lump-sum inheritances, insurance payments, and other types of lump-sum receipts. | ESRI Business Analyst. Data accessed September 2023.                                                                                        | 2023                     |
| Income inequality (ratio of household income at the 80th percentile to income at the 20th percentile) | Ratio of household income at the 80th percentile to that at the 20th percentile, i.e., when the incomes of all households in a county are listed from highest to lowest, the 80th percentile is the level of income at which only 20 percent of households have higher incomes, and the 20th percentile is the level of income at which only 20 percent of households                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2017-2021                |

| Measure                                                  | Description                                                                                                                          | Data Source                                                                                                                                        | Most Recent Data Year(s) |
|----------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
|                                                          | have lower incomes. A higher inequality ratio indicates greater division between the top and bottom ends of the income spectrum.     |                                                                                                                                                    |                          |
| Percentage of individuals living in poverty              | Number of people living below poverty level as percent of total population.                                                          | MedStar Franklin Square, FY21 Community Health Needs Assessment Advisory Taskforce Kickoff Meeting. Data accessed September 2023.                  | 2017-2021                |
| Household Income (\$, 000s) - All                        | Average annual household income in 2014-2015 for children (now in their mid-30s) who grew up in this area.                           | The Opportunity Atlas, developed in partnership by the U.S. Census Bureau, Harvard University, and Brown University. Data accessed September 2023. | 2014-2015                |
| % Asset Limited, Income Constrained, Employed Households | Percentage of households who are earning more than the Federal Poverty Level, but not enough to afford the basics where they live.   | United for ALICE. Data accessed September 2023.                                                                                                    | 2021                     |
| Gender Pay Gap                                           | Ratio of women's median earnings to men's median earnings for all full-time, year-round workers, presented as "cents on the dollar." | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023.        | 2017-2021                |

**Table A3.12: Length of Life**

| Measure                                                                                          | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Data Source                                                                                                                                 | Most Recent Data Year(s) |
|--------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| Premature Death (years of potential life lost before age 75 per 100,000 population age-adjusted) | Number of events (i.e., deaths, births, etc.) in a given time period (three-year period) divided by the average number of people at risk during that period. Years of potential life lost measures mortality by giving more weight to deaths at earlier ages than deaths at later ages. Premature deaths are deaths before age 75. All of the years of potential life lost in a county during a three-year period are summed and divided by the total population of the county during that same time period-this | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2018-2020                |

| Measure                          | Description                                                                                                                                                                                                                                                                                                                                         | Data Source                                                                                                                                 | Most Recent Data Year(s) |
|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
|                                  | value is then multiplied by 100,000 to calculate the years of potential life lost under age 75 per 100,000 people. These are age-adjusted.                                                                                                                                                                                                          |                                                                                                                                             |                          |
| Premature Age-Adjusted Mortality | Number of deaths among residents under age 75 per 100,000 population (age-adjusted).                                                                                                                                                                                                                                                                | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2018-2020                |
| Life expectancy                  | Average number of additional years that someone at a given age would be expected to live if current mortality conditions remained constant throughout their lifetime. Based on life expectancy at birth. State data are a single year while county data are a three-year aggregate. Data were not reported in the County Health Book prior to 2013. | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2018-2020                |
| Child mortality                  | Number of deaths among children under age 18 per 100,000 population                                                                                                                                                                                                                                                                                 | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2017-2020                |

**Table A3.13: Maternal and Infant Health**

| Measure                                                                | Description                                                                                                                                                                                                                                                                        | Data Source                                                                                                                                 | Most Recent Data Year(s) |
|------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| Low birthweight (percent of live births with birthweight < 2500 grams) | Percentage of live births where the infant weighed less than 2,500 grams (approximately 5 lbs., 8 oz.). The numerator is the number of low birthweight infants born over a 7-year time span, while the denominator is the total number of births in a county during the same time. | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2014-2020                |
| Infant mortality                                                       | Number of all infant deaths (within 1 year), per 1,000 live births.                                                                                                                                                                                                                | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data                          | 2014-2020                |

| Measure | Description | Data Source              | Most Recent Data Year(s) |
|---------|-------------|--------------------------|--------------------------|
|         |             | accessed September 2023. |                          |

**Table A3.14: Mental Health**

| Measure                                                           | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Data Source                                                                                                                                 | Most Recent Data Year(s) |
|-------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| Poor mental health days (avg number in past 30 days age-adjusted) | <p>Average number of mentally unhealthy days reported in past 30 days. This measure is based on responses to the Behavioral Risk Factor Surveillance System (BRFSS) question: "Thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?" The value reported in the County Health Rankings is the average number of days a county's adult respondents report that their mental health was not good. Poor Mental Health Days is age-adjusted. Prior to the 2016 County Health Rankings, the CDC's BRFSS provided the County Health Rankings with county-level estimates that were constructed from seven years of responses from participants who used a landline phone. However, even with multiple years of data, these did not provide reliable estimates for all counties, particularly those with smaller respondent samples. In 2016, the CDC began producing single-year estimates at the county level using a combination of BRFSS data and a multilevel modeling approach based on respondent answers and individual characteristics such as age, sex, and race/ethnicity, along with county-level poverty and county and state-level contextual effects. Poor Mental Health Days estimates are created using statistical modeling.</p> | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2020                     |
| Frequent mental distress                                          | Percentage of adults who reported ≥14 days in response to the question, "Now, thinking about your mental                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Robert Wood Johnson Foundation & University of Wisconsin Population                                                                         | 2020                     |

| Measure                                                    | Description                                                                                                                                        | Data Source                                                                                                                                 | Most Recent Data Year(s) |
|------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
|                                                            | health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?" | Health Institute, County Health Rankings. Data accessed September 2023.                                                                     |                          |
| ED visit rate due to mental health conditions              | This indicator shows the rate of emergency department visits related to mental health disorders (per 100,000 population).                          | Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.                                       | 2017                     |
| Suicide Rate                                               | This indicator shows the suicide rate per 100,000 population.                                                                                      | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2016-2020                |
| Hospitalization rate due to Alzheimer's or other dementias | This indicator shows the rate of hospitalizations related to Alzheimer's or other dementias (per 100,000 population).                              | Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.                                       | 2017                     |
| % Visited Mental Health Provider                           | Percent of adults who saw a psychologist or psychiatrist in the past 12 months.                                                                    | ESRI Business Analyst. Data accessed September 2023.                                                                                        | 2023                     |
| % Used Prescription Antidepressant Medications             | Percent of adults who were prescribed and used antidepressant medications in the last 12 months.                                                   | ESRI Business Analyst. Data accessed September 2023.                                                                                        | 2023                     |
| % Used Prescription Antianxiety Medications                | Percent of adults who were prescribed and used antianxiety medications in the last 12 months.                                                      | ESRI Business Analyst. Data accessed September 2023.                                                                                        | 2023                     |
| % Depressive Disorder Diagnosis                            | Percent of adults reporting that a health professional has told them that they have a depressive disorder.                                         | American Health Rankings. Data accessed September 2023.                                                                                     | 2022                     |

**Table A3.15: Physical Health**

| Measure                                                                            | Description                                                                                                                                                                                                                                                                                                                                                    | Data Source                                                                                                                                 | Most Recent Data Year(s) |
|------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| Poor or fair health (percent of adults reporting fair or poor health age-adjusted) | Percentage of adults in a county who consider themselves to be in poor or fair health. This measure is based on responses to the Behavioral Risk Factor Surveillance Survey (BRFSS) question: "In general, would you say that your health is excellent, very good, good, fair, or poor?" The value reported in the County Health Rankings is the percentage of | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2020                     |

| Measure                                                                                | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Data Source                                                                                                                                 | Most Recent Data Year(s) |
|----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
|                                                                                        | <p>respondents who rated their health “fair” or “poor.” Poor or Fair Health is age-adjusted. Prior to the 2016 County Health Rankings, the CDC’s BRFSS provided the County Health Rankings with county-level estimates that were constructed from seven years of responses from participants who used a landline phone. However, even with multiple years of data, these did not provide reliable estimates for all counties, particularly those with smaller respondent samples. In 2016, the CDC began producing single-year estimates at the county level using a combination of BRFSS data and a multilevel modeling approach based on respondent answers and individual characteristics such as age, sex, and race/ethnicity, along with county-level poverty and county and state-level contextual effects. Poor or Fair Health estimates are created using statistical modeling.</p> |                                                                                                                                             |                          |
| Poor physical health days (avg number of unhealthy days in past 30 days, age-adjusted) | <p>Average number of physically unhealthy days reported in past 30 days. This measure is based on responses to the Behavioral Risk Factor Surveillance System (BRFSS) question: “Thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good?” The value reported in the County Health Rankings is the average number of days a county’s adult respondents report that their physical health was not good. Poor Physical Health Days is age-adjusted. Prior to the 2016 County Health Rankings, the CDC’s BRFSS provided the County Health Rankings with county-level estimates that were constructed from seven years of responses from participants who used a landline phone. However, even with multiple years of data,</p>                                                            | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2020                     |

| Measure                                                        | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Data Source                                                                                                                                 | Most Recent Data Year(s) |
|----------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
|                                                                | these did not provide reliable estimates for all counties, particularly those with smaller respondent samples. In 2016, the CDC began producing single-year estimates at the county level using a combination of BRFSS data and a multilevel modeling approach based on respondent answers and individual characteristics such as age, sex, and race/ethnicity, along with county-level poverty and county and state-level contextual effects. Poor Physical Health Days estimates are created using statistical modeling.                                                                                                                                                                                                                                                       |                                                                                                                                             |                          |
| Adult obesity (percent of adults that report a BMI $\geq 30$ ) | Based on responses to the Behavioral Risk Factor Surveillance Survey (BRFSS) and is the percentage of the adult population (age 20 and older) that reports a body mass index (BMI) greater than or equal to 30 kg/m <sup>2</sup> . Participants are asked to self-report their height and weight. From these reported values, BMIs for the participants are calculated. The method for calculating Adult Obesity changed. Data for Adult Obesity are provided by the CDC Interactive Diabetes Atlas which combines 3 years of survey data to provide county-level estimates. In 2011, BRFSS changed their methodology to include cell phone and landline participants. Previously only landlines were used to collect data. Adult Obesity is created using statistical modeling. | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2020                     |
| Frequent physical distress                                     | Percentage of adults who reported $\geq 14$ days in response to the question, "Thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good?"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2020                     |
| Diabetes prevalence                                            | Prevalence of diagnosed diabetes in a given county. Respondents were considered to have diagnosed diabetes if they responded "yes" to the question, "Has a doctor ever told                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data                          | 2020                     |

| Measure                                                          | Description                                                                                                                                                                                                                                                      | Data Source                                                                                                                                 | Most Recent Data Year(s) |
|------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
|                                                                  | you that you have diabetes?"<br>Women who indicated that they only had diabetes during pregnancy were not considered to have diabetes.                                                                                                                           | accessed September 2023.                                                                                                                    |                          |
| Insufficient Sleep                                               | Percentage of adults who report fewer than 7 hours of sleep on average.                                                                                                                                                                                          | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2020                     |
| Adolescents who are obese                                        | This indicator shows the percentage of adolescent public high school students who are obese.                                                                                                                                                                     | Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.                                       | 2016                     |
| Sudden unexpected infant death rate                              | This indicator shows the rate of sudden unexpected infant deaths (SUIDs) per 1,000 live births. Sudden unexpected infant deaths (SUIDs) include deaths from Sudden Infant Death Syndrome (SIDS), unknown cause, accidental suffocation and strangulation in bed. | Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.                                       | 2016-2020                |
| Adults who are not overweight or obese (percentage)              | This indicator shows the percentage of adults who are not overweight or obese.                                                                                                                                                                                   | Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.                                       | 2021                     |
| Cancer mortality rate                                            | This indicator shows the age-adjusted mortality rate from cancer (per 100,000 population).                                                                                                                                                                       | Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.                                       | 2018-2020                |
| Age-Adjusted Mortality Rate from Heart Disease                   | This indicator shows the age-adjusted mortality rate from heart disease (per 100,000 population).                                                                                                                                                                | Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.                                       | 2018-2020                |
| Age-adjusted Death Rate due to Diabetes (per 100,000 population) | Age-adjusted Death Rate due to Diabetes (per 100,000 population).                                                                                                                                                                                                | MD Vital Statistics Report. Data accessed September 2023.                                                                                   | 2020                     |
| Age-adjusted Death Rate due to Stroke (per 100,000 population)   | Age-adjusted Death Rate due to Stroke (per 100,000 population).                                                                                                                                                                                                  | MD Vital Statistics Report. Data accessed September 2023.                                                                                   | 2020                     |

**Table A3.16: Quality of Care**

| Measure                                                                                            | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Data Source                                                                                                                                 | Most Recent Data Year(s) |
|----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| Preventable hospital stays (rate for ambulatory sensitive conditions per 1,000 Medicare enrollees) | Hospital discharge rate for ambulatory care-sensitive conditions per 1,000 fee-for-service Medicare enrollees. That means it looks at people who were discharged from the hospital for conditions that, with appropriate care, can normally be treated without the need for a hospital stay. Examples of these conditions include convulsions, chronic obstructive pulmonary disease, bacterial pneumonia, asthma, congestive heart failure, hypertension, angina, cellulitis, diabetes, gastroenteritis, kidney/urinary infection, and dehydration. Preventable hospital stays are measured among fee-for-service Medicare enrollees and is age-adjusted. | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2020                     |
| Mammography screening (percent of female Medicare enrollees)                                       | Percentage of female Medicare enrollees ages 67-69 that received at least one mammogram during the last two years. The numerator is women ages 67-69 on Medicare who have received at least one mammogram during the past year. The denominator is all women ages 67-69 on Medicare in a specific geography.                                                                                                                                                                                                                                                                                                                                               | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2020                     |
| Children and adults who are vaccinated annually against seasonal influenza                         | Percentage of fee-for-service (FFS) Medicare enrollees that had an annual flu vaccination.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2020                     |
| Children receiving blood lead screening                                                            | This indicator reflects the percentage of children (aged 12-35 months) enrolled in Medicaid (90+ days) screened for lead in their blood.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.                                       | 2021                     |
| Children with elevated blood lead levels                                                           | Number of children (0-72 months old) with blood lead levels > 10 µg/dL divided by the Total Number of Children (0-72 months old) tested.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.                                       | 2020                     |

| Measure             | Description                                                                                                       | Data Source                                                                                           | Most Recent Data Year(s) |
|---------------------|-------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|--------------------------|
| Early prenatal care | This indicator shows the percentage of pregnant women who receive prenatal care beginning in the first trimester. | Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023. | 2020                     |

**Table A3.17: Safety**

| Measure                                 | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Data Source                                                                                                                                 | Most Recent Data Year(s) |
|-----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| Injury mortality per 100,000 population | Number of deaths from planned (e.g., homicide or suicide) and unplanned (e.g., motor vehicle deaths) injuries per 100,000 population. This measure includes injuries from all causes and intents over a 5-year period. Deaths are counted in the county of residence for the person who died, rather than the county where the death occurred.                                                                                                                                                                                                                                                                                                                                                                                                                      | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2016-2020                |
| Motor vehicle crash deaths              | Number of deaths due to traffic accidents involving a motor vehicle per 100,000 population. Motor vehicle crash deaths include traffic accidents involving motorcycles; 3-wheel motor vehicles; cars; vans; trucks; buses; street cars; ATVs; industrial, agricultural, and construction vehicles; and bicyclists or pedestrians when colliding with any of the previously listed motor vehicles. Deaths due to boating accidents and airline crashes are not included in this measure. In prior years, non-traffic motor vehicle accidents were included in this definition. ICD10 codes included are V02-V04 (.1, .9), V09.2, V12-V14 (.3-.9), V19 (.4-.6), V20-V28 (.3-.9), V29-V79 (.4-.9), V80 (.3-.5), V81.1, V82.1, V83-V86 (.0-.3), V87 (.0-.8), and V89.2. | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2014-2020                |
| Homicides                               | Number of deaths from assaults, defined as ICD-10 codes X85-Y09, per 100,000 population                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data                          | 2016-2020                |

| Measure                                | Description                                                                                                                      | Data Source                                                                                                                                 | Most Recent Data Year(s) |
|----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
|                                        |                                                                                                                                  | accessed September 2023.                                                                                                                    |                          |
| Firearm fatalities                     | Number of deaths due to firearms, defined as ICD-10 codes W32-W34, X72-X74, X93-X95, Y22-Y24, and Y35.0, per 100,000 population. | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2019                     |
| Juvenile arrests                       | Rate of delinquency cases per 1,000 juveniles.                                                                                   | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2022                     |
| Child maltreatment rate                | This indicator shows the rate of children who are maltreated per 1,000 population under the age of 18.                           | Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.                                       | 2018-2020                |
| Fall-related death rate                | This indicator shows the rate of fall-related deaths per 100,000 population.                                                     | Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.                                       | 2017                     |
| Pedestrian injury rate on public roads | This indicator shows the rate of pedestrian injuries on public roads per 100,000 population.                                     | Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.                                       | 2020                     |
| Domestic Violence                      | Number of domestic violence crimes divided by total population.                                                                  | Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.                                       | 2020                     |

**Table A3.18 Sexual Health**

| Measure                                                      | Description                                                      | Data Source                                                                                                                                 | Most Recent Data Year(s) |
|--------------------------------------------------------------|------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| Sexually transmitted infections (chlamydia rate per 100,000) | Number of newly diagnosed chlamydia cases per 100,000 population | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2020                     |

| Measure                                        | Description                                                                                                    | Data Source                                                                                                                                 | Most Recent Data Year(s) |
|------------------------------------------------|----------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| Teen birth rate (per 1,000 females ages 15-19) | Number of births to females ages 15-19 per 1,000 females                                                       | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2014-2020                |
| HIV prevalence                                 | Number of diagnosed cases of HIV for persons aged 13 years and older in a county per 100,000 population.       | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2020                     |
| HIV incidence rate                             | This indicator shows the rate of adult/adolescent cases (age 13+) diagnosed with HIV (per 100,000 population). | Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.                                       | 2021                     |

**Table A3.19: Substance Use Disorders**

| Measure                         | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Data Source                                                                                                                                 | Most Recent Data Year(s) |
|---------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| Excessive drinking              | Percentage of adults that report either binge drinking, defined as consuming more than 4 (women) or 5 (men) alcoholic beverages on a single occasion in the past 30 days, or heavy drinking, defined as drinking more than one (women) or 2 (men) drinks per day on average. Please note that the methods for calculating this measure changed in the 2011 Rankings and again in the 2016 Rankings. Excessive Drinking estimates are created using statistical modeling. | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2020                     |
| Alcohol-impaired driving deaths | Percentage of motor vehicle crash deaths which had alcohol involvement. The National Highway Traffic Safety Administration defines a fatal crash as alcohol-related or alcohol-involved if either a driver or a non-motorist (usually a pedestrian or bicyclist) had a measurable or estimated blood alcohol concentration of 0.01 grams per deciliter or above. Alcohol-Impaired                                                                                        | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2016-2020                |

| Measure                                          | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Data Source                                                                                                                                 | Most Recent Data Year(s) |
|--------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
|                                                  | Driving Deaths are measured in the county of occurrence.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                             |                          |
| Drug overdose deaths                             | Number of deaths due to drug poisoning per 100,000 population. ICD-10 codes used include X40-X44, X60-X64, X85, and Y10-Y14. These codes cover accidental, intentional, and undetermined poisoning by and exposure to: 1) nonopioid analgesics, antipyretics and antirheumatics, 2) antiepileptic, sedative-hypnotic, antiparkinsonism and psychotropic drugs, not elsewhere classified, 3) narcotics and psychodysleptics [hallucinogens], not elsewhere classified, 4) other drugs acting on the autonomic nervous system, and 5) other and unspecified drugs, medicaments and biological substances. | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2018-2020                |
| Opioid prescriptions dispensed (per 100 persons) | Opioid prescriptions dispensed (per 100 persons).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Center for Disease Control and Prevention. Data accessed September 2023.                                                                    | 2020                     |

**Table A3.20: Tobacco Use**

| Measure                              | Description                                                                                                                                                                                                                                                                                       | Data Source                                                                                                                                 | Most Recent Data Year(s) |
|--------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| Adult smoking                        | Percentage of the adult population that currently smokes every day or most days and has smoked at least 100 cigarettes in their lifetime. Please note that the methods for calculating this measure changed in the 2016 Rankings. Adult Smoking estimates are created using statistical modeling. | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2020                     |
| Adolescents who use tobacco products | This indicator shows the percentage of adolescents (public high school students) who used any tobacco product in the last 30 days.                                                                                                                                                                | Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.                                       | 2016                     |

**Table A3.21: Transportation Options and Transit**

| Measure                                                                                                                     | Description                                                                                                                                                                                                                                                                                | Data Source                                                                                                                                 | Most Recent Data Year(s) |
|-----------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| Driving alone to work<br>(percent of the workforce that drives alone to work)                                               | Percentage of the workforce that usually drives alone to work. The numerator is the number of workers who commute alone to work via a car, truck, or van. The denominator is the total workforce.                                                                                          | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2017-2021                |
| Long commute/driving alone (among workers who commute in their car alone, the percentage that commute more than 30 minutes) | Percentage of workers who drive alone (via car, truck, or van) with a commute longer than 30 minutes. The numerator is the number of workers who drive alone for more than 30 minutes during their commute. The denominator is the number of workers who drive alone during their commute. | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2017-2021                |
| Traffic volume                                                                                                              | Average traffic volume per meter of major roadways in the county.                                                                                                                                                                                                                          | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2019                     |
| % Car Ownership                                                                                                             | Percent of households that own at least one insured car.                                                                                                                                                                                                                                   | ESRI Business Analyst. Data accessed September 2023.                                                                                        | 2023                     |
| Household Intracity Mass Transit Spending                                                                                   | Average household spending on fares for mass transit trips within the county.                                                                                                                                                                                                              | ESRI Business Analyst. Data accessed September 2023.                                                                                        | 2023                     |

## APPENDIX 4 | SECONDARY DATA COMPARISONS

### Description of Focus Area Comparisons

When viewing the secondary data summary tables, please note that the following color shadings have been included to identify how Baltimore County compares to Maryland and the national benchmark. If both statewide Maryland and national data was available, Maryland data was preferentially used as the target/benchmark value.

**Secondary Data Summary Table Color Comparisons**

| Color Shading | Priority Level | Baltimore County Description                                                                                                                                                                                     |
|---------------|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|               | Low            | Represents measures in which Baltimore County scores are <b>more than five percent better</b> than the most applicable target/benchmark and for which a low priority level was assigned.                         |
|               | Medium         | Represents measures in which Baltimore County scores are comparable to the most applicable target/benchmark scoring <b>within or equal to five percent</b> , and for which a medium priority level was assigned. |
|               | High           | Represents measures in which Baltimore County scores are <b>more than five percent worse</b> than the most applicable target/benchmark and for which a high priority level was assigned.                         |

Note: Please see the methodology section of this report for more information on assigning need levels to the secondary data.

Please note that to categorize each metric in this manner and identify the priority level, the Baltimore County value was compared to the benchmark by calculating the percentage difference between the values, relative to the benchmark value:

$$(Baltimore\ Co\ Value - Benchmark\ Value) / (Benchmark) \times 100 = \% \text{ Difference Used to Identify Priority Level}$$

For example, for the % Limited Access to Healthy Foods metric, the following calculation was completed:

$$(4.4 - 3.6) / (3.6) \times 100\% = 22.2\% = \text{Displayed as High Priority Level, Shaded in Red}$$

This metric indicates that the percentage of the population with limited access to healthy foods in Baltimore County is 22 percent worse (or, in this case, higher) than the percentage of the population with limited access to healthy foods in the state of Maryland.

## Detailed Focus Area Benchmarks

Table A4.1: Access to Care

| Measure                                       | National Benchmark | Maryland Benchmark | Baltimore County Data | Most Recent Data Year | Baltimore County Need |
|-----------------------------------------------|--------------------|--------------------|-----------------------|-----------------------|-----------------------|
| % Uninsured                                   | 10.0%              | 6.7%               | 6.5%                  | 2021                  | Medium                |
| Primary Care Physicians Ratio                 | 1,310:1            | 1,133:1            | 1,098:1               | 2020                  | Medium                |
| Dentist Ratio                                 | 1,380:1            | 1,258:1            | 1,299:1               | 2021                  | Medium                |
| Other Primary Care Provider Ratio             | 810:1              | 775:1              | 772:1                 | 2022                  | Medium                |
| Children receiving dental care                | N/A                | 56.3               | 55.0                  | 2021                  | Medium                |
| ED visits due to addiction-related conditions | N/A                | 2,017              | 1,689                 | 2017                  | Low                   |
| ED visits due to asthma                       | N/A                | 68.4               | 68.0                  | 2017                  | Medium                |
| ED visits due to diabetes                     | N/A                | 243.7              | 224.6                 | 2017                  | Low                   |
| ED visits due to hypertension                 | N/A                | 351.2              | 340.7                 | 2017                  | Medium                |
| ED visits due to dental care                  | N/A                | 362.7              | 281.1                 | 2017                  | Low                   |
| Persons with usual primary care provider      | N/A                | 87.3%              | 88.6%                 | 2021                  | Medium                |
| Uninsured ED visits                           | N/A                | 8.6                | 7.9                   | 2017                  | Low                   |

Table A4.2: Built Environment

| Measure                                 | National Benchmark | Maryland Benchmark | Baltimore County Data | Most Recent Data Year | Baltimore County Need |
|-----------------------------------------|--------------------|--------------------|-----------------------|-----------------------|-----------------------|
| Food Environment Index                  | 7.0                | 8.7                | 8.3                   | 2019/2020             | Low                   |
| % with Access to Exercise Opportunities | 84.0%              | 92.0%              | 97.2%                 | 2020/2022             | Medium                |
| Broadband Access                        | 87.0%              | 90.0%              | 89.0%                 | 2017-2021             | Medium                |

**Table A4.3: Diet and Exercise**

| Measure               | National Benchmark | Maryland Benchmark | Baltimore County Data | Most Recent Data Year | Baltimore County Need |
|-----------------------|--------------------|--------------------|-----------------------|-----------------------|-----------------------|
| % Physically Inactive | 22.0%              | 20.6%              | 25.0%                 | 2020                  | High                  |

**Table A4.4: Education**

| Measure                                       | National Benchmark | Maryland Benchmark | Baltimore County Data | Most Recent Data Year | Baltimore County Need |
|-----------------------------------------------|--------------------|--------------------|-----------------------|-----------------------|-----------------------|
| Students entering kindergarten ready to learn | N/A                | 45.0%              | 47.0%                 | 2017                  | Medium                |
| School segregation                            | 0.25               | 0.26               | 0.18                  | 2021-2022             | Low                   |
| School funding adequacy                       | 1,062              | 724                | -260                  | 2020                  | High                  |

**Table A4.5: Employment**

| Measure      | National Benchmark | Maryland Benchmark | Baltimore County Data | Most Recent Data Year | Baltimore County Need |
|--------------|--------------------|--------------------|-----------------------|-----------------------|-----------------------|
| % Unemployed | 5.4%               | 3.8%               | 4.1%                  | 2023                  | High                  |

**Table A4.6: Environmental Quality**

| Measure             | National Benchmark | Maryland Benchmark | Baltimore County Data | Most Recent Data Year | Baltimore County Need |
|---------------------|--------------------|--------------------|-----------------------|-----------------------|-----------------------|
| Average Daily PM2.5 | 7.4                | 7.4                | 8.3                   | 2019                  | High                  |

**Table A4.7: Family, Community and Social Support**

| Measure                                | National Benchmark | Maryland Benchmark | Baltimore County Data | Most Recent Data Year | Baltimore County Need |
|----------------------------------------|--------------------|--------------------|-----------------------|-----------------------|-----------------------|
| % Children in Single-Parent Households | 25.0%              | 26.2%              | 29.1%                 | 2017-2021             | High                  |
| Social Association Rate                | 9.1                | 8.9                | 8.1                   | 2020                  | High                  |
| % Disconnected Youth                   | 7.0%               | 6.0%               | 6.1%                  | 2017-2021             | Medium                |
| Segregation Index – Black/White        | 63.0               | 63.5               | 59.7                  | 2017-2021             | Low                   |
| % Not Proficient in English            | 14.0%              | 3.0%               | 2.0%                  | 2017-2021             | Low                   |

| Measure               | National Benchmark | Maryland Benchmark | Baltimore County Data | Most Recent Data Year | Baltimore County Need |
|-----------------------|--------------------|--------------------|-----------------------|-----------------------|-----------------------|
| Diversity Index       | 72.1               | 74.3               | 68.4                  | 2023                  | High                  |
| Childcare Cost Burden | 27.0%              | 22.0%              | 22.0%                 | 2021/2022             | Low                   |
| Childcare Centers     | 7.0                | 6.0                | 5.0                   | 2010-2022             | High                  |

**Table A4.8: Food Security**

| Measure                                                | National Benchmark | Maryland Benchmark | Baltimore County Data | Most Recent Data Year | Baltimore County Need |
|--------------------------------------------------------|--------------------|--------------------|-----------------------|-----------------------|-----------------------|
| % Food Insecure                                        | 12.0%              | 9.0%               | 10.3%                 | 2020                  | High                  |
| % Limited Access to Health Foods                       | 6.0%               | 3.6%               | 4.4%                  | 2019                  | High                  |
| % Eligible for Free or Reduced Lunch                   | 53.0%              | 45.0%              | 52.0%                 | 2020-2021             | High                  |
| % Households with Children Receiving Public Assistance | 24.4%              | 21.2%              | 23.3%                 | 2020                  | High                  |
| Food Insecurity: Middle Schoolers                      | N/A                | 27.5%              | 31.6%                 | 2021-2022             | High                  |
| Food Insecurity: Middle Schoolers                      | N/A                | 27.5%              | 30.9%                 | 2021-2022             | High                  |

**Table A4.9: Housing and Homelessness**

| Measure                      | National Benchmark | Maryland Benchmark | Baltimore County Data | Most Recent Data Year | Baltimore County Need |
|------------------------------|--------------------|--------------------|-----------------------|-----------------------|-----------------------|
| % Severe Housing Problems    | 17.0%              | 15.7%              | 15.3%                 | 2015-2019             | Medium                |
| % Homeowners                 | 65.0%              | 67.3%              | 66.5%                 | 2017-2021             | Medium                |
| % Severe Housing Cost Burden | 14.0%              | 14.0%              | 14.0%                 | 2017-2021             | Medium                |
| % Affordable Housing         | N/A                | 48.1%              | 64.1%                 | 2016                  | Low                   |

**Table A4.10: Income**

| Measure                 | National Benchmark | Maryland Benchmark | Baltimore County Data | Most Recent Data Year | Baltimore County Need |
|-------------------------|--------------------|--------------------|-----------------------|-----------------------|-----------------------|
| % Children in Poverty   | 17.0%              | 14.0%              | 14.2%                 | 2021                  | Medium                |
| Median Household Income | \$69,700           | \$93,432           | \$82,607              | 2023                  | High                  |
| Income Inequality       | 4.9                | 4.5                | 4.3                   | 2017-2021             | Medium                |
| % Living in Poverty     | 12.8%              | 10.3%              | 9.8%                  | 2017-2021             | Medium                |
| ALICE Households        | 28%                | 29%                | 34%                   | 2021                  | High                  |
| Gender Pay Gap          | 0.81               | 0.87               | 0.85                  | 2017-2021             | Medium                |

**Table A4.11: Length of Life**

| Measure                           | National Benchmark | Maryland Benchmark | Baltimore County Data | Most Recent Data Year | Baltimore County Need |
|-----------------------------------|--------------------|--------------------|-----------------------|-----------------------|-----------------------|
| Years of Potential Life Lost Rate | 7,300              | 7,547              | 8,370.7               | 2018-2020             | High                  |
| Premature Age-Adjusted Mortality  | 360                | 360                | 390                   | 2018-2020             | High                  |
| Life Expectancy                   | 78.5               | 78.6               | 77.5                  | 2018-2020             | Medium                |
| Child Mortality Rate              | 50.0               | 48.5               | 54.3                  | 2017-2020             | High                  |

**Table A4.12: Maternal and Infant Health**

| Measure               | National Benchmark | Maryland Benchmark | Baltimore County Data | Most Recent Data Year | Baltimore County Need |
|-----------------------|--------------------|--------------------|-----------------------|-----------------------|-----------------------|
| % Low Birthweight     | 8.0%               | 8.7%               | 9.1%                  | 2014-2020             | Medium                |
| Infant Mortality Rate | 6.0                | 6.3                | 6.5                   | 2014-2020             | Medium                |

**Table A4.13: Mental Health**

| Measure                                | National Benchmark | Maryland Benchmark | Baltimore County Data | Most Recent Data Year | Baltimore County Need |
|----------------------------------------|--------------------|--------------------|-----------------------|-----------------------|-----------------------|
| Mental Health Provider Ratio           | 340:1              | 315:1              | 262:1                 | 2022                  | Low                   |
| Average No. of Mentally Unhealthy Days | 4.4                | 4.1                | 4.5                   | 2020                  | High                  |
| % Frequent Mental Distress             | 14.0%              | 12.7%              | 14.5%                 | 2020                  | High                  |

| Measure                                                    | National Benchmark | Maryland Benchmark | Baltimore County Data | Most Recent Data Year | Baltimore County Need |
|------------------------------------------------------------|--------------------|--------------------|-----------------------|-----------------------|-----------------------|
| ED visits due to mental health conditions                  | N/A                | 4,291.5            | 4,210.1               | 2017                  | Medium                |
| Hospitalization rate due to Alzheimer's or other dementias | N/A                | 515.5              | 559.0                 | 2017                  | High                  |
| % Visited Mental Health Provider                           | N/A                | 4.7%               | 4.9%                  | 2023                  | High                  |
| % Used Prescription Antidepressant Medications             | N/A                | 6.7%               | 7.0%                  | 2023                  | High                  |
| % Used Prescription Antianxiety Medications                | N/A                | 7.6%               | 7.9%                  | 2023                  | Medium                |
| Depression rate                                            | 20.5%              | 16.6%              | 20.7%                 | 2022                  | High                  |
| Suicide death rate                                         | 14.0               | 10.0               | 11.0                  | 2016-2020             | High                  |

Table A4.14: Physical Health

| Measure                                    | National Benchmark | Maryland Benchmark | Baltimore County Data | Most Recent Data Year | Baltimore County Need |
|--------------------------------------------|--------------------|--------------------|-----------------------|-----------------------|-----------------------|
| % Adults with Obesity                      | 32.0%              | 30.9%              | 31.7%                 | 2020                  | Medium                |
| % Adults with Diabetes                     | 9.0%               | 9.1%               | 8.8%                  | 2020                  | Medium                |
| % Frequent Physical Distress               | 9.0%               | 6.8%               | 7.7%                  | 2020                  | High                  |
| % Insufficient Sleep                       | 33.0%              | 34.1%              | 34.2%                 | 2020                  | Medium                |
| % Fair or Poor Health                      | 12.0%              | 10.6%              | 12.0%                 | 2020                  | High                  |
| Avg. No. of Physically Unhealthy Days      | 3.0                | 2.5                | 2.5                   | 2020                  | Medium                |
| Adolescents who are obese                  | N/A                | 15.9               | 14.7                  | 2016                  | Low                   |
| Adults who are not overweight or obese (%) | N/A                | 33.4               | 34.1                  | 2021                  | Medium                |
| Age-Adjusted Death Rate                    | N/A                | 163.3              | 180.9                 | 2018-2020             | High                  |

| Measure                               | National Benchmark | Maryland Benchmark | Baltimore County Data | Most Recent Data Year | Baltimore County Need |
|---------------------------------------|--------------------|--------------------|-----------------------|-----------------------|-----------------------|
| from Heart Disease                    |                    |                    |                       |                       |                       |
| Cancer Mortality Rate                 | N/A                | 145.5              | 158.3                 | 2018-2020             | High                  |
| Sudden unexpected infant death rate   | N/A                | 0.8                | 0.7                   | 2016-2020             | Low                   |
| Age-adjusted Death Rate due to Stroke | 38.8               | 42.5               | 47.1                  | 2020                  | High                  |

**Table A4.15: Quality of Care**

| Measure                                                        | National Benchmark | Maryland Benchmark | Baltimore County Data | Most Recent Data Year | Baltimore County Need |
|----------------------------------------------------------------|--------------------|--------------------|-----------------------|-----------------------|-----------------------|
| Children/adults vaccinated annually against seasonal influenza | 51.0%              | 55.0%              | 59.0%                 | 2020                  | Low                   |
| Mammography screening                                          | 37.0%              | 37.0%              | 41.0%                 | 2020                  | Low                   |
| Preventable hospital stays                                     | 28.1               | 26.5               | 30.1                  | 2020                  | High                  |
| Children receiving blood lead screening                        | N/A                | 67.1               | 69.8                  | 2021                  | Medium                |
| Children with elevated blood lead levels                       | N/A                | 0.2                | 0.6                   | 2020                  | High                  |
| Early prenatal care                                            | N/A                | 70.2%              | 71.8%                 | 2020                  | Medium                |

**Table A4.16: Safety**

| Measure                    | National Benchmark | Maryland Benchmark | Baltimore County Data | Most Recent Data Year | Baltimore County Need |
|----------------------------|--------------------|--------------------|-----------------------|-----------------------|-----------------------|
| Firearm fatalities         | 12.0               | 12.3               | 12.9                  | 2019                  | High                  |
| Homicides                  | 6.0                | 9.1                | 8.8                   | 2016-2020             | Medium                |
| Injury mortality           | 76.0               | 88.3               | 109.4                 | 2016-2020             | High                  |
| Juvenile arrests           | 24.0               | 27.1               | 38.9                  | 2022                  | High                  |
| Motor vehicle crash deaths | 12.0               | 8.9                | 8.3                   | 2014-2020             | Low                   |
| Child maltreatment rate    | N/A                | 4.6                | 3.7                   | 2018-2020             | Low                   |

| Measure                                | National Benchmark | Maryland Benchmark | Baltimore County Data | Most Recent Data Year | Baltimore County Need |
|----------------------------------------|--------------------|--------------------|-----------------------|-----------------------|-----------------------|
| Domestic Violence                      | N/A                | 568.6              | 1079.0                | 2020                  | High                  |
| Fall-related death rate                | N/A                | 10.6               | 15.5                  | 2017                  | High                  |
| Pedestrian injury rate on public roads | N/A                | 53.5               | 54.4                  | 2020                  | Medium                |

**Table A4.17: Sexual Health**

| Measure             | National Benchmark | Maryland Benchmark | Baltimore County Data | Most Recent Data Year | Baltimore County Need |
|---------------------|--------------------|--------------------|-----------------------|-----------------------|-----------------------|
| Teen Birth Rate     | 19.0               | 15.2               | 13.2                  | 2014-2020             | Low                   |
| HIV Prevalence Rate | 380.0              | 655.4              | 466.8                 | 2020                  | Low                   |
| HIV Incidence Rate  | N/A                | 15.0               | 14.8                  | 2021                  | Medium                |
| Chlamydia Rate      | 481.3              | 535.9              | 533.1                 | 2020                  | Medium                |

**Table A4.18: Substance Use Disorders**

| Measure                        | National Benchmark | Maryland Benchmark | Baltimore County Data | Most Recent Data Year | Baltimore County Need |
|--------------------------------|--------------------|--------------------|-----------------------|-----------------------|-----------------------|
| Drug Overdose Mortality Rate   | 23.0               | 41.1               | 50.8                  | 2018-2020             | High                  |
| % Excessive Drinking           | 19.0%              | 14.6%              | 16.9%                 | 2020                  | High                  |
| % Driving Deaths with Alcohol  | 27.0%              | 28.3%              | 26.8%                 | 2016-2020             | Low                   |
| Opioid prescriptions dispensed | 43.3               | 39.5               | 41.7                  | 2020                  | High                  |

**Table A4.19: Tobacco Use**

| Measure                              | National Benchmark | Maryland Benchmark | Baltimore County Data | Most Recent Data Year | Baltimore County Need |
|--------------------------------------|--------------------|--------------------|-----------------------|-----------------------|-----------------------|
| % Smokers                            | 16.0%              | 11.1%              | 13.8%                 | 2020                  | High                  |
| Adolescents who use tobacco products | N/A                | 14.4%              | 16.5%                 | 2016                  | High                  |

**Table A4.20: Transportation Options and Transit**

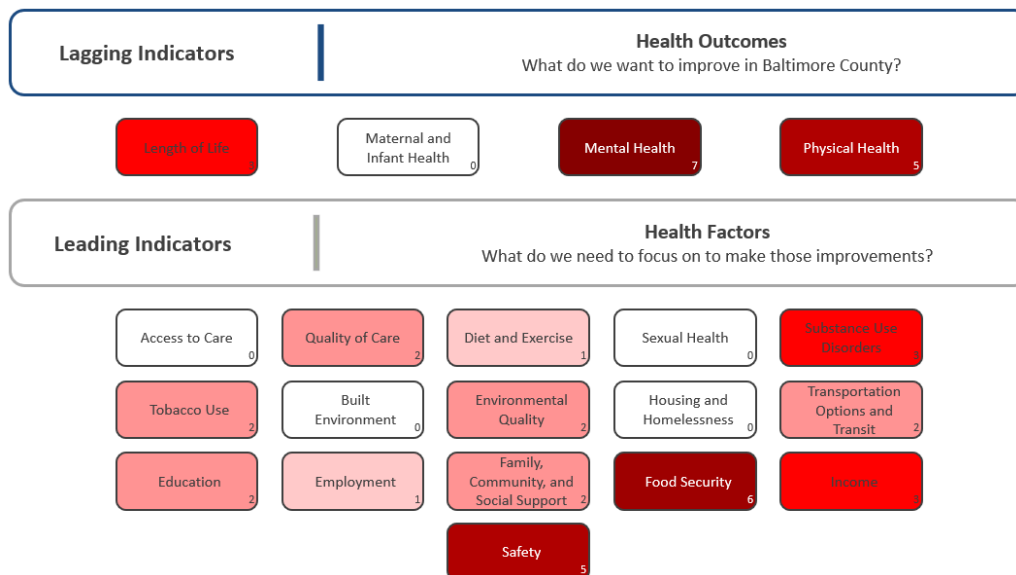
| <b>Measure</b>                | <b>National Benchmark</b> | <b>Maryland Benchmark</b> | <b>Baltimore County Data</b> | <b>Most Recent Data Year</b> | <b>Baltimore County Need</b> |
|-------------------------------|---------------------------|---------------------------|------------------------------|------------------------------|------------------------------|
| Traffic Volume                | 505.0                     | 695.2                     | 835.4                        | 2019                         | High                         |
| % Drive Alone to Work         | 73.0%                     | 69.8%                     | 75.1%                        | 2017-2021                    | High                         |
| % Long Commute – Drives Alone | 37.0%                     | 49.6%                     | 45.1%                        | 2017-2021                    | Low                          |
| % Car Ownership               | N/A                       | 89.8%                     | 90.7%                        | 2023                         | Medium                       |
| Mass Transit Spending         | N/A                       | 102.6                     | 88.2                         | 2023                         | Low                          |

## APPENDIX 5 | SECONDARY DATA SUMMARY

The table and graphic below include summaries of potential priority need areas, as identified by the secondary data analysis process, as well as priority areas of need identified by other state, local, and national sources.

| Priority Area                                 | Secondary Data Findings | MedStar Health 2021 | Kennedy Krieger 2022 | Sheppard Pratt 2022 | Baltimore County 2020 | Alive! Maryland 2022 | Healthy People 2030 |
|-----------------------------------------------|-------------------------|---------------------|----------------------|---------------------|-----------------------|----------------------|---------------------|
| Social Determinants of Health*                | ✓                       | ✓                   | ✓                    | ✓                   | ✓                     | ✓                    | ✓                   |
| Access to Health Care                         | ✓                       | ✓                   | ✓                    | ✓                   | ✓                     | ✓                    | ✓                   |
| Mental Health and Behavioral Health/ Wellness | ✓                       | ✓                   | ✓                    | ✓                   | ✓                     | ✓                    |                     |
| Health Equity                                 | ✓                       | ✓                   | ✓                    |                     | ✓                     | ✓                    | ✓                   |
| Health Literacy and Communication             |                         | ✓                   | ✓                    | ✓                   |                       | ✓                    | ✓                   |
| Transportation                                | ✓                       | ✓                   | ✓                    | ✓                   | ✓                     |                      |                     |
| Substance Abuse                               | ✓                       | ✓                   |                      | ✓                   | ✓                     |                      |                     |
| Chronic Disease (Physical Health)             | ✓                       | ✓                   |                      |                     | ✓                     |                      |                     |
| Specialty Care                                |                         | ✓                   | ✓                    |                     |                       | ✓                    |                     |
| Staffing Support                              |                         |                     | ✓                    | ✓                   |                       | ✓                    |                     |
| Childhood Support                             | ✓                       |                     | ✓                    |                     |                       |                      |                     |
| Obesity/Diabetes/Fitness/Nutrition            |                         | ✓                   |                      |                     | ✓                     |                      |                     |
| Primary Care                                  |                         | ✓                   |                      |                     |                       | ✓                    |                     |
| Sexual Health                                 |                         |                     |                      |                     |                       | ✓                    |                     |

\* Data indicate needs particularly in areas related to safety, food security, and income.



Values in bottom right represent number of measures with high need.

\*Access to care metrics are based on the ratio of county population to providers, which does not account for the significant in-migration that occurs into Baltimore County facilities for healthcare.

## APPENDIX 6 | DETAILED PRIMARY DATA FINDINGS

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Primary data were collected through web-based Key Leader and Community surveys, and focus groups, which were conducted in-person or in a virtual format.

### Methodologies

The methodologies varied based on the type of primary data being analyzed. The following section describes the various methodologies used to analyze the primary data, along with key findings.

#### Focus Groups

The following 13 focus groups were conducted virtually or in person between October 3, 2023 and November 3, 2023. These groups included representation from key leaders, non-profit partners, patients, and community members, with over 90 participants providing responses.

- Pikesville Senior Center
- Behavioral Health Advisory Council
- Housing Community of Development/Catholic Charities
- GBMC Veteran patients
- Cherry Hill seniors
- Concord Baptist Church
- Jewish Community Center of Greater Baltimore
- Northwest Hospital Diabetes Center
- Eastern Family Resource Center
- Rosedale Senior Center
- Immaculate Heart of Mary Parkville
- Towson & Parkville YMCA
- Prevent T2 (Diabetes prevention group)

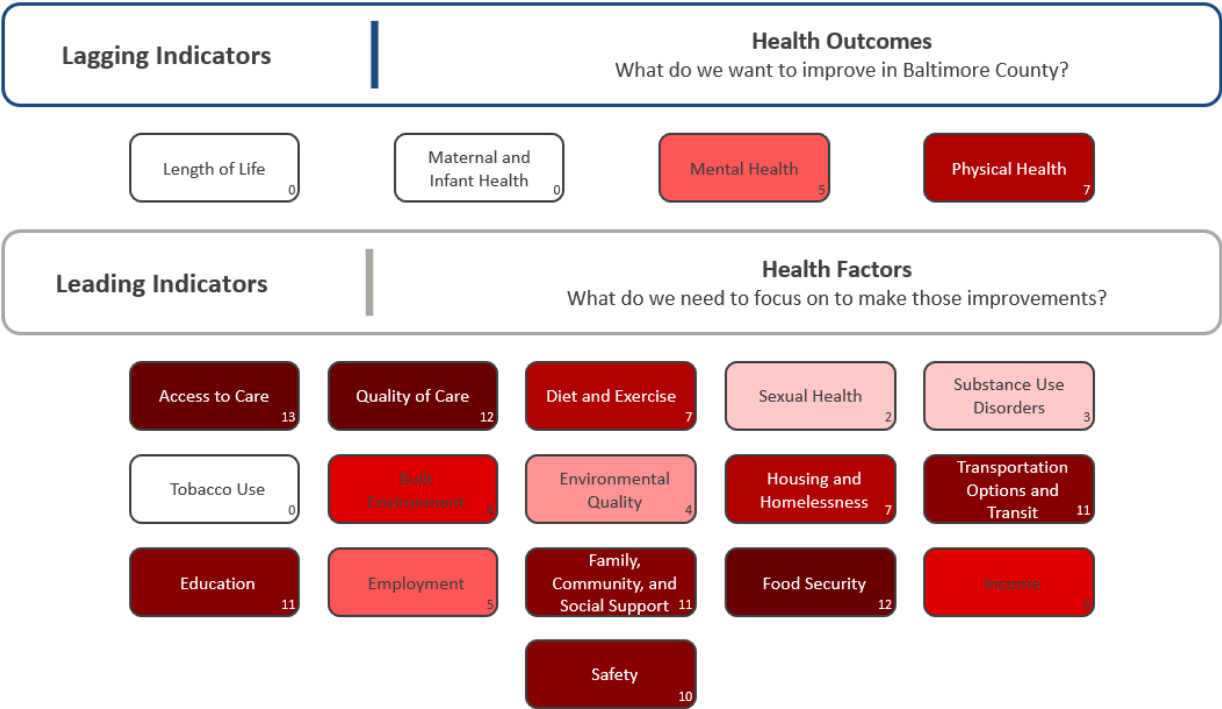
Input was gathered on the following topics:

- Community health concerns
- Access to care
- Social and environmental concerns that may impact health

Key findings from the focus groups are summarized by topic in the graphic below.



Focus Group Findings by Category



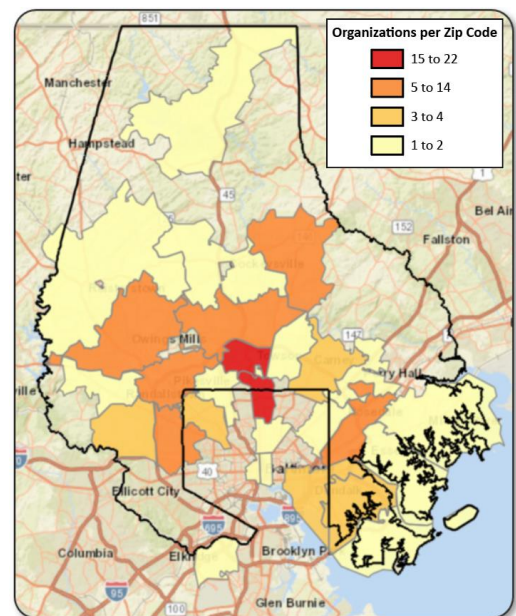
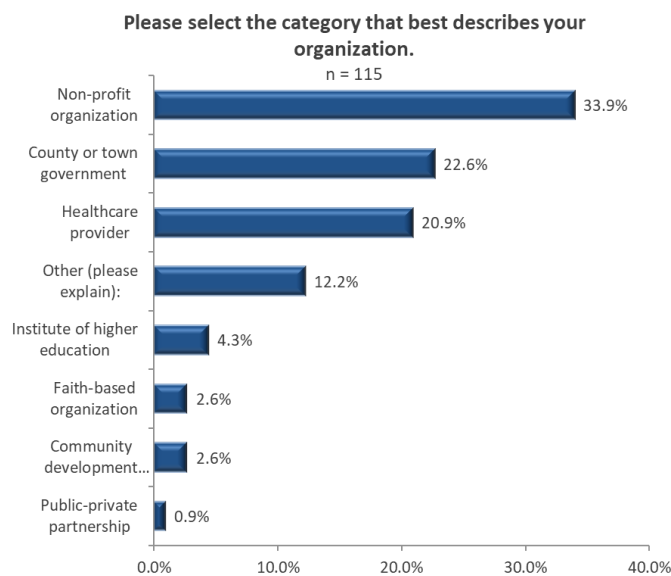
### Key Leader Web Survey

A total of 115 key leaders completed the web-based Key Leader Survey, which was live from September 5, 2023 to November 3, 2023.

Key leaders represented a variety of organizations with geographies throughout Baltimore County. Broad categories included:

- Nonprofit partners
- Government officials
- Healthcare providers
- Academic partners
- First responders
- Business leaders

The chart below shows the distribution of Key Leader survey respondents by type of organization. The map below shows the geographic distribution of Key Leader survey respondents based on the ZIP code in which the organization they represent is located.



In general, survey questions focused on the following topics:

- Top community health needs of Baltimore County
- Top social drivers that impact health
- Availability of community resources
- Access to care (barriers to care and locations of care)
- Health literacy

The key findings from the Key Leader Survey are detailed below:

- Key leaders identified the top 3 health needs of Baltimore County as: mental health/suicide, substance/alcohol use and housing.
- Key leaders identified the following areas as having the most impact on health in the community: access to affordable housing, crime and violence, and access to healthy foods.
- Key leaders identified cost of care, health literacy, and appointment availability as the most significant barriers to care.
- Residents in poverty were identified as the community group in Baltimore County most in need of assistance.
- The most common suggestions for improving community health focused on increasing affordable housing, community engagement, affordable healthcare, transportation, and adding more recreational facilities and neighborhood/mobile clinics.

Charts detailing key findings from the Key Leader Survey are displayed below:

**Figure A6.1**  
How do you believe the health of the community you serve has changed over the past three years?  
n= 115

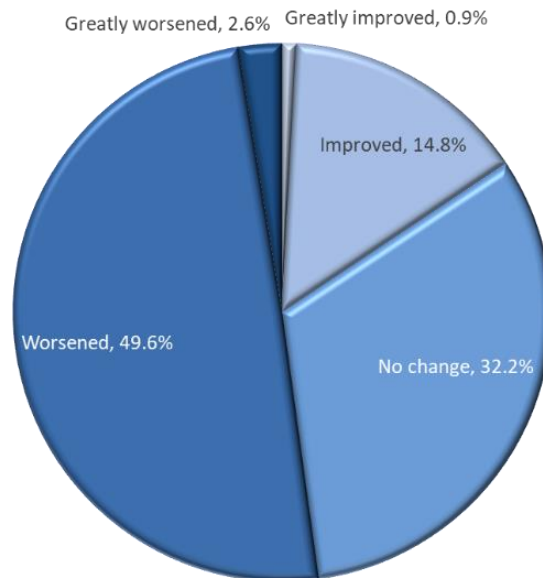
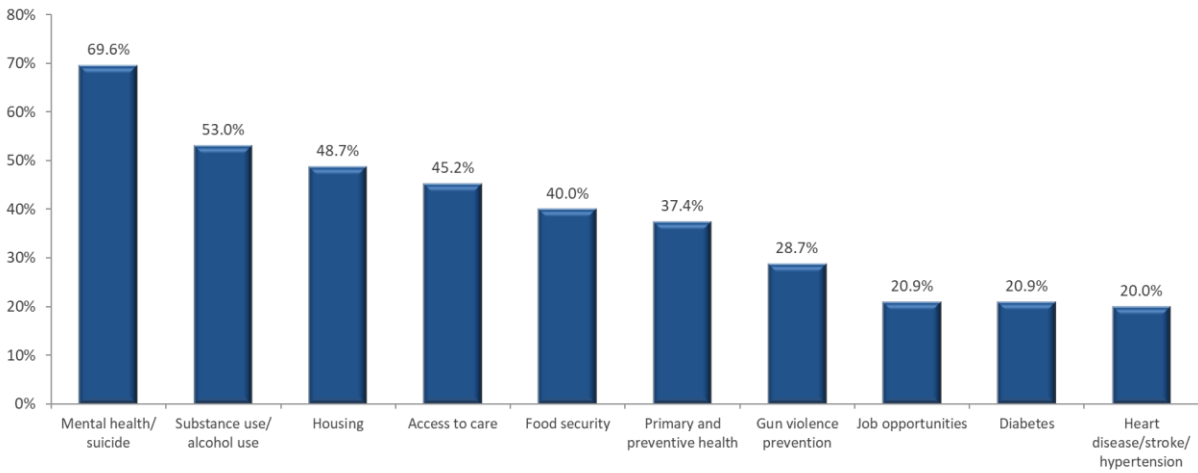


**Figure A6.2**

Please select the top FIVE (5) community health needs of the Baltimore County.  
n= 115

**Figure A6.3**

Please choose the top 5 social needs in the community you serve.  
n= 115

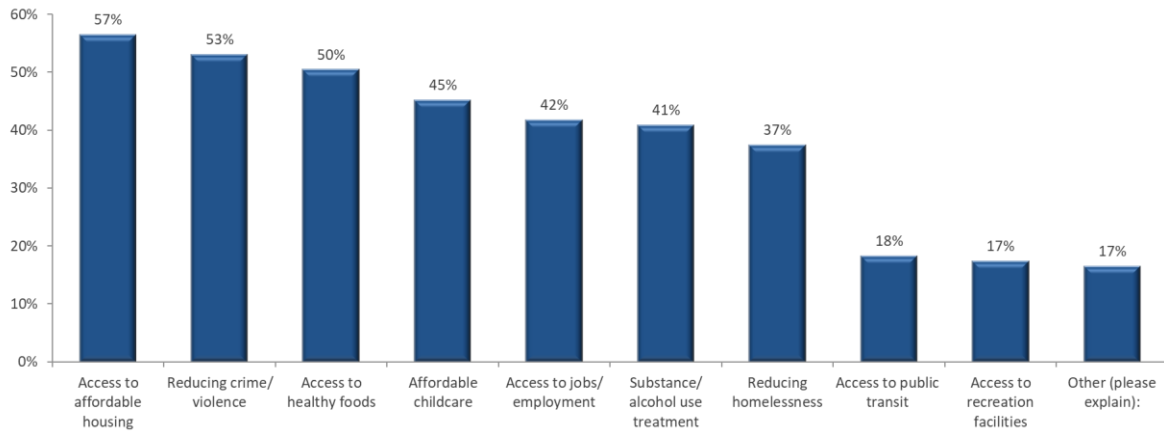
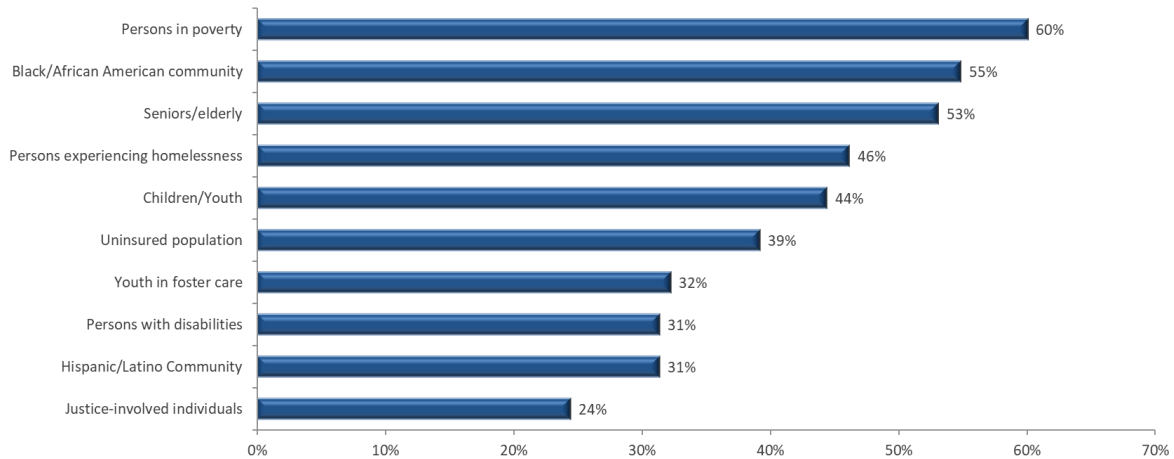


**Figure A6.4**Choose the group(s) that needs more help in the community you serve. *Choose all that apply.*

n = 115

**Figure A6.5**

On a scale of 1 to 5, please rate the following statements for the community in which you live?

n = 115

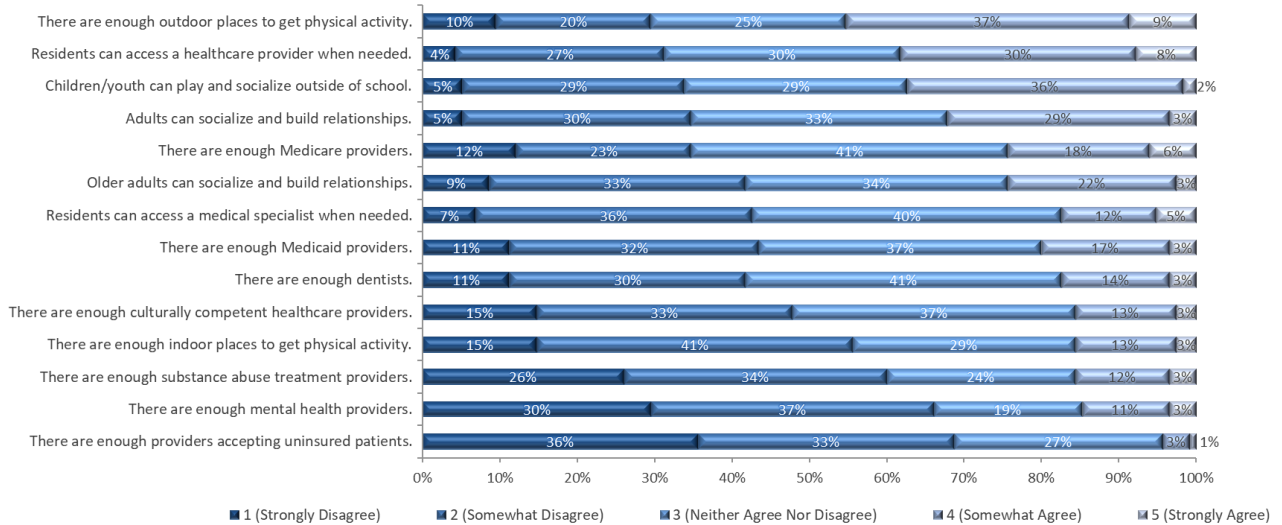


Figure A6.6

Do you believe that health and social needs are uniform across Baltimore County? n = 115

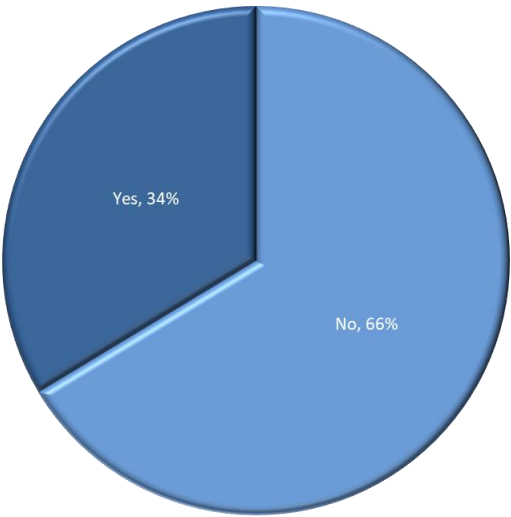


Figure A6.7

What barriers, if any, exist to improving the health of residents in your community? Choose all that apply. n= 115

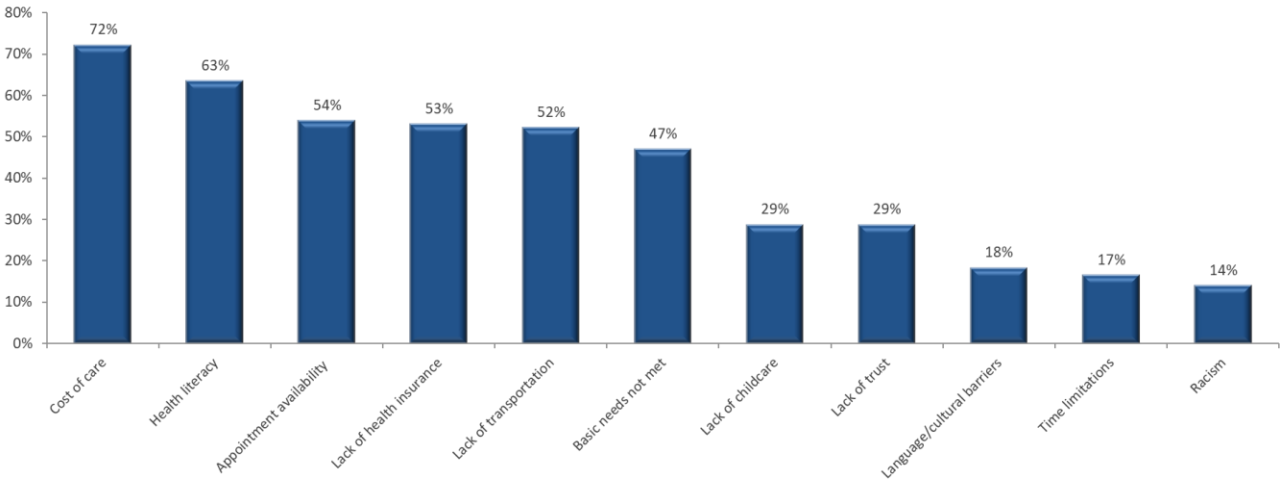


**Figure A6.8**

Do you feel that the residents of the community you serve are health literate? n = 115

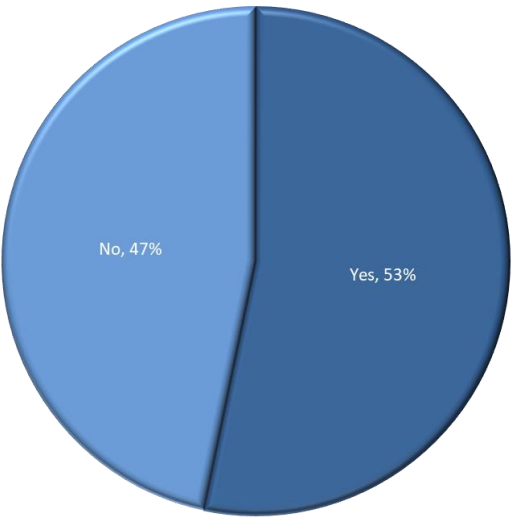
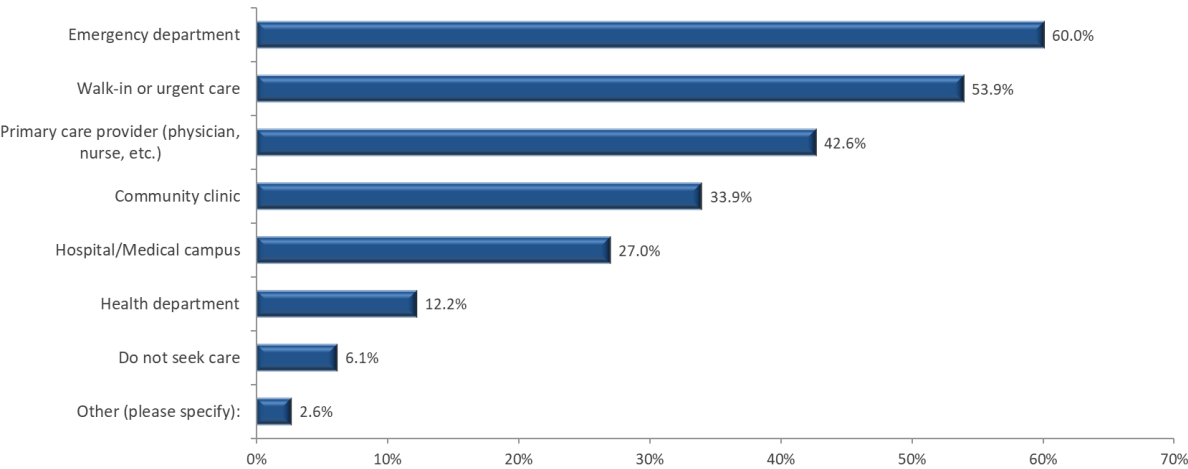


**Figure A6.9**

Members of your community typically seek medical care through... Please select all that apply  
n= 115



The questions administered via the Key Leader Survey instrument are below:

**Baltimore County | 2024 Key Community Health Leader Survey**

**1. Please select the category that best describes your organization.**

- a. Faith-based organization
- b. Non-profit organization
- c. Media
- d. County or town government
- e. Institute of higher education
- f. Healthcare provider
- g. Public – private partnership
- h. Community Development Corporation
- i. Other (please explain) \_\_\_\_\_

**2. What is the ZIP code of your organization/facility? Please write 5-digit ZIP code.**

\_\_\_\_\_

**3. How do you believe the health of the community you serve has changed over the past three years?**

- a. Greatly improved
  - b. Improved
  - c. No change
  - d. Worsened
  - e. Greatly worsened
- [if “Greatly improved” or “Improved”] In what way(s) has the health of the community you serve improved?
  - [if “Greatly worsened” or “Worsened”] In what way(s) has the health of the community you serve worsened?

**4. From the list provided, please rank the top FIVE (5) community health needs of Baltimore County.**

- a. Access to Care
- b. Accidents (falls)
- c. Cancer
- d. Dental Health
- e. Diabetes
- f. Food security
- g. Gun violence prevention
- h. Heart Disease/Stroke/Hypertension
- i. Maternal/Infant Health
- j. Mental Health/Suicide
- k. Primary and Preventive Health Care

- l. Obesity
  - m. Sexually Transmitted Disease
  - n. Substance Use/Alcohol Use
  - o. Tobacco and Electronic Smoking Devices
  - p. Housing
  - q. Uninsured
  - r. Other (please explain)
  - s. None
  - t. Unsure/Do not know
  - u. Prefer not to respond
- 5. What resources are available in the community you serve to address the top health issues you identified?**
- 
- 6. Please share any additional information regarding these health issues and your reasons for ranking them this way.**
- 
- 7. In your opinion, which FIVE (5) of the following need the most improvement within the community you serve? If a need that requires the most improvement is not listed, please select "Other" and write it in.**
- a. Access to affordable housing
  - b. Access to healthy foods
  - c. Access to public transit (buses, commuter rail, etc.)
  - d. Access to recreation facilities, parks or playgrounds
  - e. Access to substance use/alcohol use treatment
  - f. Affordable childcare
  - g. Availability of alternative transportation options (biking, walking, carpooling, etc.)
  - h. Improved air quality
  - i. Improved water quality
  - j. Medication/local pharmacy access
  - k. Reducing homelessness
  - l. Reducing crime/violence
  - m. Language/Immigrant services
  - n. Other (please explain)
  - o. None
  - p. Unsure/Do not know
  - q. Prefer not to respond
- 8. Please share any additional information regarding these needs and your reasons for prioritizing them.**
-

**9. In your opinion, which population sub-group(s) has the greatest need for additional resources within the community you serve? Please select all that apply. If a population sub-group that needs additional resources is not listed, please select "Other" and write it in.**

- a. Black/African American community
- b. Children/Youth
- c. Hispanic/Latino community
- d. LGBTQIA+ community
- e. Justice-involved individuals
- f. Persons experiencing homelessness
- g. Persons in poverty
- h. Persons with disabilities
- i. Refugees/Immigrants
- j. Seniors/Elderly
- k. Uninsured population
- l. Women in pregnancy
- m. Young adults
- n. Youth in foster care
- o. Other (please explain) \_\_\_\_\_
- p. None
- q. Unsure/Do not know
- r. Prefer not to respond

**10. Please share any additional information regarding these population sub-group(s) and your reasons for choosing them.**

---

**11. On a scale of 1 to 5 (with 1 being strongly disagree and 5 being strongly agree), please rate each of the following statements for the community you serve:**

- a. Residents can access a doctor, including nurse practitioners and physician assistants (Family/General Practitioner, Ob/Gyn, Pediatrician) when needed.
- b. Residents can access a medical specialist (Cardiologist, Dermatologist, etc.) when needed.
- c. There are enough providers accepting Medicaid in the community.
- d. There are enough providers accepting Medicare in the community.
- e. There are enough providers accepting patients without insurance in the community.
- f. There are enough dentists in the community.
- g. There are enough culturally competent healthcare providers in the community.
- h. There are enough mental health providers in the community.
- i. There are enough substance abuse treatment providers in the community.

**12. From the list provided, where do you feel most members of the community you serve most often seek medical care? Choose all that apply.**

- a. Community Clinic
- b. Hospital/Medical Campus
- c. Emergency Department
- d. Walk-in or Urgent Care
- e. Primary care provider (physician, nurse, etc.)
- f. Health department
- g. Other (please specify): \_\_\_\_\_
- h. Do not seek care

**13. Why do you think members of the community you serve primarily seek care in the location(s) you selected above? \_\_\_\_\_**

**14. What are the most significant barriers that keep people in the community you serve from accessing healthcare when they need it? Choose all that apply.**

- a. Availability of providers/ appointments
- b. Basic needs not met (food/shelter)
- c. Gender biases
- d. Inability to navigate healthcare system
- e. Inability to pay out of pocket expenses (co pays, prescriptions)
- f. Lack of/limited childcare
- g. Lack of health insurance coverage
- h. Lack of/limited transportation
- i. Lack of trust
- j. Language/cultural barriers
- k. Racism
- l. Time limitations
- m. None/no barriers
- n. Other: \_\_\_\_\_

**15. Please share any additional information regarding these barriers and your reasons for choosing them. \_\_\_\_\_**

**16. Do you believe health and social needs are similar across Baltimore County?**

- a. Yes
- b. No
- c. Prefer not to answer

• [If “No”]:

- In your opinion, which geographic areas experience the greatest level of need? \_\_\_\_\_

- Please describe any unique health and social needs you have observed within these areas: \_\_\_\_\_

**17. What challenges do older adults face in the community you serve?**

---

**18. Do you feel that the people in the community you serve are health literate, or able to understand health-related information?**

- a. Yes
- b. No
- c. Prefer not to answer

**19. What strategies do you find most effective in communicating information related to health or social needs to members of the community you serve?**

---

**20. On a scale of 1 to 5 (with 1 being strongly disagree and 5 being strongly agree), please rate each of the following statements for the community you serve:**

- a. There are enough indoor places to get regular exercise or physical activity in the community you serve.
- [If disagree or strongly disagree]: Please share any additional information related to the answer you selected.
- b. There are enough outdoor places to get regular exercise or physical activity in the community you serve.
- [If disagree or strongly disagree]: Please share any additional information related to the answer you selected.

**21. On a scale of 1 to 5 (with 1 being strongly disagree and 5 being strongly agree), please rate each of the following statements for the community you serve:**

- a. Children and youth living in the community you serve have access to places to play and socialize outside of school.
- [If disagree or strongly disagree]: What strategies could help address loneliness or social isolation in children/youth in the community you serve?
- b. Adults in the community you serve have access to places to socialize and build relationships outside of work or home.
- [If disagree or strongly disagree]: What strategies could help address loneliness or social isolation in adults in the community you serve?

- c. Older adults in the community you serve have access to places to socialize and build relationships outside of the home.
- [If disagree or strongly disagree]: What strategies could help address loneliness or social isolation in older adults in the community you serve?

**22. Have you already gotten, or do you plan to get, your annual flu shot?**

- a. Yes
- b. No
- c. Prefer not to answer

**23. What ideas or suggestions do you have to improve health in the community you serve?**

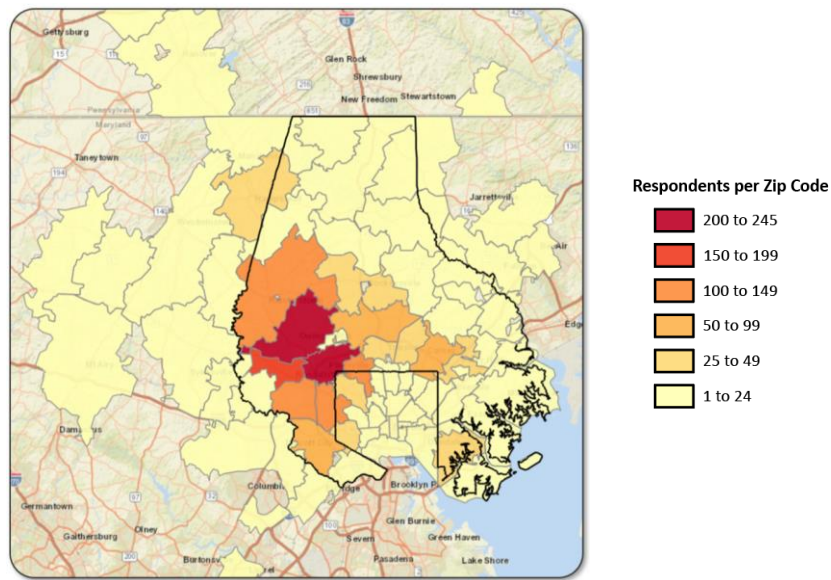
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**Thank you for completing the survey!**

### Community Survey

A total of 2,034 surveys were completed by individuals living, working or receiving healthcare in the Baltimore County community. For the sake of accessibility, the survey was available in both English and Spanish. Approximately 1% of the surveys were completed in Spanish. Consistent with one of the survey process goals, survey community member respondents were representative of a broad geographic area encompassing areas throughout the county. The map below provides additional information on survey respondents' ZIP code of residence.

**Figure A6.10: Respondent Zip Code of Residence**



In general, survey questions focused on:

- Community health problems and concerns
- Community social/environmental problems and concerns
- Access to healthcare
- Food insecurity
- Dental care

The key findings from the Community Survey are detailed below:

- Community members identified the top 3 health needs of Baltimore County as Heart Disease/High Blood Pressure, Overweight/Obesity, and Diabetes. These were followed very closely by mental health.
- Relative to areas that have the most impact on health, community members mentioned: violence and safety, and housing and homelessness.
- Community members identified the cost of care as the largest barrier to health in the community.
- The most common suggestions for improving community health were increasing affordability and insurance coverage, community outreach and programming, availability of grocery stores,

number of providers, transportation, mental health resources, education, safety, and mobile health services.

Charts detailing key findings from the Community Member Survey are displayed below:

**Figure A6.11**

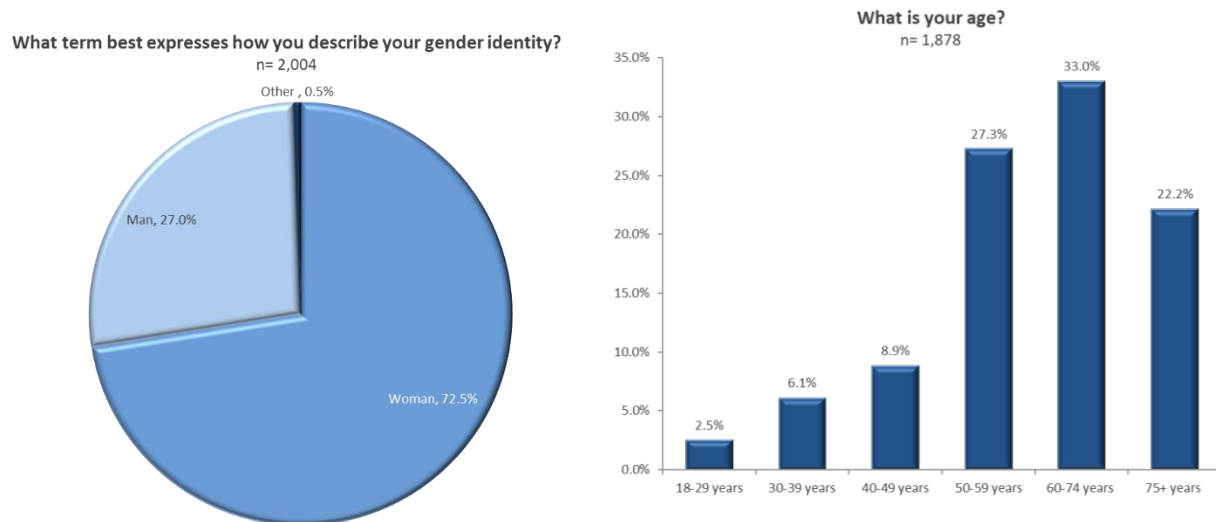


**Figure A6.12**

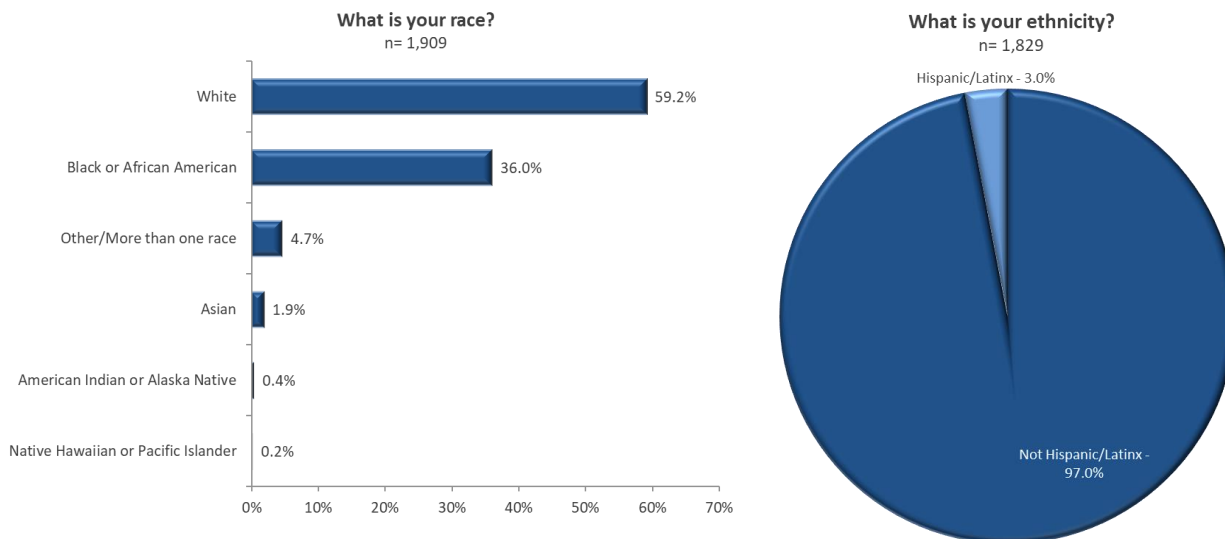


Figure A6.13

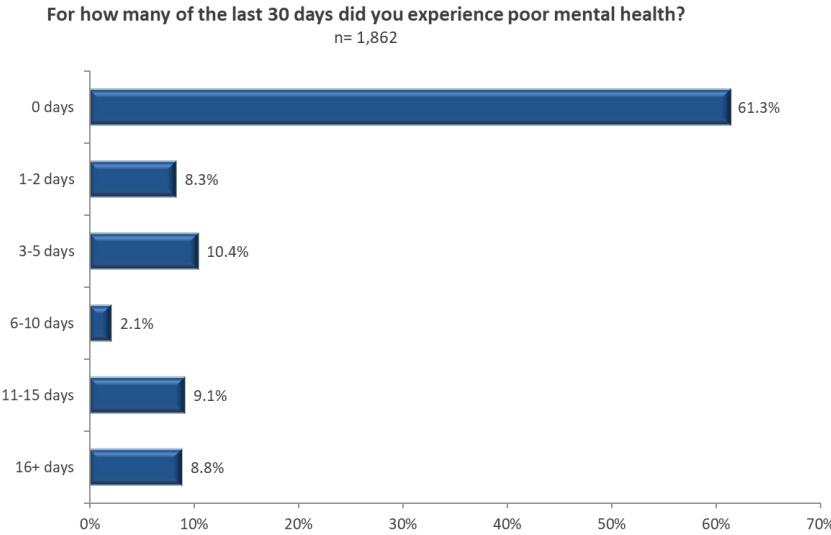


Figure A6.14

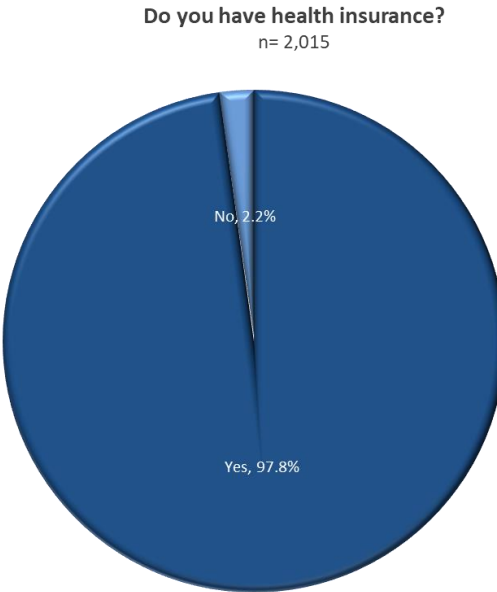


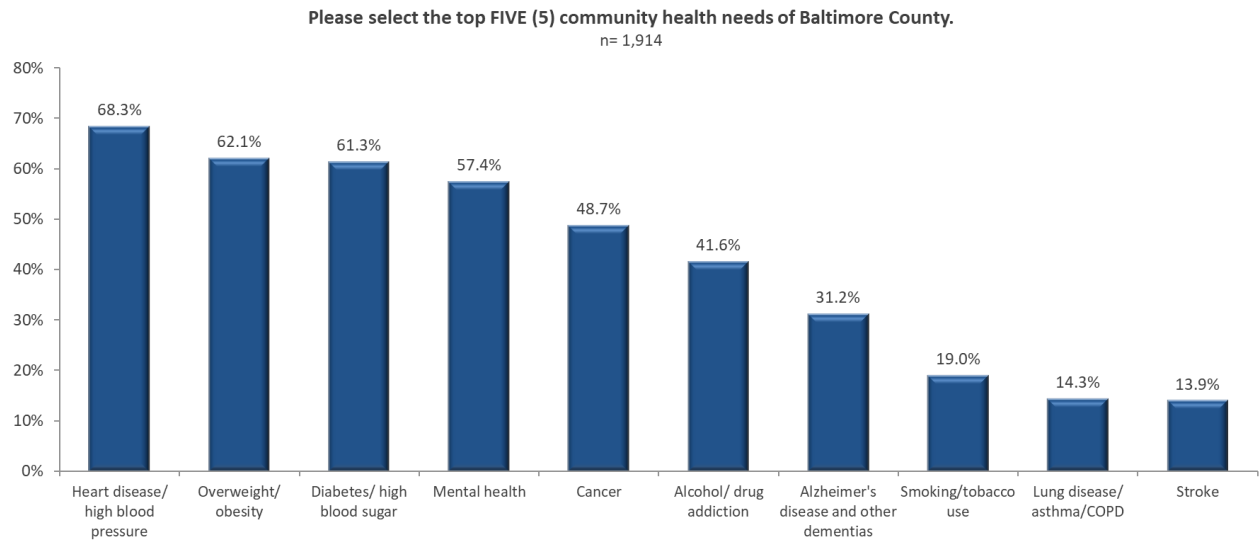
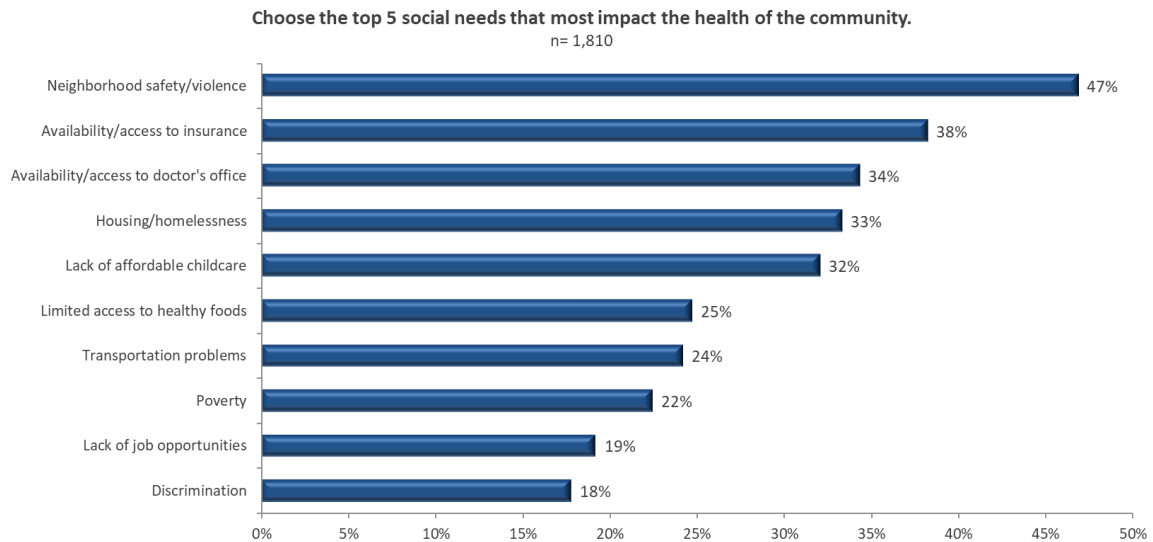
**Figure A6.15****Figure A6.16**

Figure A6.17

What barriers, if any, exist to improving the health of Baltimore County residents? *Choose all that apply.*  
n= 1,832

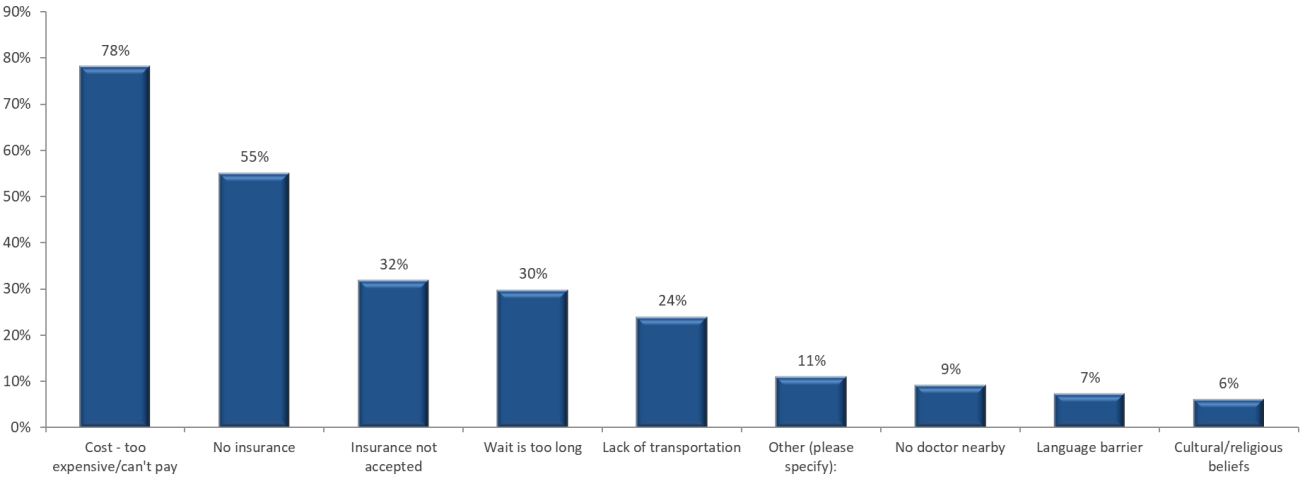
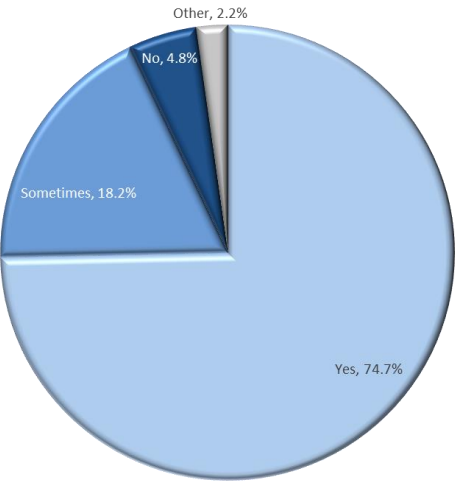
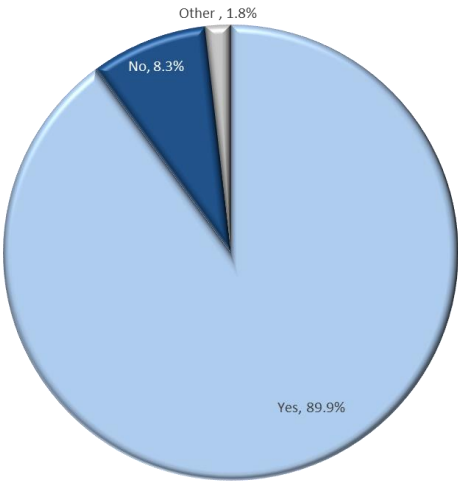


Figure A6.18

Do you have access to find healthy and affordable food?  
n= 2,022



Do you have access to a dentist or dental services?  
n= 2,018



The questions administered via the Community Member Survey instrument are below:

**1. What is your ZIP code?**

*Please write 5-digit ZIP code.* \_\_\_\_\_

**2. Do you think of yourself as:**

*Please select one.*

- ☐ Male
- ☐ Female
- ☐ Transgender man
- ☐ Transgender woman
- ☐ Gender queer/gender nonconforming, i.e., neither exclusively male nor female
- ☐ Other/Additional gender category (*please specify*): \_\_\_\_\_
- ☐ Prefer not to answer

**3. What is your age group (years)?**

*Please select one.*

- ☐ 18-29
- ☐ 30-39
- ☐ 40-49
- ☐ 50-64
- ☐ 65-74
- ☐ 75+
- ☐ Prefer not to answer

**4. Which one of the following describes your race?**

*Please select all that apply.*

- ☐ Black or African American
- ☐ White
- ☐ Asian
- ☐ Native Hawaiian or Pacific Islander
- ☐ American Indian or Alaska Native
- ☐ Other/more than one race (*please specify*): \_\_\_\_\_
- ☐ Prefer not to answer

**5. Which one of the following is your ethnicity?**

*Please select one.*

- ☐ Hispanic or Latino/a
- ☐ Non-Hispanic or Non-Latino/a
- ☐ Prefer not to answer

**7. On how many days during the past 30 days was your mental health not good?** Mental health includes stress, depression, and problems with emotions.

*Please write the number of days.*

\_\_\_\_\_ days

☐ Zero days

☐ Prefer not to answer

**8. How frequently do you see your primary care provider (Medical Doctor, Nurse Practitioner)?**

*Please select one.*

☐ 1 time per year

☐ 2-3 times per year

☐ 4 or more times per year

☐ I cannot get timely access to my primary care provider

☐ I do not have a primary care provider

☐ I use another medical provider option (emergency department, urgent care, GYN provider etc.)

**9. Do you have health insurance?**

*Please select one.*

☐ Yes

☐ No

☐ Prefer not to answer

**10. What are the five most important health problems that affect the health of your community?**

*Please select up to five.*

☐ Alcohol/drug addiction

☐ Alzheimer's disease and other dementias

☐ Mental health (depression/anxiety)

☐ Cancer

☐ Diabetes/high blood sugar

☐ Heart disease/high blood pressure

☐ HIV/AIDS

☐ Infant death

☐ Lung disease/asthma/COPD

☐ Stroke

☐ Smoking/tobacco use

☐ Overweight/obesity

☐ Other (*please specify*): \_\_\_\_\_

☐ Prefer not to answer

**11. What are the five most important social/environmental problems that affect the health of your community?***Please select up to five*

- ☐ Availability/access to doctor's office
- ☐ Availability/access to insurance
- ☐ Child abuse/neglect
- ☐ Discrimination (*Please specify type: age, gender, race, ability, etc.*): \_\_\_\_\_
- ☐ Domestic violence
- ☐ Housing/homelessness
- ☐ Lack of affordable childcare
- ☐ Lack of job opportunities
- ☐ Limited access to healthy foods
- ☐ Limited places to exercise
- ☐ Neighborhood safety/violence
- ☐ Limited opportunities for social connection
- ☐ Poverty
- ☐ School dropout/poor schools
- ☐ Transportation problems
- ☐ Other (*please specify*): \_\_\_\_\_
- ☐ Prefer not to answer

**12. What are the three most important reasons people in your community do not get health care?***Please select up to three.*

- ☐ Cost – too expensive/can't pay
- ☐ Wait is too long
- ☐ No insurance
- ☐ No doctor nearby
- ☐ Lack of transportation
- ☐ Insurance not accepted
- ☐ Language barrier
- ☐ Cultural/religious beliefs
- ☐ Other (*please specify*): \_\_\_\_\_
- ☐ Prefer not to answer

**13. Do you have the ability to find healthy *and* affordable foods around where you live?***Please select one.*

- ☐ Yes
- ☐ Sometimes
- ☐ No
- ☐ Other (*please specify*): \_\_\_\_\_
- ☐ Prefer not to answer

**14. Do you have access to a dentist or dental services?**

*Please select one.*

☐ Yes

☐ No

☐ Other (*please specify*): \_\_\_\_\_

☐ Prefer not to answer

**15. What ideas or suggestions do you have to improve health in your community?**

---

**Thank you for completing the survey!**

## APPENDIX 7 | PRIMARY DATA SUMMARY

Primary data findings are summarized in full by the table below.

|   | Priority Area                      | Community | Key Leaders | Focus Groups* |
|---|------------------------------------|-----------|-------------|---------------|
| ★ | Access to Care                     | ✓         | ✓           | ✓             |
| ★ | Transportation                     | ✓         | ✓           | ✓             |
|   | Food Insecurity                    | ✓         | ✓           | ✓             |
| ★ | Chronic Diseases                   | ✓         | ✓           |               |
| ★ | Health Literacy                    | ✓         | ✓           |               |
| ★ | Behavioral Health/Mental Health    | ✓         | ✓           |               |
| ★ | Substance Use                      | ✓         | ✓           |               |
|   | Housing and Homelessness           | ✓         | ✓           |               |
| ★ | Income and Employment              |           | ✓           |               |
|   | Overweight/Obesity                 | ✓         |             |               |
|   | Education                          |           |             | ✓             |
| ★ | Violence and Safety                |           | ✓           | ✓             |
|   | Family, Community & Social Support |           |             | ✓             |

★ Top priority area from secondary data

\*Focus group results are limited to the highest priority needs.



# BALTIMORE COUNTY COMMUNITY HEALTH NEEDS ASSESSMENT



2023-2024



MedStar Health



## ACKNOWLEDGEMENTS

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This Community Health Needs Assessment (CHNA) represents the culmination of work completed by multiple individuals and groups. The Baltimore County Department of Health (BCDH) and local health systems including Northwest Hospital of LifeBridge Health, Greater Baltimore Medical Center Healthcare (GBMC), the University of Maryland St. Joseph Medical Center (UM SJMC), and MedStar Franklin Square Medical Center (MFSMC) have served an integral role in making this comprehensive assessment possible and will be referred to as the Steering Committee throughout this CHNA. The Steering Committee would like to extend its gratitude to all the focus groups participants, key community health leaders, and community members who provided information used in the development of this assessment.

### The CHNA Steering Committee

| Name               | Title                                                   | Organization      |
|--------------------|---------------------------------------------------------|-------------------|
| D'Ambra Anderson   | Population Health and Community Benefit Project Manager | GBMC              |
| David Baker        | Executive Director of Population and Community Health   | LifeBridge Health |
| Rebecca Cohen      | Community Health Nurse Manager                          | UM SJMC           |
| Jill Brown Hong    | Director of Community and Population Health             | UM SJMC           |
| Rosemary Burrell   | Public Health Nurse Administrator – Population Health   | BCDH              |
| Terrie Dashiell    | Director of Community Health and Wellness               | LifeBridge Health |
| Phyllis Gray       | Assistant Vice President – Care Transformation          | MedStar Health    |
| Tricia Isenock     | Community Health Advisor                                | MedStar Health    |
| Della Leister      | Deputy Health Officer                                   | BCDH              |
| Sharon McClernan   | Vice President – Population Health                      | LifeBridge Health |
| Karen Polite-Lamma | Program Manager – Population and Community Health       | MedStar Health    |
| Diana Quinn        | Community Health Program Advisor                        | MedStar Health    |
| Martin Raffel      | Director of Continuing Care Services Data and Analytics | GBMC              |
| Karen Thompkins    | Director of Community Partnerships                      | GBMC              |
| Athena Visilias    | Senior Community Health Specialist                      | UM SJMC           |
| Brenda Wolcott     | Community Health System Manager                         | MedStar Health    |
| Renee Youngfellow  | PHN Bureau Director – Bureau of Clinical Services       | BCDH              |

Ascendient Healthcare Advisors served as consultants, directing the CHNA process and developing the content of this report.

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## EXECUTIVE SUMMARY

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A Community Health Needs Assessment (CHNA) helps health leaders evaluate the health and wellness of the community they serve and identify gaps and challenges that should be addressed through new programs, services and policy changes. This report was created in compliance with the Public Health Accreditation Board's Standards & Measures for Initial Accreditation, Version 2022, as well as Internal Revenue Service requirements for not-for-profit hospitals.

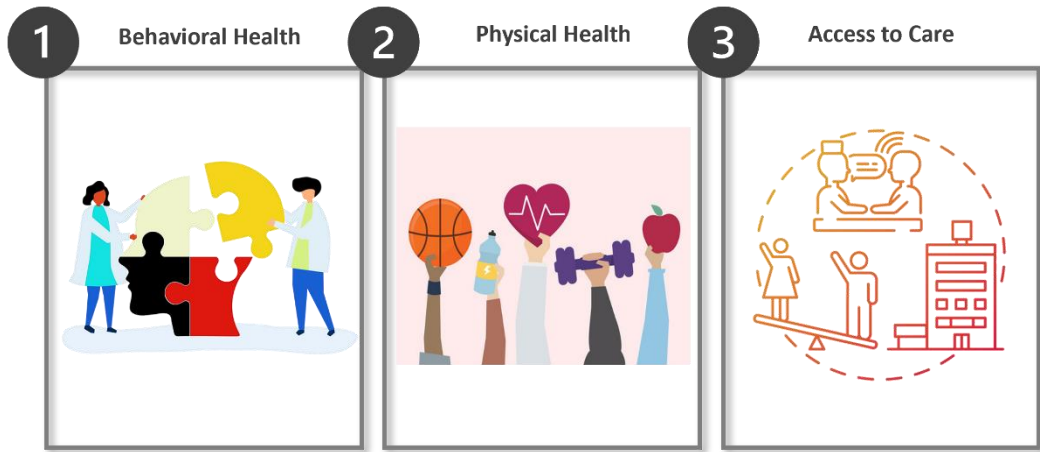
Several local health organizations came together as the CHNA Steering Committee to help develop this CHNA, including:

- Baltimore County Department of Health
- Greater Baltimore Medical Center Healthcare
- MedStar Franklin Square Medical Center
- Northwest Hospital of LifeBridge Health
- University of Maryland St. Joseph Medical Center

Secondary (existing) data is an important piece of the CHNA process. More than 100 data indicators were chosen for analysis from data sources like the Robert Wood Johnson Foundation County Health Rankings, the University of North Carolina Health Literacy Data Map, and the Centers for Disease Control and Prevention. Secondary data measures were gathered into six categories and 20 detailed sub-categories based on common themes. Each data measure was also compared to state or national benchmarks to identify areas of specific concern for Baltimore County. Top community needs identified through secondary data analysis included social determinants of health, access to healthcare, behavioral health and health equity.

Primary (new) data were collected through community-based focus groups and web-based surveys for community members and key community leaders, and included feedback from more than 2,200 people who live, work or receive healthcare in Baltimore County. Key leaders most frequently represented nonprofit organizations, but participants also included government, health, and faith leaders among others. A total of 13 focus groups were conducted, either virtually or in person, with a variety of community members from different backgrounds, age groups and life experiences. Primary data identified access to healthcare, food insecurity, and transportation as top needs that impact the health and well-being of people living in Baltimore County.

The CHNA Steering Committee worked together to identify the priorities the county should focus on over the following three-year period. Leaders evaluated the primary and secondary data collected throughout the process to identify needs based on the size and scope, severity, the ability for hospitals or health departments to make an impact, associated health disparities, and importance to the community. Although it was not possible for every single area of potential need to be identified as a priority, the CHNA Steering Committee selected three top priority health needs (behavioral health, physical health and access to care), which are shown here in no particular order:



The Steering Committee compiled a Health Resources Inventory, which describes a variety of resources available to help Baltimore County residents meet their health and social needs.

Following completion of this report, health leaders throughout Baltimore County will use its findings to collaborate with community organizations and local residents to develop effective health strategies, new implementation plans and interventions, and action plans to improve the communities they serve.

## INTRODUCTION

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### Background

To illustrate its commitment to the health and well-being of the community, the Baltimore County CHNA Steering Committee has completed this assessment to understand and document the greatest health needs currently faced by local residents. The Committee included representatives from Baltimore County Department of Health (BCDH), Northwest Hospital of LifeBridge Health (Northwest), Greater Baltimore Medical Center HealthCare (GBMC), University of Maryland St. Joseph Medical Center (UM SJMC), and MedStar Health (MedStar) (on behalf of MedStar Franklin Square Medical Center (MFSMC)). These organizations helped gather the focus group and survey data that are detailed in this report. The CHNA process helps local leaders continuously evaluate how best to improve and promote the health of the community. The CHNA builds upon formal collaborations between the Steering Committee and other community partners to proactively identify and respond to the needs of Baltimore County residents.

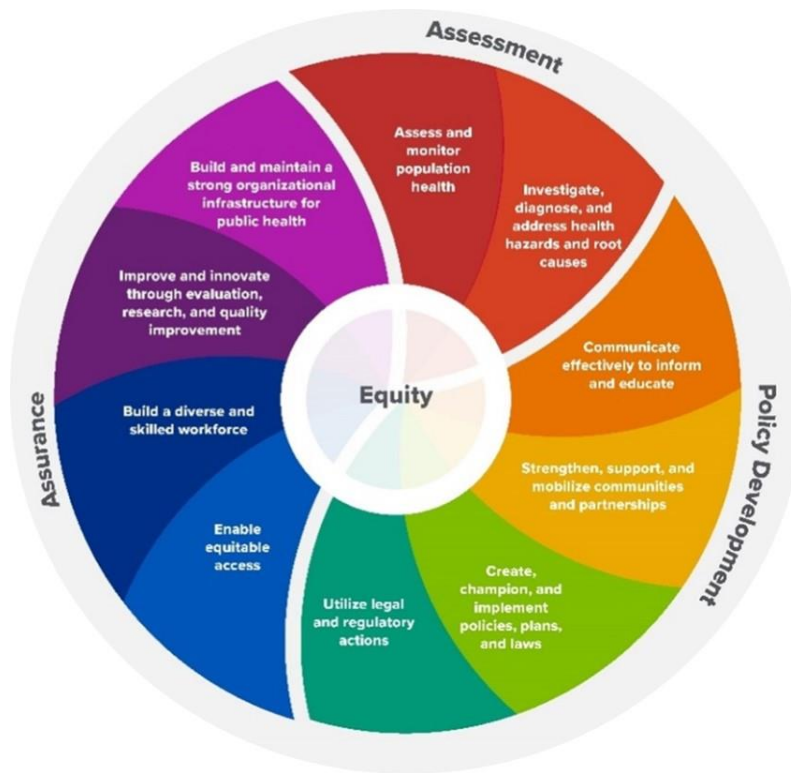
This report was created in compliance with the Public Health Accreditation Board (PHAB)'s Standards & Measures for Initial Accreditation, Version 2022. The Standards "provide requirements and guidance for public health departments"<sup>1</sup> and are based on ensuring public health departments adhere their standards to the CDC's "10 Essential Public Health Services" framework. In its demonstration of data and prioritization of Baltimore County's community needs, this report aligns with all PHAB Standards and Measures for Initial Accreditation, including the need to:

- Conduct and disseminate assessments focused on population health status and public health issues facing the community;
- Participate in or conduct a collaborative process resulting in a comprehensive community health assessment;
- Collect and maintain reliable, comparable, and valid data that provide information on conditions of public health importance and on the health status of the population;
- Analyze public health data to identify trends in health problems, environmental public health hazards, and social and economic factors that affect the public's health;
- Describe disparities in health status and health behaviors, as well as inequities in the factors that contribute to health challenges; and
- Provide and use the results of health data analysis to develop recommendations regarding public health policy, processes, programs, or interventions.

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<sup>1</sup> Source: Public Health Accreditation Board, Centers for Disease Control and Prevention (2022). *Standards & Measures for Initial Accreditation*. Retrieved September 27, 2022, from <https://phaboard.org/wp-content/uploads/Standards-Measures-Initial-Accreditation-Version-2022.pdf>

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**Figure 1.1: The 10 Essential Public Health Services**

Further, this process complies with Internal Revenue Service (IRS) requirements for not-for-profit hospitals to complete a CHNA every three years and to adopt an implementation strategy to meet CHNA-identified community health needs.<sup>2</sup> Specifically, the IRS requires that hospital facilities do the following:

- Define the community it serves;
- Assess the health needs of that community;
- Through the assessment process, take into account input received from people who represent the community's broad interests, including those with special knowledge of or expertise in public health;
- Document the CHNA in a written report that is reviewed and adopted by the hospital facility's authorizing body; and
- Make the CHNA widely available to the public.

<sup>2</sup> Source: *Community Health Needs Assessment for Charitable Hospital Organizations – Section 501(c)(3)* (2023). Internal Revenue Service. Retrieved February 13<sup>th</sup>, 2024 from <https://www.irs.gov/charities-non-profits/community-health-needs-assessment-for-charitable-hospital-organizations-section-501r3>.

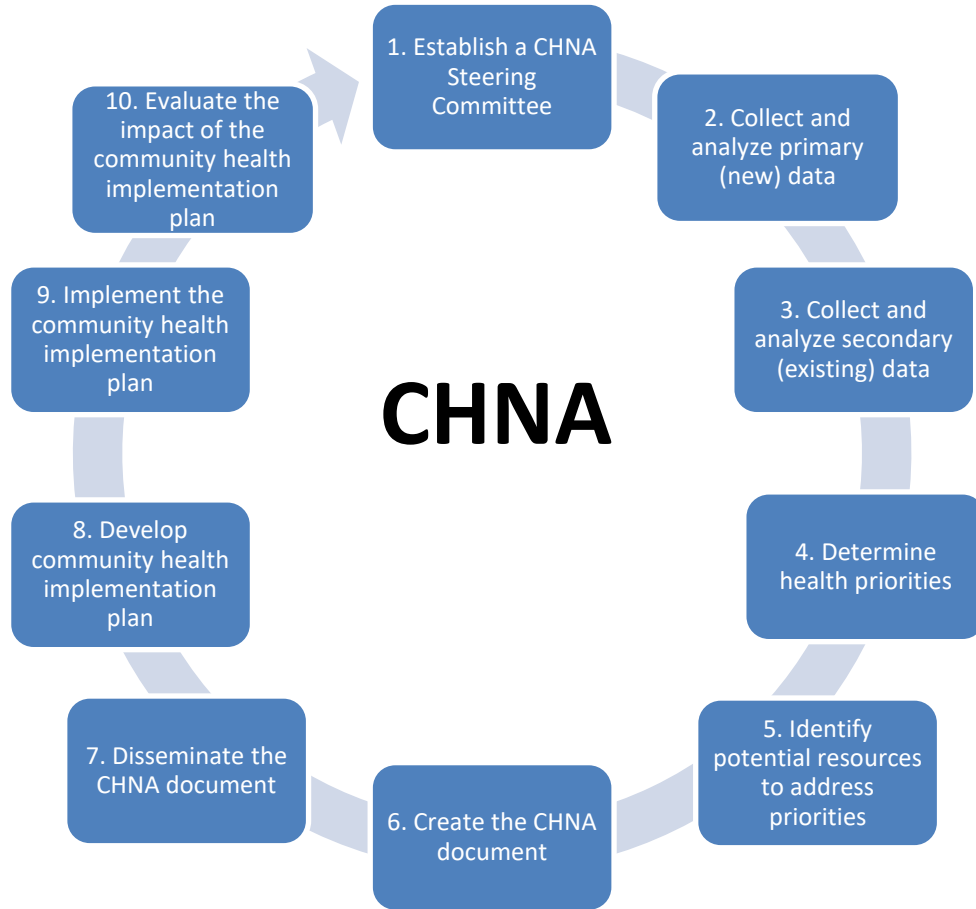
**Process Overview**

A significant amount of information has been reviewed during this planning process, and the CHNA Steering Committee has been careful to ensure that a variety of sources were used to deliver a truly comprehensive report. Both existing (secondary) data and new (primary) data were collected directly from the community throughout this process. It is also important to note that, although unique to Baltimore County, the sources and methodologies used to develop this report comply with the current PHAB and IRS requirements for health departments and not-for-profit hospital organizations.

The purpose of this study is to better understand, quantify, and articulate the health needs of Baltimore County residents. Key objectives of this CHNA include:

- Identify the health needs of Baltimore County residents.
- Identify disparities in health status and health behaviors, as well as inequities in the factors that contribute to health challenges.
- Understand the challenges residents face when trying to maintain and/or improve their health.
- Understand where underserved populations turn for services needed to maintain and/or improve their health.
- Understand what is needed to help residents maintain and/or improve their health.
- Prioritize the needs of the community and clarify/focus on the highest priorities.

There are ten phases in the CHNA process, as described in Figure 1.2 below. Results of the first seven phases are discussed throughout this assessment and the development of community health action plans and subsequent phases will take place after the completion of the CHNA report.

**Figure 1.2: The CHNA Process**

### Report Structure

The outline below provides detailed information about each section of the report.

- 1) [Methodology](#) – The methodology chapter provides an overall summary of how the priority health need areas were selected as well as how information was collected and incorporated into the development of this CHNA, including study limitations.
- 2) [County Profile](#) – This chapter details the demographic (such as age, gender, and race) and socioeconomic data of Baltimore County residents.
- 3) [Priority Health Need Areas](#) – This chapter describes each identified priority health need area for Baltimore County and summarizes the new and existing data that support these prioritizations. This chapter also describes the impact of health disparities among various sub-groups in Baltimore County.
- 4) [Health Resource Inventory](#) – This chapter documents existing health resources currently available to the Baltimore County community.

- 5) [Next Steps](#) – This chapter briefly summarizes the next steps that will occur to address the priority health need areas discussed throughout this document.

In addition, the appendices discuss all of the data used during the development of this report in detail, including:

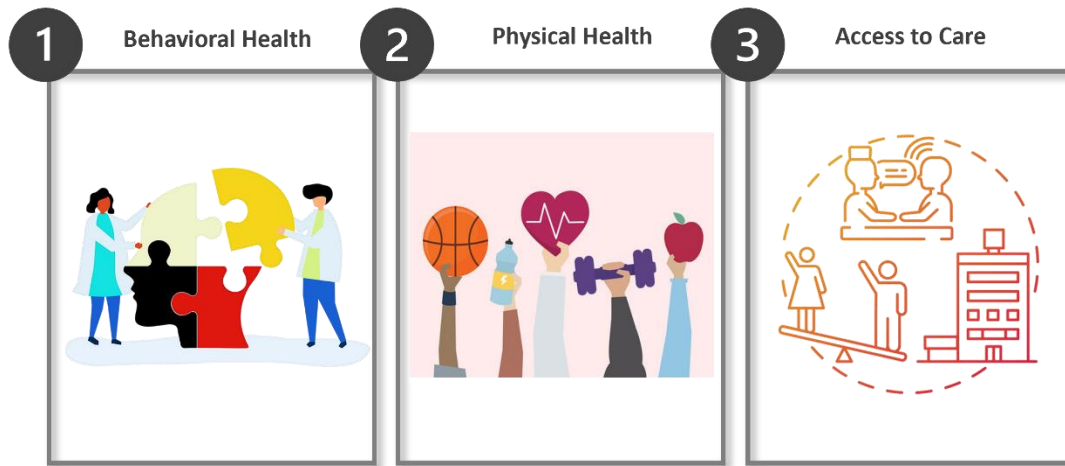
- 1) [Summary of Prior CHNA Implementation Plans](#) – Information about Steering Committee partners and actions taken to address the priority health needs identified in previous CHNAs are presented in Appendix 1.
- 2) [County Demographic and Socioeconomic Data](#) – Information regarding the population characteristics (such as age, gender, and race) of Baltimore County are presented in Appendix 2.
- 3) [Detailed Summary of Secondary Data Measures and Findings](#) – Existing data measures and findings used in the prioritization process are presented in Appendices 3-5.
- 4) [Detailed Summary of Primary Findings](#) – Summaries of new data findings from community member and key community health leader surveys as well as focus groups are presented in Appendices 6-7.

### **Summary Findings: Baltimore County Priority Health Need Areas**

To achieve the study objectives, both new and existing data were collected and reviewed. New data included information from web-based surveys of adults (18+ years) and focus groups; various local organizations, community members, and health service providers within Baltimore County participated. Existing data included information regarding the demographics, health and healthcare resources, behavioral health, disease trends, and county rankings. The data collection and analysis process began in July 2023 and continued through March 2024.

Given the size of Baltimore County, both in geography and population, significant variations in demographics and health needs exist within the county. At the same time, consistent needs are present across the whole county and serve as the basis for determining priority health needs at the county level. This document will discuss the priority health need areas for Baltimore County, as well as how the severity of those needs might vary across subpopulations based on the information obtained and analyzed during this process.

Through the prioritization process, the CHNA Steering Committee identified Baltimore County's priority health need areas from a list of over 100 health indicators. Please note that the final priority needs were not ranked in any order of importance and the Steering Committee and the Local Health Improvement Coalition (LHIC) will engage in each of the three priority need areas. After looking at all relevant data and feedback from the CHNA Steering Committee, the three focus areas identified as countywide priorities for the 2023-2024 CHNA are behavioral health, physical health and access to care, as seen in Figure 1.3.

**Figure 1.3: Priority Health Needs, 2023-2024**

Health, healthcare and associated community needs are very much interrelated, and often impact each other. Although this CHNA process considered these areas separately, their impact on each other should be considered when planning for programs or services to address community needs.

Many health needs are also related to underlying societal and socioeconomic factors. Research has consistently shown that income, education, physical environment, and other such demographic and socioeconomic factors affect the health status of individuals and communities. This CHNA acknowledges that link and focuses on identifying and documenting the greatest health needs as they present themselves today. As plans are developed to address these needs, the Committee's goal is to work with other community organizations to address underlying factors that could drive long-term improvements to the county population's health.

For additional discussion of current priority needs and the data that supports those priorities, please see Chapter 3.

## CHAPTER 1 | METHODOLOGY

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### Study Design

The process used to assess Baltimore County's community needs, challenges, and opportunities included multiple steps. Both new and existing data were used throughout the study to paint a more complete picture of Baltimore County's health needs. While the CHNA Steering Committee largely viewed the new and existing data equally, there were situations where one provided clearer evidence of community health need than the other. In these instances, the health needs identified were discussed based on the most appropriate data gathered. Data analysis, community feedback review, and stakeholder engagement were all used to identify key areas of need.

Specifically, the following data types were collected and analyzed:

#### New (Primary) Data

Public engagement and feedback were received through online community member and key community leader surveys, along with community focus groups and significant input and direction from the CHNA Steering Committee. The Steering Committee worked together to develop the survey questions for the two web-based surveys. Community members were asked to identify the most significant health and social needs in their community, as well as asked questions about their experiences seeking or receiving medical care. Key leaders were asked to answer similar questions about the community they serve. Focus group participants were also asked a standard set of questions about health and social needs, in order to identify trends across various groups and to highlight areas of concern for specific populations. In total, the Steering Committee was able to gather input from over 2,200 Baltimore County residents and other stakeholders. This included web survey responses from 2,034 community members and 115 key leaders, as well as 13 focus groups that included over 90 community members and other people who live, work or receive healthcare in Baltimore County.

For more information regarding specific questions asked as part of the focus groups and surveys, please refer to Appendix 6.

#### Existing (Secondary) Data

Key sources for existing data on Baltimore County included information provided by the Steering Committee and a variety of public data sources related to demographics, social and economic determinants of health, environmental health, health status and disease trends, mental/behavioral health trends, and individual health behaviors. Key information sources leveraged during this process included:

- *County Health Rankings*, developed in partnership by Robert Wood Johnson Foundation and University of Wisconsin Population Health Institute
- Maryland Department of Health's State Health Improvement Process (MD SHIP) and Division of Vital Records
- The Maryland Youth Risk Behavior Survey/Youth Tobacco Survey (YRBS/YTS)

- *The Opportunity Atlas*, developed in partnership by the U.S. Census Bureau, Harvard University, and Brown University
- *The National Equity Atlas*, developed by PolicyLink and the University of Southern California (USC) Equity Research Institute
- *Food Access Research Atlas*, published by the U.S. Food and Drug Administration
- *Minority Health Social Vulnerability Index*, published by U.S. Department of Health and Human Services Office of Minority Health
- *American Community Survey*, as collected and published by the U.S. Census Bureau
- Data provided by CHNA Steering Committee members and other affiliated organizations, including CHNA reports from BCDH, Northwest, Sheppard Pratt, GBMC, UM SJMC, and MFSMC.

For more information regarding data sources and data time periods, please refer to Appendix 4.

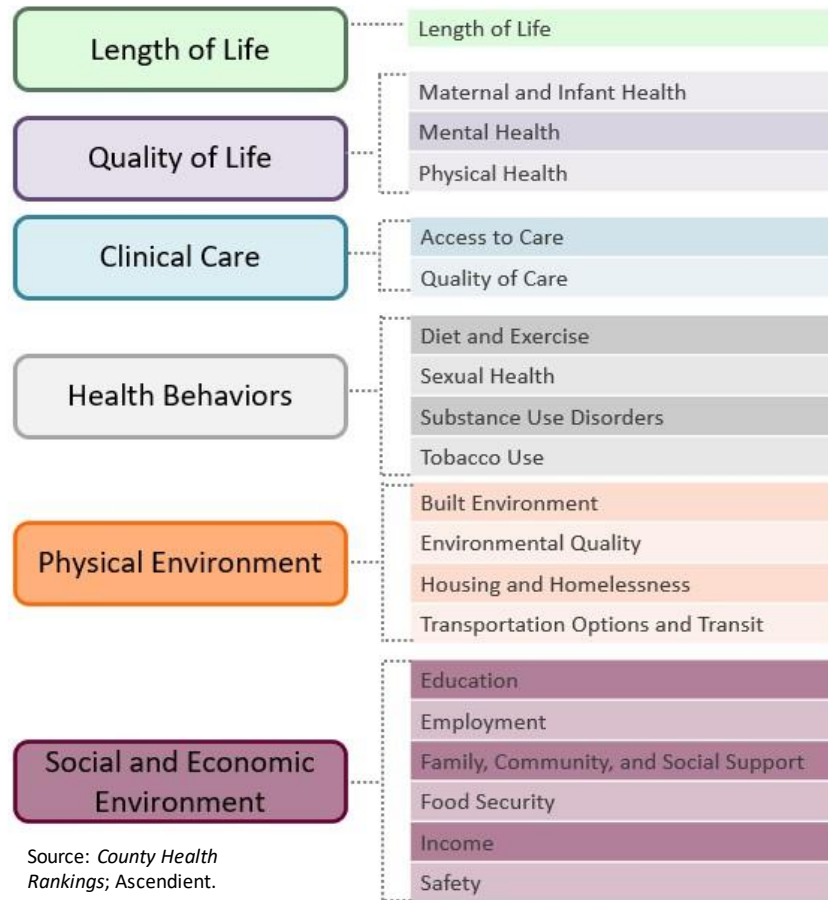
#### Comparisons

To understand the relevance of existing data collected throughout the process, each measure must be compared to a benchmark, goal, or similar geographic area. In other words, without being able to compare Baltimore County to an outside measure, it would be impossible to determine how the county is performing. For this process, each data measure was compared to outside data as available, including the following:

- *County Health Rankings Top Performers*: This is a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute that ranks counties across the nation by various health factors.
- *City of Baltimore and State of Maryland*: The Steering Committee determined that comparisons with the City of Baltimore and the state of Maryland were appropriate. While certain differences exist between the county and the city, the close proximity and overlap between resources creates a meaningful opportunity for comparison.

#### Prioritization Process Overview and Results

The process of identifying the priority health needs for the 2023-2024 CHNA began with the collection and analysis of hundreds of new and existing data measures. In order to create more easily discussable categories, all individual data measures were then grouped into six categories and 20 corresponding focus areas based on “common themes,” as seen in Figure 2.1 below. These focus areas are detailed further in Appendix 4.

**Figure 2.1: Areas of Focus**

Since a large number of individual data measures were collected and analyzed to develop these 20 focus areas, it was not reasonable to make each of them a priority. The Steering Committee considered which focus areas had data measures of high need or worsening performance, priorities from the primary data, and how possible it is for health departments or hospitals to impact the given need to help determine which health needs should be prioritized. Once the primary and secondary data had been grouped into the focus areas detailed in Appendix 4, the CHNA Steering Committee used a polling software to evaluate and prioritize the health needs of Baltimore County while considering the following factors:

- Size and scope of the health need;
- Severity and intensity of the health need;
- Whether possible interventions would be possible and effective;
- Health disparities associated with the need; and
- Importance the community places on addressing the need.

The final priority need areas were not ranked in any particular order of importance, and each will be addressed by the Steering Committee. The following three focus areas (behavioral health, physical health and access to care) were identified as Baltimore County's top priority health needs to be addressed over the next three years, as seen in Figure 2.2 below:

**Figure 2.2: Priority Health Needs, 2023-2024**

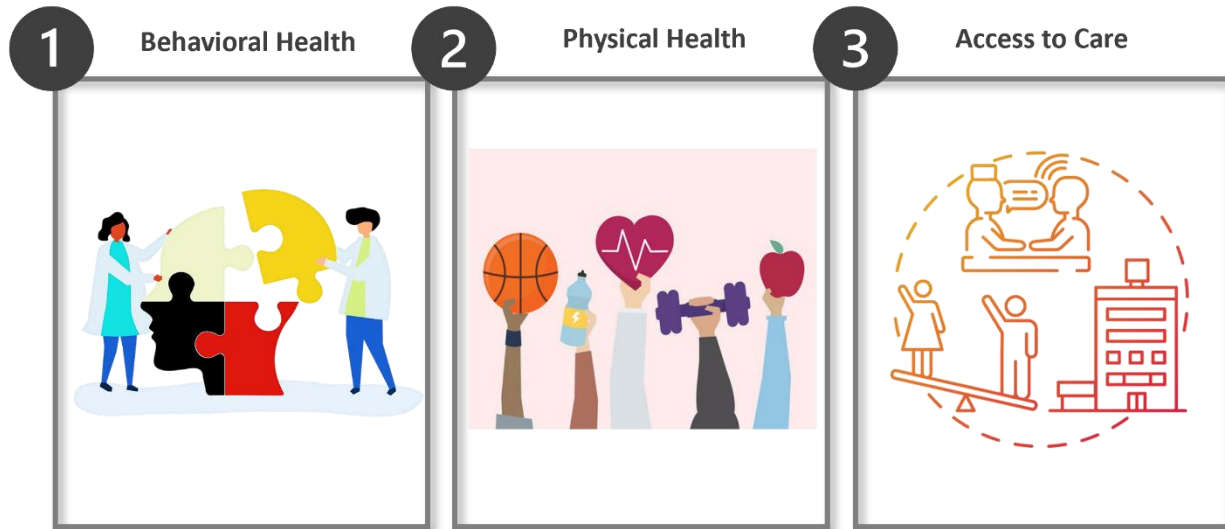


**Figure 2.3: Social Determinants of Health**

Throughout the process, the Steering Committee also considered *Healthy People 2030's* "Social Determinants of Health and Health Equity." The CDC defines social determinants of health (SDoH) as the conditions in the environments where people are born, live, learn, work, play, worship and age that affect a wide range of health, functioning and quality of life outcomes and risks. These factors can include healthcare access and quality, neighborhood and built environment, social and community context, economic stability, and education access and quality, as outlined in Figure 2.3.<sup>3</sup>

Recognizing that SDoH have an impact on health disparities and inequities in the community was a key point the Steering Committee considered throughout the CHNA process. Figure 2.4 describes the way various social and economic conditions may affect health and well-being.

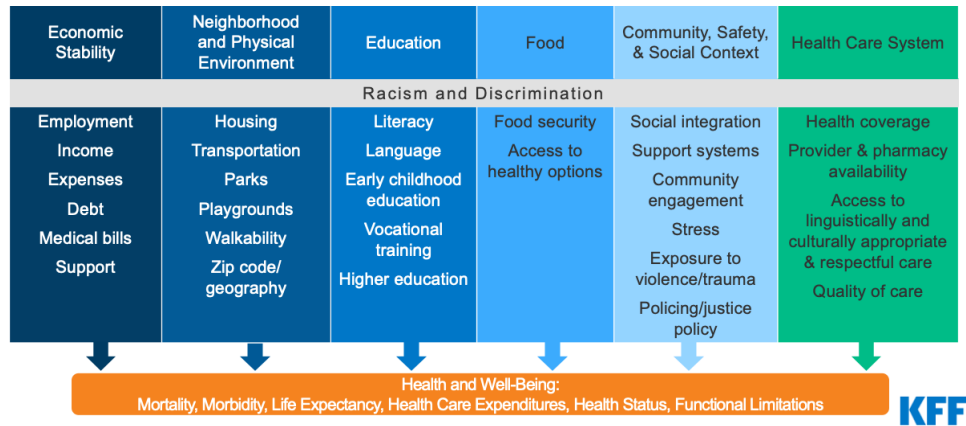
### Social Determinants of Health



Social Determinants of Health  
Copyright-free

Healthy People 2030

<sup>3</sup> Source: CDC (2022). Social Determinants of Health at CDC. Accessed March 7th, 2024 via <https://www.cdc.gov/about/sdoh/index.html>

**Figure 2.4: SDoH and Health Disparities****Health Disparities are Driven by Social and Economic Inequities****Study Limitations**

Developing a CHNA is a long and time-consuming process. Because of this, more recent data may have been made available after the collection and analysis timeframe. Existing data typically become available between one and three years after the data is collected. This is a limitation, because the “staleness” of certain data may not depict current trends. For example, the U.S. Census Bureau’s American Community Survey is a valuable source of demographic information, however data for a particular year is not published until late the following year. This means 2022 data on community characteristics, such as languages spoken at home, did not become available until late fall 2023. The Steering Committee tried to account for these limitations by collecting new data, including focus groups and web-based community member and key community leader surveys. Another limitation of existing data is that, depending on the source, it may have limited demographic information, such as gender, age, race, and ethnicity.

Given the size of Baltimore County in both population and geography, this study was limited in its ability to fully capture health disparities and health needs across racial and ethnic groups. While efforts were made to include diverse community members in survey efforts, roughly 60% of all respondents were white, and another 36% of respondents were Black or African American. Although survey respondents could choose from multiple race or ethnicity categories,<sup>4</sup> limited responses were received from these groups. This made it difficult for the Steering Committee to assess health needs and disparities for other racial/ethnic minority groups in the community.

In addition, there are existing gaps in information for some population groups. Many available datasets are not able to isolate historically underserved populations, including the uninsured, low-income persons, and/or certain minority groups. Despite the lack of available data, attempts were made to include underserved sub-segments of the greater population through the new data gathered throughout the CHNA process. For example, the Steering Committee chose to focus on Spanish-speaking members of the community by providing a Spanish language version of the web-based community survey and facilitating

<sup>4</sup> Categories included Asian, American Indian/Alaskan Native (AIAN), Black or African American, Hispanic/Latino, Native Hawaiian/Other Pacific Islander (NHPI) and White.

Spanish-language focus groups. Paper surveys were also distributed in an effort to reach as much of the community as possible, although usage of paper surveys was low. To increase future survey responses, members of the Steering Committee should consider working directly with partner organizations in the community who can connect directly with populations who are hard to access through traditional outreach methods, including people with disabilities, the uninsured and people who are disengaged.

In the future, assessments should make efforts to include other underserved communities whose needs are not specifically discussed here because of data and input limitations during this CHNA cycle. Of note, residents in the disabled, blind, deaf, and hard-of-hearing communities can be a focus of future new data collection methods. Using a primarily web-based survey collection method might have also impacted response rates of community members with no internet access or low technological literacy. Additionally, more input from both patients and providers of SUD services would also be helpful in future assessments.

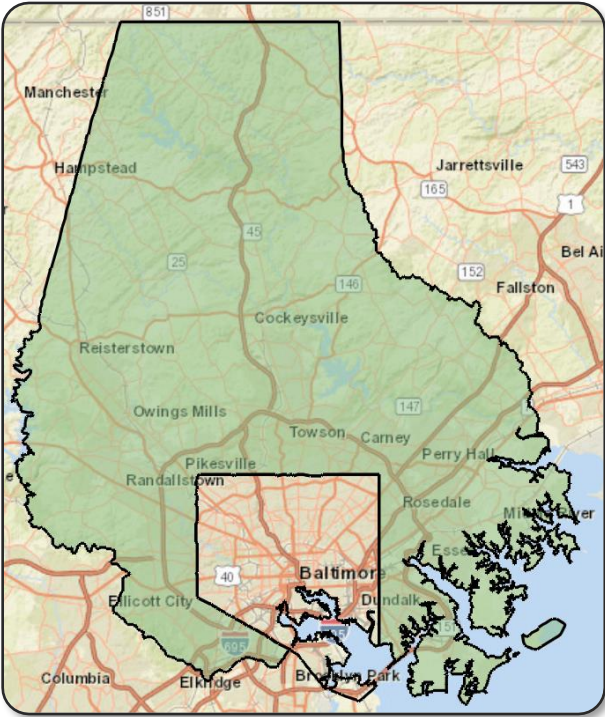
Finally, parts of this assessment have relied on input from community members and key community health leaders through web-based surveys and focus groups. Since it would be unrealistic to gather input from every single member of the community, the community members that participated have offered their best expertise and understanding on behalf of the entire community. As such, the CHNA Steering Committee has assumed that participating community members accurately and completely represented their fellow residents.

CHAPTER 2 | COUNTY PROFILE

Geography

Baltimore County occupies 612 square miles of land — plus an additional 28 square miles of water — in the geographic center of Maryland. Baltimore County surrounds most of Baltimore City, however, the city was separated from the county in 1851. Today, Baltimore City is an independent city on par with county jurisdictions.

Figure 3.1: Baltimore County Map



Population

Population figures discussed throughout this chapter were obtained from Esri, a leading GIS provider that utilizes U.S. Census data projected forward using proprietary methodologies.

With a population of roughly 860,000 people, the county is the largest jurisdiction in the Central Maryland Metropolitan Area.

| Table 3.1: 2023 Total Population |                  |                |           |               |
|----------------------------------|------------------|----------------|-----------|---------------|
|                                  | Baltimore County | Baltimore City | Maryland  | United States |
| Population                       | 859,710          | 573,794        | 6,259,408 | 337,470,185   |

Source: Esri 2023

## Age and Sex Distribution

Data on age and sex helps health providers understand who lives in the community and informs planning for needed health services. The age distribution of Baltimore County skews slightly older than that of Baltimore City, Maryland, and the U.S. While people of all ages can benefit from preventive services and health education, older people may need higher acuity healthcare and specialized services like cancer care or chronic disease management.

| Table 3.2: 2023 Age Distribution |                  |                |          |               |
|----------------------------------|------------------|----------------|----------|---------------|
|                                  | Baltimore County | Baltimore City | Maryland | United States |
| Percentage below 15              | 16.4%            | 16.8%          | 17.6%    | 18.0%         |
| Percentage between 15 and 44     | 38.9%            | 43.7%          | 39.2%    | 39.6%         |
| Percentage between 45 and 64     | 24.9%            | 23.0%          | 25.7%    | 24.6%         |
| Percentage 65 and older          | 19.7%            | 16.5%          | 17.5%    | 17.8%         |

Source: Esri 2023

The populations of Baltimore County and Baltimore City skew more heavily female compared to the state of Maryland, and the U.S.

| Table 3.3 2023 Sex Distribution |                  |                |          |               |
|---------------------------------|------------------|----------------|----------|---------------|
|                                 | Baltimore County | Baltimore City | Maryland | United States |
| Female                          | 52.2%            | 52.8%          | 51.3%    | 50.6%         |
| Male                            | 47.8%            | 47.2%          | 48.7%    | 49.4%         |

Source: Esri 2023

## Race and Ethnicity

Data on race and ethnicity help us understand the need for healthcare services as well as cultural factors that can impact how care is delivered. A greater proportion of residents in Baltimore County identify as Black or African American compared to the U.S. overall. However, the proportion of county residents that identify as Black or African American is roughly half the proportion of the city.

**Table 3.4: 2023 Racial Distribution**

|                    | Baltimore County |               | Baltimore City |               | Maryland  |               | United States |               |
|--------------------|------------------|---------------|----------------|---------------|-----------|---------------|---------------|---------------|
|                    | Count            | Pct. of Total | Count          | Pct. of Total | Count     | Pct. of Total | Count         | Pct. of Total |
| Non-Hispanic White | 431,552          | 50.2%         | 146,924        | 25.6%         | 2,867,623 | 45.8%         | 191,314,266   | 56.7%         |
| Non-Hispanic Black | 260,766          | 30.3%         | 332,377        | 57.9%         | 1,834,049 | 29.3%         | 40,898,542    | 12.1%         |
| Asian              | 57,506           | 6.7%          | 21,210         | 3.7%          | 439,514   | 7.0%          | 20,811,620    | 6.2%          |
| AIAN               | 1,921            | 0.2%          | 1,270          | 0.2%          | 11,977    | 0.2%          | 2,284,715     | 0.7%          |
| NHPI               | 255              | 0.0%          | 152            | 0.0%          | 2,635     | 0.0%          | 643,202       | 0.2%          |

Source: Esri 2023

By ethnicity, less than 10% of Baltimore County's population is Hispanic.<sup>5</sup> Baltimore County has a smaller Hispanic population than Baltimore City, Maryland, and the U.S. overall.

**Table 3.5: 2023 Ethnic Distribution**

|              | Baltimore County |               | Baltimore City |               | Maryland  |               | United States |               |
|--------------|------------------|---------------|----------------|---------------|-----------|---------------|---------------|---------------|
|              | Count            | Pct. of Total | Count          | Pct. of Total | Count     | Pct. of Total | Count         | Pct. of Total |
| Non-Hispanic | 793,133          | 92.3%         | 525,925        | 91.7%         | 5,470,733 | 87.4%         | 271,934,049   | 80.6%         |
| Hispanic     | 66,577           | 7.7%          | 47,869         | 8.3%          | 788,675   | 12.6%         | 65,536,136    | 19.4%         |

Source: Esri 2023

The proportion of foreign-born individuals residing in Baltimore County is higher than that of Baltimore City but lower than that of the state of Maryland. This measure is also slightly lower than the U.S. overall.

**Table 3.6: 2022 Foreign Born Population**

|              | Baltimore County | Baltimore City | Maryland | United States |
|--------------|------------------|----------------|----------|---------------|
| Foreign Born | 13.0%            | 9.7%           | 16.7%    | 13.9%         |

Source: U.S. Census Bureau (2022), American Community Survey (2018-2022)

The diversity of Baltimore County and Baltimore City is reflected in the languages that residents speak at home. According to the most recent American Community Survey, approximately 15% of Baltimore County and 10% of Baltimore City residents speak a language other than English at home, compared to around 20% of Maryland and U.S. residents. Less than 5% of county or city residents speak Spanish at home. Spanish is more commonly spoken at home in the state of Maryland and the U.S. overall.

<sup>5</sup> Race and ethnicity (Hispanic origin) are two separate concepts, according to federal guidelines. People who are Hispanic may be of any race, and people in each race group may be either Hispanic or Not Hispanic. Source: [U.S. Census Bureau Guidance on the Presentation and Comparison of Race and Hispanic Origin Data](#).

**Table 3.7: 2022 Language Spoken at Home**

|                                      | Baltimore County | Baltimore City | Maryland | United States |
|--------------------------------------|------------------|----------------|----------|---------------|
| English Only                         | 85.8%            | 89.0%          | 79.3%    | 78.0%         |
| Spanish                              | 4.0%             | 4.7%           | 8.9%     | 13.3%         |
| Indo-European Languages              | 4.5%             | 2.5%           | 4.7%     | 3.8%          |
| Asian and Pacific Islander Languages | 2.7%             | 1.9%           | 3.9%     | 3.6%          |
| Other Languages                      | 3.0%             | 1.8%           | 3.2%     | 1.2%          |

Source: American Community Survey 2022 1-Year Estimates

**Economic Indicators**

In addition to demographic data, socioeconomic factors in the community such as income, poverty, and food scarcity play a significant role in identifying health-related needs. The median household income in Baltimore County is higher than in Baltimore City and the U.S. overall, but lower than Maryland.

**Table 3.8: 2023 Median Household Income**

|        | Baltimore County | Baltimore City | Maryland | United States |
|--------|------------------|----------------|----------|---------------|
| Income | \$82,607         | \$55,224       | \$93,432 | \$72,603      |

Source: Esri 2023

In 2021, approximately 10% of Baltimore County households were below the federal poverty level (FPL). The share of households below the FPL was higher in Baltimore City and the U.S. overall but equal to the state of Maryland. Poverty has a significant impact on health. Across the lifespan, people who live in impoverished communities have a higher risk of poor health outcomes, including mental illness, chronic diseases, higher mortality and lower life expectancy. Poverty is a concern across the lifespan; children who live in poverty are at risk for developmental delays, toxic stress and poor nutrition, and are likely to live in poverty as adults as well. Unmet social needs, including having low or no income, can also limit people's ability to access healthcare when they need it, or to provide for basic necessities needed to live healthy lives, such as safe housing or healthy food.<sup>6</sup>

**Table 3.9: 2021 Percent of Households Below the Federal Poverty Level**

|                   | Baltimore County | Baltimore City | Maryland | United States |
|-------------------|------------------|----------------|----------|---------------|
| Percent Below FPL | 9.1%             | 19.6%          | 9.1%     | 12.4%         |

Source: Esri 2023

<sup>6</sup> Source: Healthy People 2030 (2023). *Poverty*. Accessed March 7<sup>th</sup>, 2024 via: <https://health.gov/healthypeople/priority-areas/social-determinants-health/literature-summaries/poverty>

Similar to the percentage of households below the FPL, approximately 10% of Baltimore County households received Food Stamps/SNAP<sup>7</sup> in 2021. This percentage was comparable with the state of Maryland and the United States but significantly less than Baltimore City.

| Table 3.10: 2021 Households Receiving Food Stamps/SNAP |                  |                |           |               |
|--------------------------------------------------------|------------------|----------------|-----------|---------------|
|                                                        | Baltimore County | Baltimore City | Maryland  | United States |
| Number of Households Receiving Food Stamps/SNAP        | 34,031           | 56,208         | 238,288   | 14,105,231    |
| Total Number of Households                             | 326,932          | 244,893        | 2,294,270 | 124,010,992   |
| Percentage of Households receiving Food Stamps/SNAP    | 10.4%            | 23.0%          | 10.4%     | 11.4%         |

Source: Esri 2023

Baltimore County is relatively well-educated, with 67.1% of residents having received some education beyond high school. Baltimore County's proportion of the population with a bachelor's degree was slightly higher than that of Baltimore City, Maryland, and the U.S.

| Table 3.11: 2023 Educational Attainment |                  |                |          |               |
|-----------------------------------------|------------------|----------------|----------|---------------|
|                                         | Baltimore County | Baltimore City | Maryland | United States |
| Less than 9 <sup>th</sup> Grade         | 2.6%             | 3.5%           | 3.2%     | 4.1%          |
| Some High School/No Diploma             | 4.8%             | 8.8%           | 4.9%     | 5.5%          |
| High School Diploma                     | 22.1%            | 23.9%          | 21.4%    | 22.9%         |
| GED/Alternative Credential              | 3.3%             | 5.2%           | 3.1%     | 4.1%          |
| Some College/No Diploma                 | 17.1%            | 16.9%          | 16.4%    | 17.7%         |
| Associate's Degree                      | 7.8%             | 5.7%           | 7.5%     | 9.5%          |
| Bachelor's Degree                       | 23.8%            | 18.3%          | 23.3%    | 22.3%         |
| Graduate/ Professional Degree           | 18.4%            | 17.7%          | 20.2%    | 13.9%         |

Source: Esri 2023

The overall unemployment rate in Baltimore County was higher than Maryland, and the U.S. overall in 2023, but lower than Baltimore City. The highest rate of unemployment in the county was among people ages 25 to 54.

<sup>7</sup> The Supplemental Nutrition Assistance Program (SNAP) provides nutrition assistance to eligible, low-income individuals and households. It is the largest Federal nutrition assistance program. Source: [USDA Supplemental Assistance Program fact sheet](#).

**Table 3.12: 2023 Unemployment**

|                                       | Baltimore County | Baltimore City | Maryland | United States |
|---------------------------------------|------------------|----------------|----------|---------------|
| Percentage unemployed ages 16 to 24   | 1.3%             | 1.7%           | 1.2%     | 1.3%          |
| Percentage unemployed ages 25 to 54   | 1.9%             | 2.8%           | 1.9%     | 2.2%          |
| Percentage unemployed ages 55 to 64   | 0.6%             | 0.7%           | 0.5%     | 0.6%          |
| Percentage unemployed ages 65 or more | 0.3%             | 0.5%           | 0.2%     | 0.2%          |
| Total unemployment                    | 4.1%             | 5.7%           | 3.8%     | 3.7%          |

Source: Esri 2023

In 2023, the age group in both Baltimore County and Baltimore City least likely to have health insurance was adults ages 35 to 64. Baltimore County has proportions of uninsured individuals across almost every age group lower than the U.S. as a whole, but similar to both Baltimore City and Maryland.

**Table 3.13: 2023 Health Insurance Status**

|                                       | Baltimore County | Baltimore City | Maryland | United States |
|---------------------------------------|------------------|----------------|----------|---------------|
| Percentage uninsured ages 18 or below | 0.9%             | 0.8%           | 0.9%     | 1.3%          |
| Percentage uninsured ages 19 to 34    | 1.9%             | 2.2%           | 2.1%     | 3.2%          |
| Percentage uninsured ages 35 to 64    | 2.3%             | 2.9%           | 2.8%     | 4.2%          |
| Percentage uninsured ages 65 or more  | 0.1%             | 0.1%           | 0.1%     | 0.1%          |

Source: Esri 2023

### Social Determinants of Health

In addition to the considerations noted above, there are many other factors that can positively or negatively influence a person's health. The Steering Committee recognizes this and believes that, to portray a complete picture of the county's health status, it first must address the factors that impact community health. The Centers for Disease Control and Prevention (CDC) defines social determinants of health (SDoH) as the conditions in the environments where people are born, live, learn, work, play, worship and age that affect a wide range of health, functioning and quality of life outcomes and risks. According to the CDC's "Social Determinants of Health" from its *Healthy People 2030* public health priorities initiative, factors contributing to an individual's health status can include the following: healthcare access and quality, neighborhood and built environment, social and community context, economic stability, and education access and quality.

**Figure 3.2: Social Determinants of Health**

As seen in Figure 3.2, many of the factors that contribute to health are hard to control or societal in nature. As such, health and healthcare organizations need to consider many underlying factors that may impact an individual's health and not simply their current health conditions.

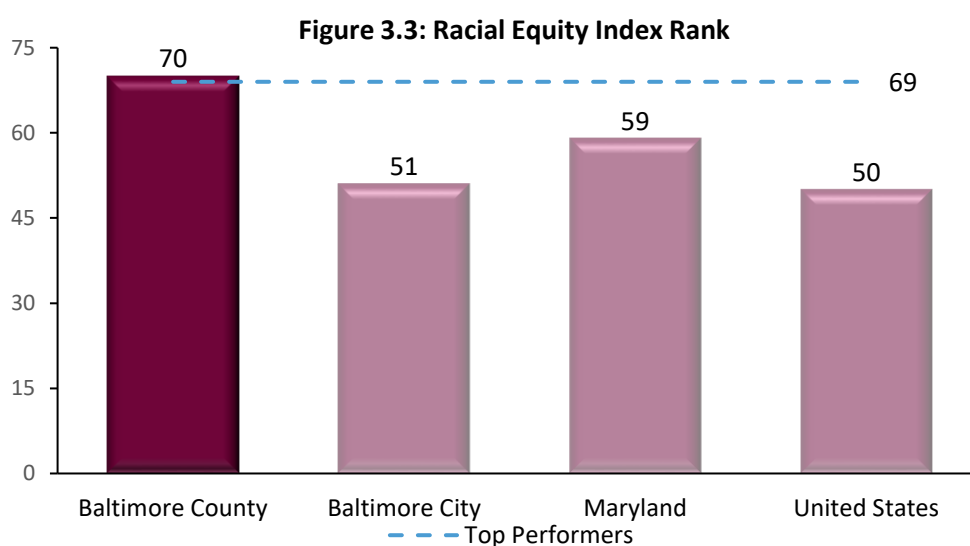
It is widely acknowledged that people with lower income, social status and levels of education find it harder to access healthcare services compared to people in the community with more resources. Being unable to access healthcare services is a factor that contributes to poor health status. Further, people in communities with fewer resources may also experience high levels of stress, which also contributes to worse health outcomes, particularly related to mental or behavioral health.

The CHNA Steering Committee collected new data via focus groups and surveys to ensure that residents and key community health leaders could provide input regarding the needs of their specific communities. An analysis of the racial and geographic disparities that emerged in the information obtained and analyzed during this process is detailed below.

### Disparities

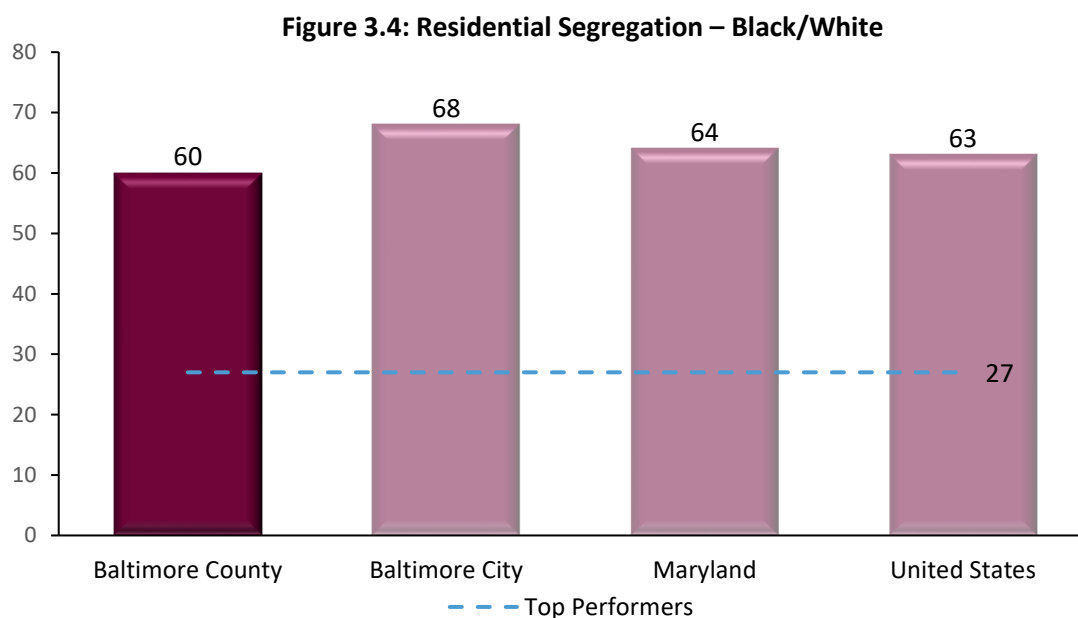
Recognizing the diversity of Baltimore County, as discussed above, the Steering Committee evaluated factors that may contribute to health disparities in its community. These included racial equity; racial segregation; financial barriers; nutrition; social, behavioral, and economic factors that influence health; and English language proficiency.

The Racial Equity Index measures disparities between racial groups based on inclusion and prosperity. As seen in Figure 3.3, Baltimore County performs higher than Baltimore City, Maryland and the U.S. Higher scores are better and indicate smaller racial gaps. In this graphic and the following, the blue line indicates geographies that perform best in that indicator.



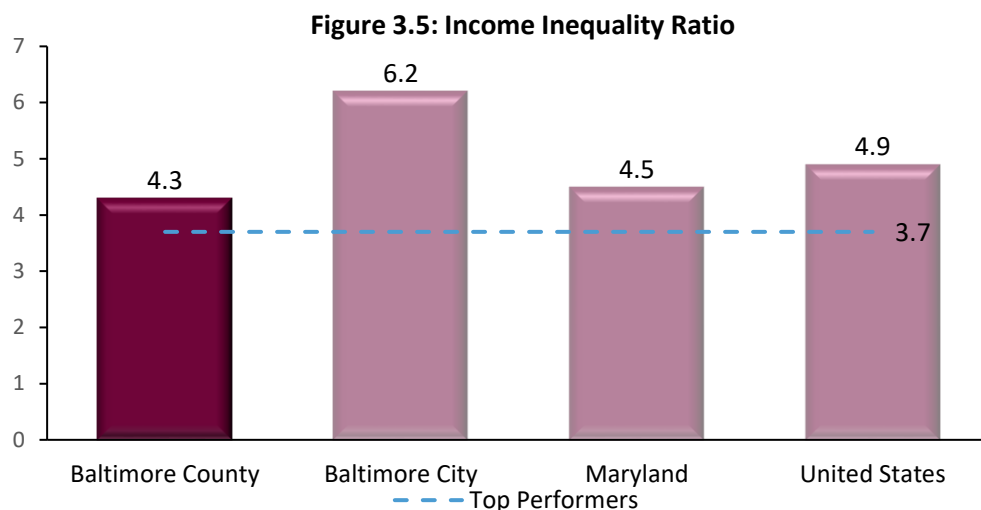
Source: National Equity Atlas 2020

Residential segregation is measured by the index of dissimilarity, a demographic measure ranging from 0 to 100 that represents how evenly two demographic groups are distributed across a county's census tracts. Lower scores represent a higher level of integration. Baltimore County has a lower level of segregation between Black and white residents than Baltimore City, Maryland and the U.S. overall, as seen in Figure 3.4.



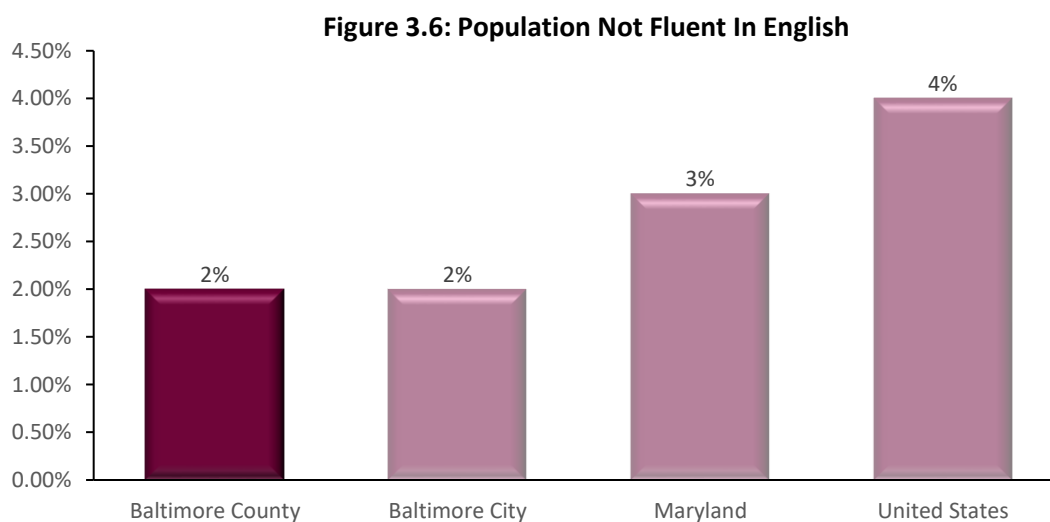
Source: Robert Wood Johnson County Health Rankings 2023

Income inequality is measured as the ratio of household income at the 80<sup>th</sup> percentile to household income at the 20<sup>th</sup> percentile. Communities with greater income inequality may have worse outcomes on a variety of metrics, including mortality, poor health, sense of community, and social support. As seen in Figure 3.5, Baltimore County's income inequality ratio is much lower than Baltimore City's, and lower than the state of Maryland and the U.S.



Source: Robert Wood Johnson County Health Rankings 2023

People with limited English proficiency (LEP) may face challenges accessing care and resources that fluent English speakers do not. Language barriers may make it hard to access transportation, medical, and social services as well as limit opportunities for education and employment. Importantly, LEP community members may not understand critical public health and safety notifications, such as safety-focused communications during the COVID-19 pandemic. In 2022, just 2% of Baltimore County residents reported speaking English less than “very well.” This is comparable to the rate of Baltimore City, but lower than the rates in Maryland and the U.S., as seen in Figure 3.6.



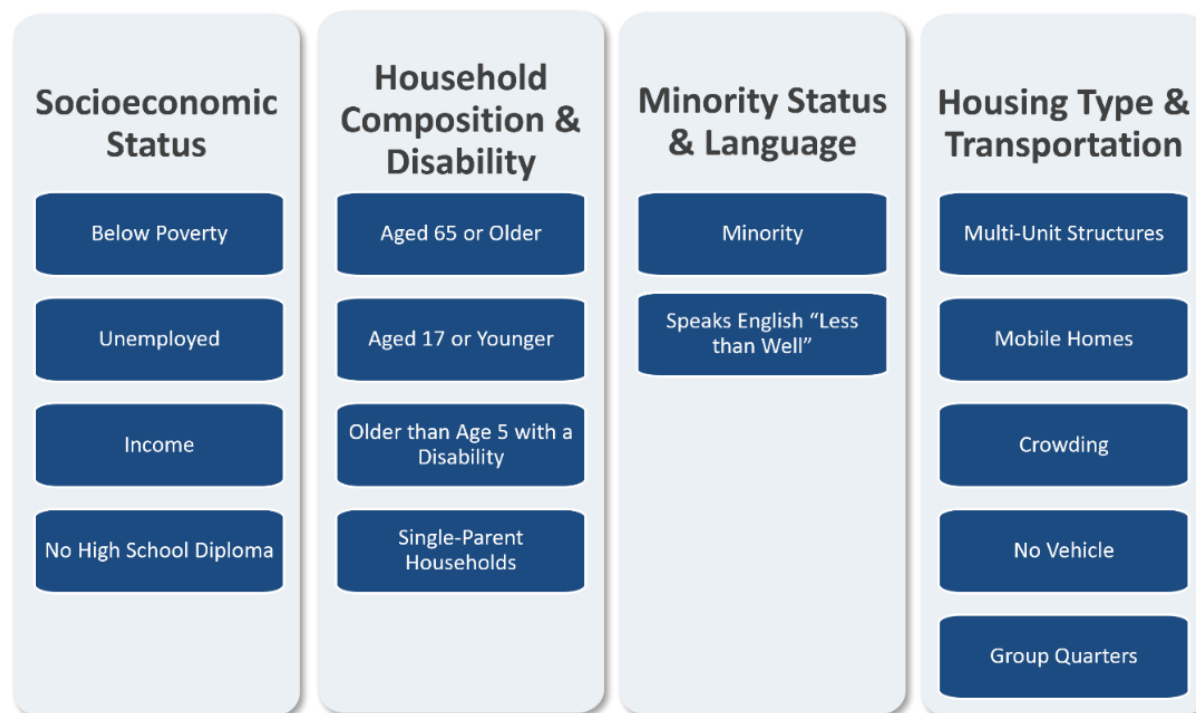
Source: American Community Survey 5-year estimates (2017-2022)

## Social Vulnerability Index

One resource that can help show variation and disparities between geographic areas is the Social Vulnerability Index (SVI), which was developed by the CDC and the Agency for Toxic Substances and Disease Registry (ATSDR). Social vulnerability refers to negative effects communities may experience due to external stresses that impact human health, like natural or human-caused disasters, or disease outbreaks. Socially vulnerable populations are at especially high risk during public health emergencies.

The SVI uses 16 U.S. Census variables to help local officials identify communities that may need support before, during, or after a public health emergency.<sup>8</sup> Communities with a higher SVI score are generally at a higher risk for poor health outcomes. Instead of relying on public health data alone, the SVI accounts for underlying economic and structural conditions that affect overall health, including SDoH. SVI scores are calculated at the census tract level and based on U.S. Census variables across four related themes: socioeconomic status, household characteristics, racial and ethnic minority status, and housing type/transportation. Figure 3.7 outlines the variables used to calculate SVI scores.

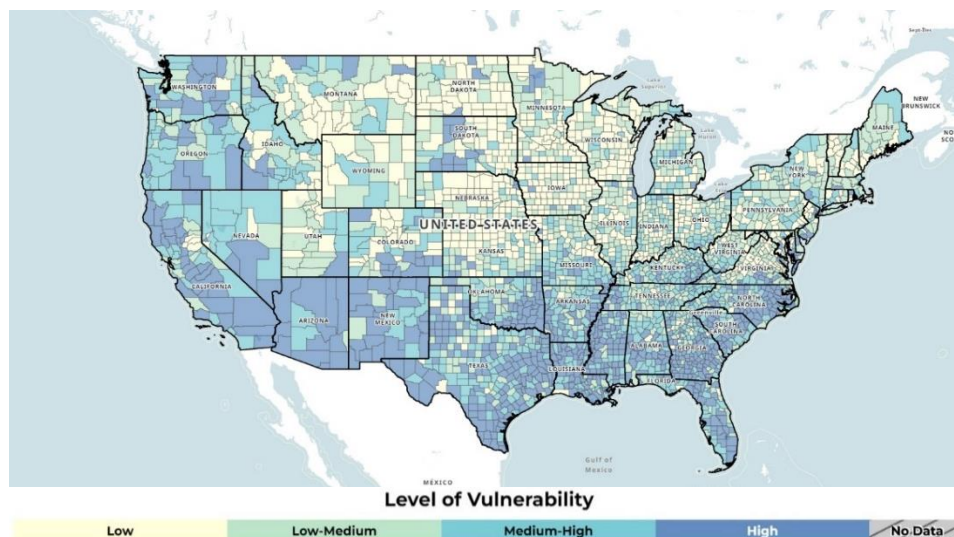
**Figure 3.7: Social Vulnerability Index Variables**



<sup>8</sup> Tsai, et al (2022). CDC/ATSDR Social Vulnerability Index (SVI). Retrieved from <https://www.atsdr.cdc.gov/placeandhealth/svi/index.html>.

The United States SVI by county is shown in Figure 3.8 below. As shown, a lot of variation exists across the country, and even within individual states.

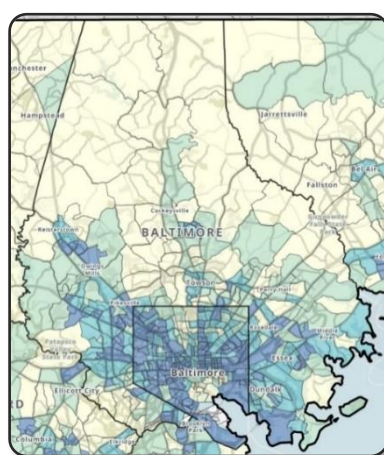
**Figure 3.8: Social Vulnerability Index by County, 2020**



Source: CDC/ATSDR Social Vulnerability Index (SVI) 2020 SVI by County; accessed at [https://www.atsdr.cdc.gov/placeandhealth/svi/interactive\\_map.html](https://www.atsdr.cdc.gov/placeandhealth/svi/interactive_map.html).

The 2020 SVI scores for Baltimore County and Baltimore City are shown in Figure 3.9 below. Possible scores range from 0 (lowest vulnerability) to 1 (highest vulnerability), and these scores show a relative comparison with other counties and census tracts in Maryland. Given this, the vulnerability of Baltimore County overall is fairly high compared to the state, with an SVI score of 0.70. However, specific regions within the county, particularly those closest to the city border, demonstrate higher vulnerability.

**Figure 3.9: Baltimore County Social Vulnerability Index, 2020**



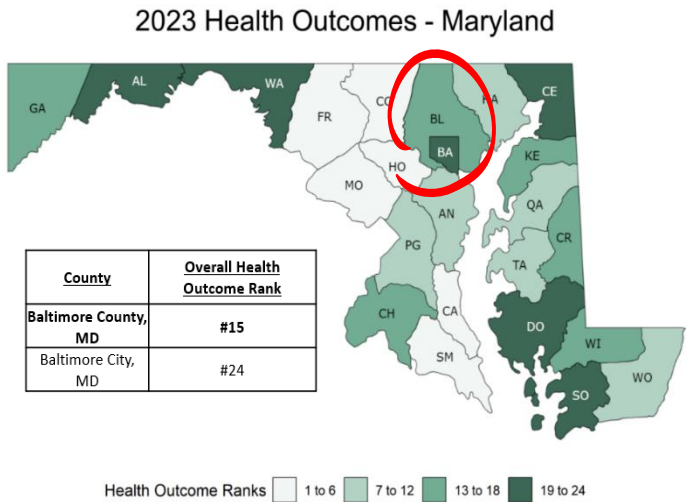
| Area             | State | U.S. |
|------------------|-------|------|
| Baltimore County | 0.70  | 0.52 |
| Baltimore City   | 0.91  | 0.87 |

Source: CDC/ATSDR Social Vulnerability Index (SVI) 2020 SVI by County; accessed at [https://www.atsdr.cdc.gov/placeandhealth/svi/interactive\\_map.html](https://www.atsdr.cdc.gov/placeandhealth/svi/interactive_map.html).

Health Outcome and Health Factor Rankings

The Steering Committee also reviewed and analyzed data from the Robert Wood Johnson Foundation and the University of Wisconsin County Health Rankings for the year 2023. Out of 24 reported counties in Maryland for health outcomes, Baltimore County ranks 15<sup>th</sup> overall, as seen in Figure 3.10 below. This includes ranking 13<sup>th</sup> among 24 reported counties on Length of Life, and 16<sup>th</sup> overall for Quality of Life. These categories are discussed further in Appendices 2 through 4.

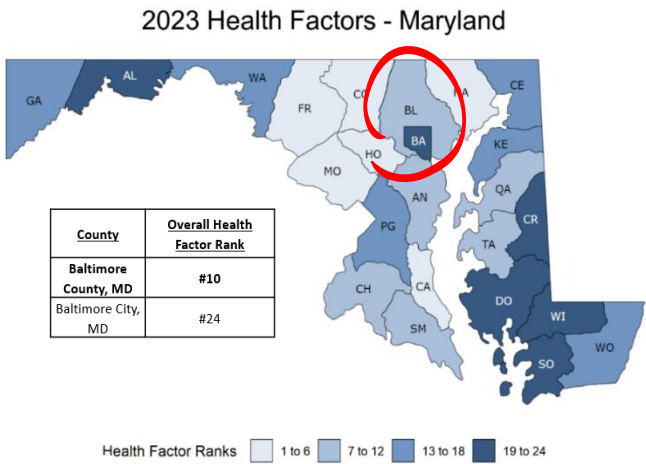
Figure 3.10



Source: Robert Wood Johnson Foundation, 2023 County Health Rankings.

Lastly, out of 24 reported counties in Maryland for health factors, Baltimore County ranks 10<sup>th</sup> overall as seen in Figure 3.11.

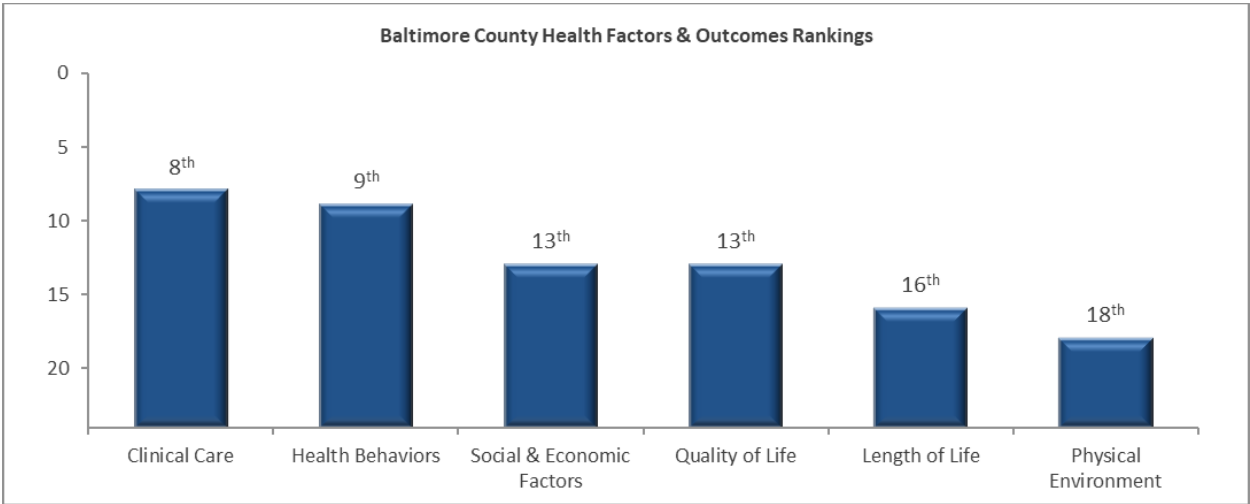
Figure 3.11



Source: Robert Wood Johnson Foundation, 2023 County Health Rankings.

Figure 3.12 shows that Baltimore County ranks 8<sup>th</sup> among 24 reported Maryland counties for Clinical Care, 9<sup>th</sup> for Health Behaviors, and 13<sup>th</sup> for Social & Economic factors. Baltimore County also ranked 18<sup>th</sup> for Physical Environment. These categories are also discussed further in Appendices 2 through 4.

**Figure 3.12: Baltimore County Health Factors and Outcomes**



Source: Robert Wood Johnson Foundation, 2023 County Health Rankings.

## CHAPTER 3 | PRIORITY NEED AREAS

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This chapter describes each of the three priority areas in more detail and discusses the data that supports each priority. The information in this section includes context and national perspective, secondary data findings, and primary data findings (including key leader survey, community member survey, and focus groups).

As mentioned previously, these priority needs areas are not listed in any hierarchical order of importance and all will be addressed by the Steering Committee in health improvement plans guided by this CHNA. As noted in Chapter 1, the Steering Committee considered the following factors when determining the priority needs reported in this assessment:

- Size and scope of the health need;
- Severity and intensity of the health need;
- Estimated feasibility and effectiveness of possible interventions;
- Health disparities associated with the need; and
- Importance the community places on addressing the need.

### Priority Need: Behavioral Health

#### Context and National Perspective

The definition of behavioral health often describes conditions related to both mental health and substance use.<sup>9</sup> After evaluating data from a variety of sources including surveys and focus groups conducted throughout the assessment process, the Steering Committee identified behavioral health, including both mental health and substance use, to be an area of urgent need within Baltimore County.

Mental illnesses are common in the United States: in 2021, an estimated 57.8 million U.S. adults – nearly one in five – were living with a mental illness.<sup>10</sup> Four years following the onset of the COVID-19 pandemic, concerns about mental health and substance use remain high nationwide. The pandemic impacted public mental health and well-being in many ways. Community members continue to grapple with the pandemic-related effects of isolation and loneliness, financial instability, long-term health impacts and grief. In addition, both drug overdose and suicide deaths have sharply increased over the past several years – often disproportionately impacting younger people and communities of color.<sup>11</sup>

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<sup>9</sup> Source: American Medical Association (2022). *What is behavioral health?* Retrieved September 13<sup>th</sup>, 2023, from <https://www.ama-assn.org/delivering-care/public-health/what-behavioral-health>.

<sup>10</sup> Source: National Institute of Mental Health (2023). *Mental Illness*. Retrieved September 13<sup>th</sup>, 2023, from <https://www.nimh.nih.gov/health/statistics/mental-illness>.

<sup>11</sup> Source: Panchal, N., Saunders H., Rudowitz, R. and Cox, C. (2023). The Implications of COVID-19 for Mental Health and Substance Use. *Kaiser Family Foundation*. Retrieved from <https://www.kff.org/mental-health/issue-brief/the-implications-of-covid-19-for-mental-health-and-substance-use>.

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Access to services that address mental health and substance use is an ongoing challenge across the U.S. According to the Substance Abuse and Mental Health Services Administration (SAMHSA), in 2021, less than half (47.2%) of U.S. adults who reported having a mental illness utilized any type of mental health services, including inpatient, outpatient or telehealth services or prescription drug therapies.<sup>12</sup> Demand for mental health services, particularly anxiety and depression treatment, remains high across the nation, while the prevalence of stress- and trauma-related disorders, along with substance use disorders, continues to grow. The American Psychological Association reports that the percentage of psychologists in the U.S. seeing more patients than they did before the pandemic increased from 15% in 2020 to 38% in 2021 to 43% in 2022. Further, 60% of psychologists reported having no openings for new patients and 38% maintained a waitlist for their services.<sup>13</sup>

Substance use disorders (SUDs) are one of the fastest rising categories of behavioral health disorders. According to the American Psychiatric Association, SUDs are a complex condition in which there is uncontrolled use of a substance, despite harmful consequences.<sup>14</sup> SUDs often occur in conjunction with other mental illness. In 2022, 17 million (48.8%) young adults aged 18-25 reported having either a SUD or Acute Mental Illness (AMI) in the past year.<sup>15</sup> In that same year, 17.3% (48.7 million) of all U.S. adults were reported as having an SUD.<sup>15</sup> These trends have been increasing in recent years. According to the National Center for Drug Abuse Statistics, in 2018 (3.7%) of all adults aged 18 and older (9.2 million) had both an AMI and at least one SUD.<sup>16</sup> By 2021, this had increased to 13.5% of U.S. adults, with the highest incidence among Multiracial adults.

### Secondary Data Findings

Secondary data collected through the CHNA process identified behavioral health as an area of particular concern for residents of Baltimore County. In 2021, 20.7% of Baltimore County residents self-reported that a health professional has told them that they have a depressive disorder, higher than both the state of Maryland (16.6%) and the US (20.5%).<sup>17</sup> Multiple mental health indicators in Baltimore County were higher than the state and national averages, with 15% of the population experiencing frequent mental distress (compared to 13% for the state and 14% nationally), and residents reporting an average of 4.5 poor mental health days per month (4.1 for state and 4.4 for national respectively). Drug overdoses in Baltimore County accounted for 51 deaths per 100,000 individuals, higher than the state rate (41 deaths

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<sup>12</sup> Source: SAMHSA (2023). *Highlights from the 2021 National Survey on Drug Use and Health*. Retrieved September 13<sup>th</sup>, 2023, from <https://www.samhsa.gov/data/sites/default/files/2022-12/2021NSDUHFRHighlights092722.pdf>.

<sup>13</sup> Source: American Psychological Association (2022). *2022 COVID-19 Practitioner Impact Survey*. Retrieved September 13<sup>th</sup>, 2023, from <https://www.apa.org/pubs/reports/practitioner/2022-covid-psychologist-workload.pdf>.

<sup>14</sup> Source: American Psychiatric Association (2024). *Addiction and Substance Use Disorders*. Retrieved January 16, 2024, from <https://www.psychiatry.org/patients-families/addiction-substance-use-disorders>.

<sup>15</sup> Source: SAMHSA (2023). *Highlights from the 2022 National Survey on Drug Use and Health*. Retrieved January 16<sup>th</sup>, 2023, from <https://www.samhsa.gov/data/sites/default/files/reports/rpt42731/2022-nsduh-main-highlights.pdf>.

<sup>16</sup> Source: National Center for Drug Abuse Statistics (2023). *Drug Abuse Statistics*. Retrieved January 8<sup>th</sup>, 2024, from <https://drugabusestatistics.org/>.

<sup>17</sup> Source: CDC (2022). *Behavioral Risk Factor Surveillance System*. Retrieved January 9<sup>th</sup>, 2024, from [https://data.cdc.gov/Behavioral-Risk-Factors/Behavioral-Risk-Factor-Surveillance-System-BRFSS-P/dttw-Syxu/data\\_preview](https://data.cdc.gov/Behavioral-Risk-Factors/Behavioral-Risk-Factor-Surveillance-System-BRFSS-P/dttw-Syxu/data_preview)

per 100,000), and more than double the national rate (23 deaths per 100,000). Excessive drinking among adults was lower than the national rate, (17% vs. 19% respectively), but higher than the rate in Maryland (15%).

| Table 4.1: Behavioral Health Indicators                     |                  |                |          |               |
|-------------------------------------------------------------|------------------|----------------|----------|---------------|
| Indicator                                                   | Baltimore County | Baltimore City | Maryland | United States |
| Drug Overdose Deaths per 100,000                            | 51               | 124            | 41       | 23            |
| Percent of Population Experiencing Frequent Mental Distress | 15%*             | 16%            | 13%      | 14%           |
| Number of Poor Mental Health Days in the Past Month         | 4.5*             | 5.4            | 4.1      | 4.4           |
| Percent of Adults Reporting Excessive Drinking              | 17%              | 18%            | 15%      | 19%           |

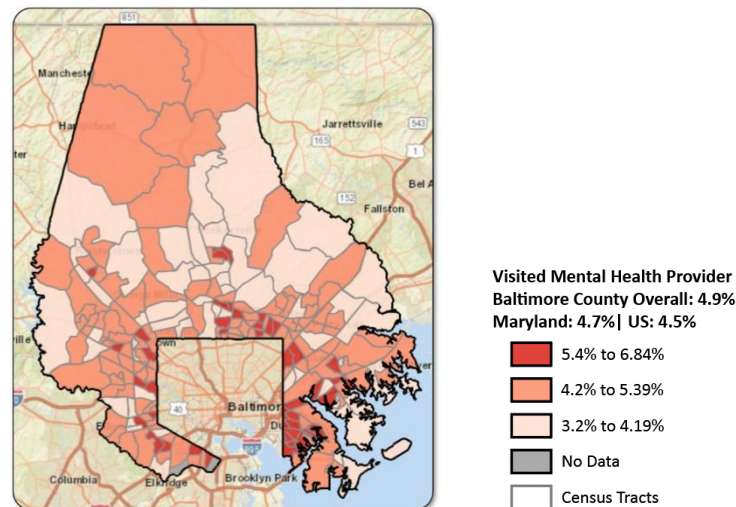
Source: Robert Wood Johnson Foundation, County Health Rankings 2023

\*Indicates areas of high need

When compared to the previous CHNA, which was conducted in 2020, each of these statistics have increased. The population experiencing frequent mental distress increased from 12% in 2020 to 15% in 2023. The average monthly number of poor mental health days reported by residents increased as well, from 3.8 to 4.5 days. In 2023, 4.9% of residents in Baltimore County reported visiting a mental health provider, slightly higher than the state average of 4.7%, and the national average of 4.5%.

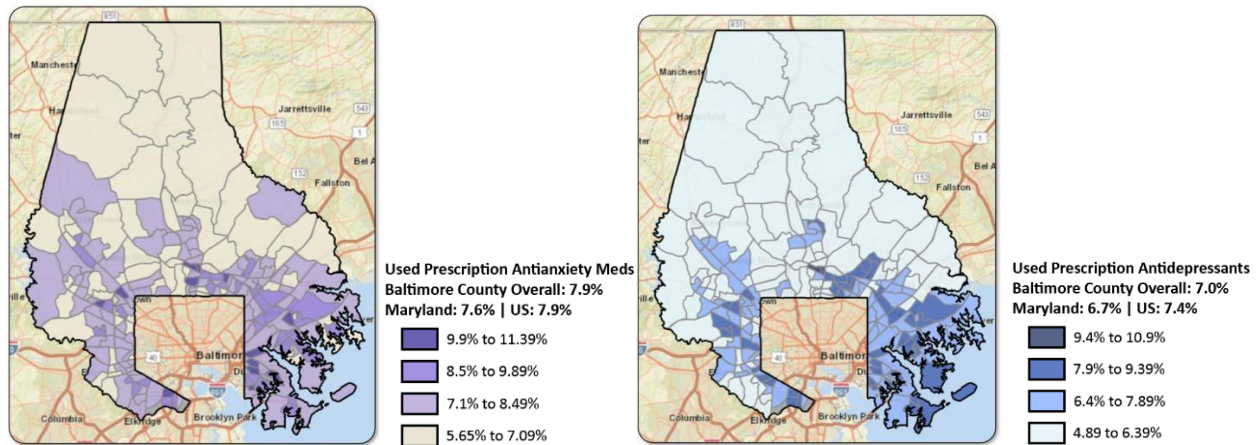
Figure 4.1 shows that, in 2021, there were more visits to mental health providers concentrated towards the city border, with fewer visits occurring in the outlying regions of the county.

**Figure 4.1: Percentage of Population who Visited a Mental Health Provider, 2021**



In 2021, 7.0% of Baltimore County residents used prescription antidepressants, which was slightly higher than the state average of 6.7%, and lower than the national average of 7.4%. There is a similar geographic trend in the usage of antidepressants and anti-anxiety medication as there is in mental health visits. As Figure 4.2 shows, the highest concentrations of medication usage were in neighborhoods adjacent to the border with the City of Baltimore, especially the southeastern region closest to Chesapeake Bay.

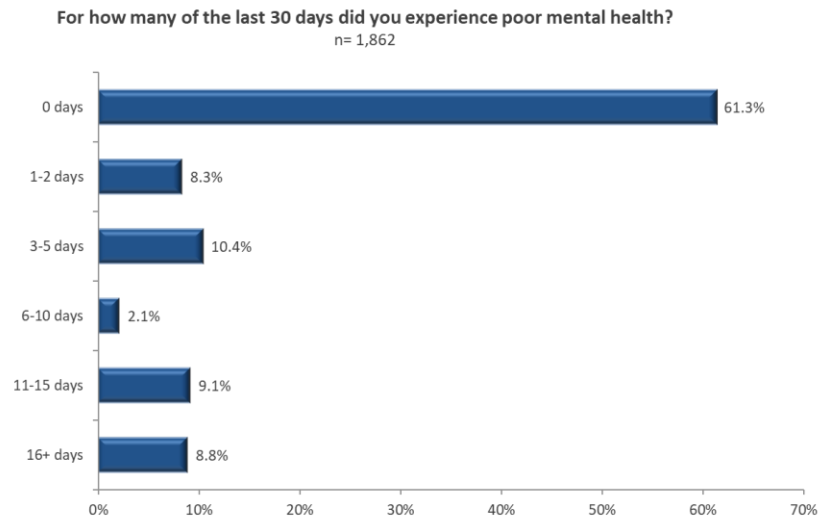
**Figure 4.2: Percentage of Population who Used Prescription Antidepressants or Anti-Anxiety Medications, 2021**



#### Primary Data Findings – Community Member Survey

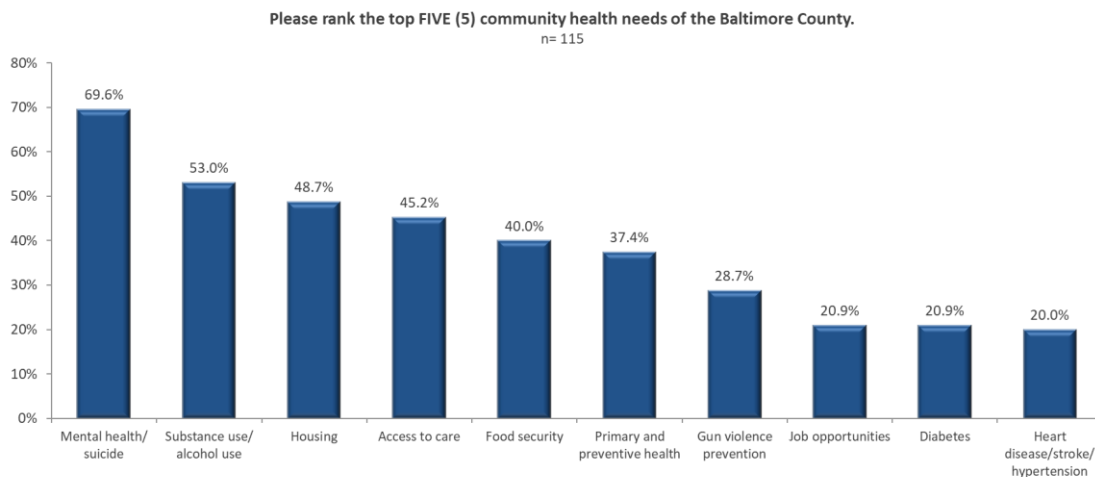
More than 2,000 people who live, work or receive healthcare in Baltimore County responded to the community member survey. When asked to identify the top five community health needs in Baltimore County, mental health was identified as a top concern by 57.4% of respondents, and 41.6% identified alcohol and drug addiction.

As seen in Figure 4.3, responses related to individual mental health concerns were largely positive, with 61.3% of respondents reporting that they had not experienced any poor mental health days the prior 30-day period. Nearly one-quarter of respondents reported that they had experienced 10 or fewer poor mental health days in the previous month (21%), while 18% reported having poor mental health on 11 days or more. While most Baltimore County residents reported fewer poor mental health days than the state average (4.1 days per month), a significant proportion of residents (18%) spent more than one-third of the month experiencing mental health concerns.

**Figure 4.3**

### Primary Data Findings – Key Leader Survey

Key leaders surveyed during the CHNA process identified mental health/suicide and substance or alcohol use as the top two health issues impacting residents of Baltimore County. Among 115 key leaders from various organizations who responded to the survey, 69.6% identified mental health and suicide as a top community health need in Baltimore County. Substance and alcohol use ranked second in the survey and was identified as a top concern by 53% of respondents. Multiple community resources to address behavioral and mental health were identified in this survey as being both helpful to address these concerns and insufficient to meet existing levels of community need. Key leaders described a need for more comprehensive resources or easier access to existing resources. Respondents were also asked to identify the five most significant social needs in the community they serve, and the need for expanded substance and alcohol use treatment was selected by 41% of respondents.

**Figure 4.4**

A lack of resources to address behavioral health was also noted when respondents were asked to indicate how strongly they agreed or disagreed with statements about different types of providers in the community. The majority (60%) of key leaders disagreed when asked to evaluate the statement “there are enough substance abuse treatment providers.” When looking at health and social needs as a whole, key leaders noted mental health and substance use issues as particularly prevalent in the southeastern and southwestern portions of the County. This aligns with the geographic trends previously described in the secondary data findings, which show concentrations in utilization of mental health providers and prescription medication usage in those areas as well.

#### Primary Data Findings – Focus Groups

Thirteen focus groups were conducted during the CHNA process, with more than 90 community members and other stakeholders providing input on a variety of health and social concerns. Five of these focus groups identified mental health as being a top health concern in Baltimore County, and three identified substance use disorders as a major concern as well. However, the most significant concerns identified by the focus groups focused more heavily on social and environmental concerns, such as food insecurity, overall access to healthcare, and transportation to appointments and health services.

Focus group participants were given the opportunity to share their personal experiences surrounding mental health and substance use. For example, one focus group featured clients at a clinic that serves individuals experiencing homelessness and participants provided some commentary on their experiences with providers in their community. One participant shared a situation where they told their provider they did not want a certain medication due to the risk of addiction or dependence, but it was prescribed to them anyway. This comment led to other focus group members to speak out in agreement, and voice their wish for providers to develop a greater level of trust with their patients to better understand their concerns – particularly as it relates to behavioral health.

Another focus group featured participants living with various behavioral health conditions. Participants expressed concerns about a lack of awareness of the connection between substance use, mental health, and childhood trauma. Participants noted that, often, individuals are unable or unwilling to recognize the impact of their own past traumas, and that there is a lack of reliable mental health providers or social workers available in the community to help address their trauma and find reliable pathways for accessing help.

#### **Priority Need: Physical Health**

##### Context and National Perspective

Physical health is the monitoring and maintenance of the human body. There are many factors involved in an individual’s overall physical health status, such as disease prevention, timely access to primary and preventive healthcare, exercise, and maintaining a healthy diet. Physical health can also involve the management of chronic health conditions. As society has changed and people live longer, chronic health conditions have become more common than communicable diseases like typhoid and cholera. As defined by the World Health Organization (WHO), chronic diseases are those with a long duration, that are

influenced by a combination of genetic, environmental, psychological, or behavioral factors.<sup>18</sup> Chronic health conditions are extremely common in the United States, with 6 in 10 Americans living with at least one chronic disease, such as diabetes, obesity, cancer, hypertension, or heart disease.<sup>19</sup>

Chronic diseases are the leading cause of death and disability in the United States.<sup>18</sup> According to the WHO, chronic health conditions kill 41 million people globally each year and are responsible for 7 in 10 deaths in the U.S. annually.<sup>18</sup> The number of individuals living with a chronic health condition is expected to increase as the U.S. population continues to age. The population over the age of 50 is expected to increase by 61% to 221.1 million people by 2050.<sup>20</sup> Among those 221 million, nearly two-thirds (142.7 million people) are expected to have at least one chronic health condition, with approximately 15 million people living with multiple chronic health conditions.<sup>20</sup>

Cancer is a group of diseases characterized by the uncontrolled growth and spread of abnormal cells that can result in death if not treated. While the risk of dying from cancer has declined significantly over the past 30 years, it remains the second most common cause of death in the U.S. Incidence of new cancer cases has continued to rise, with 2 million new cases expected to be identified in 2024.<sup>21</sup> This trend is largely affected by the aging and growth of the population and by a rise in diagnoses of 6 of the 10 most common cancers—breast, prostate, endometrial, pancreatic, kidney, and melanoma. Some research has attributed this rise to the impact of the obesity epidemic.<sup>21</sup> Cigarette smoking is another significant risk factor for cancer, and is responsible for about 20% of all cancers and 30% of cancer deaths in the U.S. each year.<sup>22</sup>

The WHO defines overweight and obesity as abnormal or excessive fat accumulation that presents risks to a person's health.<sup>18</sup> Obesity is one of the fastest rising chronic conditions in the United States. According to the CDC, the U.S. obesity prevalence rate between 2017-2020 was 41.9%, which represents a significant increase from 30.5% in 2000.<sup>23</sup> Obesity is often a factor in other chronic health conditions, such as stroke, diabetes, heart disease, and in some types of cancer.

The CDC recommends four ways to prevent chronic conditions and maintain good physical health. Recommended healthy behaviors include stopping or refraining from smoking, eating low-fat whole food diets, exercising moderately for at least 150 minutes a week, and limiting or refraining from consuming

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<sup>18</sup> Source: World Health Organization (WHO) (2023). *Noncommunicable diseases*. Retrieved January 23<sup>rd</sup>, 2024, from: <https://www.who.int/news-room/fact-sheets/detail/noncommunicable-diseases>.

<sup>19</sup> Source: CDC (2024). *National Center for Chronic Disease Prevention and Health Promotion*. Retrieved January 23, 2024, from: <https://www.cdc.gov/chronicdisease/index.htm>.

<sup>20</sup> Source: Ansah, J.P. & Chiu, T.C., (2022). Projecting the chronic disease burden among the adult population in the United States using a multi-state population model. *Frontiers in Public Health*. Retrieved January 23, 2024, from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9881650/>.

<sup>21</sup> Source: American Cancer Society (ACS) (2024). *ACS Fast & Figures 2024*. Retrieved January 24<sup>th</sup>, 2024, from <https://www.cancer.org/research/acs-research-news/facts-and-figures-2024.html>.

<sup>22</sup> ACS (2020). *Health Risks of Smoking Tobacco*. Retrieved March 7<sup>th</sup>, 2024 from <https://www.cancer.org/cancer/risk-prevention/tobacco/health-risks-of-tobacco/health-risks-of-smoking-tobacco.html>

<sup>23</sup> Source: CDC (2022). *Adult Obesity Facts*. Retrieved January 23<sup>rd</sup>, 2024, from <https://www.cdc.gov/obesity/data/adult.html>.

alcohol.<sup>24</sup> Annual physicals with a primary care provider are also necessary to help prevent or treat chronic health conditions. Yearly screenings can allow providers to identify any warning signs for developing conditions and enable patients to correct or develop healthy behaviors to avoid developing a physical health condition. A CDC study noted that one-third of visits to health centers in 2020 were for preventive care.<sup>25</sup> For those living with chronic conditions, the CDC recommends some general steps people can take to manage their diseases. These include taking medications as prescribed by a provider, self-monitoring symptoms as needed (such as conducting home blood sugar checks), and regularly seeing a provider for check-ups.

### Secondary Data Findings

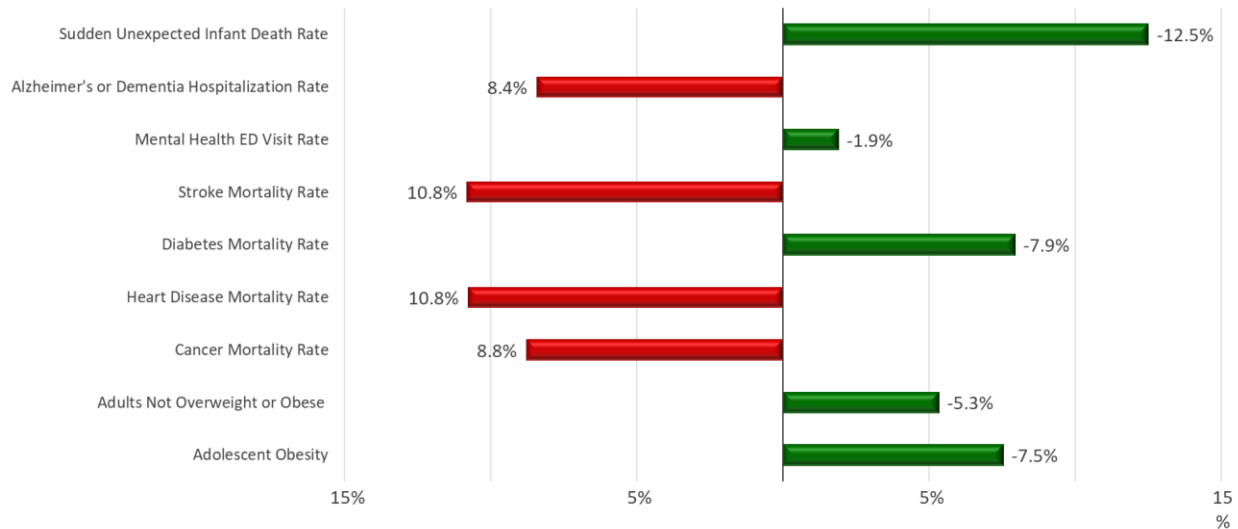
Baltimore County performed worse than the state of Maryland in nearly all physical health indicators, as shown in Table 4.2. This includes a higher percentage of residents experiencing frequent physical distress, or self-reporting poor or fair health status. Baltimore County also had slightly higher prevalence of diabetes and obesity among adults when compared to the state.

| Table 4.2: Physical Health Indicators                            |                  |                |          |               |
|------------------------------------------------------------------|------------------|----------------|----------|---------------|
| Indicator                                                        | Baltimore County | Baltimore City | Maryland | United States |
| Percentage of Population Experiencing Frequent Physical Distress | 8%               | 10%            | 7%       | 9%            |
| Number of Poor Physical Health Days in the Last 30 Days          | 2.5              | 3.3            | 2.5      | 3             |
| Percentage of Population Reporting Poor or Fair Health           | 12%              | 17%            | 11%      | 12%           |
| Percent of Population Reporting Insufficient Sleep               | 34%              | 40%            | 34%      | 33%           |
| Adult Diabetes Prevalence                                        | 9%               | 13%            | 9%       | 9%            |
| Adult Obesity Prevalence                                         | 32%              | 37%            | 31%      | 32%           |

When compared to the state overall, Baltimore County had measurably worse rates of hospitalization for Alzheimer’s disease or other dementias, as well as higher rates of mortality due to stroke, heart disease and cancer.

<sup>24</sup> Source: CDC (2023). *Top 4 tips to Prevent Chronic Diseases*. Retrieved January 31, 2024, from: <https://www.cdc.gov/chronicdisease/about/top-four-tips/index.htm>.

<sup>25</sup> CDC (2022). *Characteristics of visits to health centers: United States, 2020*. Retrieved January 31, 2024, from <https://www.cdc.gov/nchs/products/databriefs/db438.htm>.

**Figure 4.5: Physical Health Indicators: Variance from State**

Baltimore County also underperformed relative to the state in a number of health behaviors that have an impact on physical health. Baltimore County residents had higher rates of physical inactivity and smoking – both of which have been shown to increase the risk of various chronic health conditions. Despite having a higher rate of physical inactivity than the state, Baltimore County does have a higher proportion of its population with access to exercise opportunities. Food insecurity was also a concern for Baltimore County residents, which is notable due to the impact diet has on overall physical health.

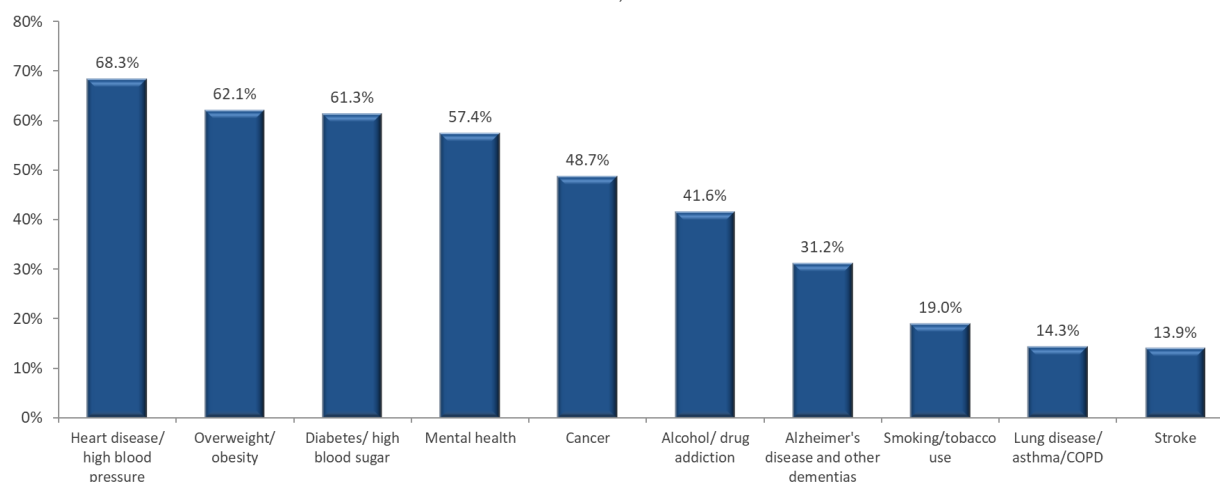
| Table 4.3: Health Behavior and Food Security Indicators     |                  |                |          |               |
|-------------------------------------------------------------|------------------|----------------|----------|---------------|
| Indicator                                                   | Baltimore County | Baltimore City | Maryland | United States |
| Percent of Physically Inactive Adults                       | 22%              | 25%            | 21%      | 22%           |
| Percent of Adult Smokers                                    | 14%              | 19%            | 11%      | 16%           |
| Food Environment Index                                      | 8.3              | 7.5            | 8.7      | 7             |
| Percent of Population with Access to Exercise Opportunities | 97%              | 99%            | 92%      | 84%           |
| Percent of Population Experiencing Food Insecurity          | 10%              | 16%            | 9%       | 12%           |
| Percent with Limited Access to Healthy Foods                | 4%               | 2%             | 4%       | 6%            |
| Percent of Children Eligible for Free or Reduced Lunch      | 52%              | 66%            | 45%      | 53%           |

### Primary Data Findings – Community Member Survey

Community members who responded to the survey identified various conditions related to physical health among the top community health needs in Baltimore County. Heart disease and high blood pressure were identified as the top community health need overall, having been selected by 68.3% of respondents. Overweight and obesity was identified as the second highest need by 62.1% of respondents, while diabetes and high blood sugar ranked third (61.3%). Other physical health conditions were also ranked among the top ten community health needs, including cancer (48.7%), Alzheimer's disease and other dementias (31.2%), lung conditions (14.3%) and stroke (13.9%). In addition, nearly one in five respondents identified smoking or tobacco use as a primary concern, which is of note due to the significant health impacts that can result from tobacco exposure.

**Figure 4.6**

Please select the top FIVE (5) community health needs of Baltimore County.  
n= 1,914



### Primary Data Findings – Key Leader Survey

Among respondents to the key leader survey, approximately 21% identified diabetes and 20% identified heart disease, stroke, or hypertension among the most pressing health needs in Baltimore County. The need for primary and preventive healthcare, which helps promote physical health and well-being, was identified as a top need by 37.4% of respondents. In addition, more than half of Baltimore County key leaders (56%) indicated that there were not enough indoor places to get physical activity, one-third felt there were not enough outdoor places to get physical activity (30%) and 56% felt that children did not have enough opportunities to play and socialize outside of school.

### Primary Data Findings – Focus Groups

Participants in the focus groups came from a wide variety of backgrounds, ranging from military veterans to those involved with a local YCMA, independent seniors, and those living with various physical health conditions. When asked to identify the most serious health issues impacting their community, participants

described an array of physical health conditions, including diabetes (type 1 and type 2), hypertension, obesity, cancer, and dehydration.

Access to healthy food was noted as a contributing factor that directly impacts many of these health concerns. Multiple focus groups described a lack of access to grocery stores as well as a lack of healthy, convenient food options within walking distance of their homes or workplaces. One focus group featuring military veterans noted that subscription healthy meal services were a helpful option, however the cost may not be accessible to those with lower incomes. This group also noted a lack of access to fresh food in the winter, and that less healthy canned food was more commonly eaten. Participants in a focus group featuring clients at a clinic that provides services to individuals experiencing homelessness also expressed that it can be difficult to carry multiple or large items on public transportation. This presents a challenge for some to be able to transport healthy groceries home, especially those who are elderly or have mobility challenges.

Focus group participants also described other challenges that impact the physical health of the community. Participants living with type 2 diabetes, in particular, cited a need for safe outdoor spaces where they can exercise without having to pay for a gym membership. These community members also expressed a need for providers to better educate their patients on preventive screenings and healthy behaviors, to help patients understand how to prevent certain chronic health conditions. This group felt that not enough attention was given to preventive health education, and that providers are often more focused on treating acute conditions.

### **Priority Need: Access to Care**

#### Context and National Perspective

Access to care means patients are able to get high quality, affordable healthcare in a timely fashion to achieve the best possible health outcomes. It includes several components, including coverage (i.e. insurance), a physical location where care is provided, the ability to receive timely care, and enough providers in the workforce. The CHNA Steering Committee identified access to care as a high priority need for residents of Baltimore County

From a national perspective, according to Healthy People 2030, approximately one in ten people in the U.S. do not have health insurance, which means they are less likely to have a primary care provider or to be able to afford the services or medications they need.<sup>26</sup> Access is a challenge even for those who are insured.<sup>27</sup>

The availability and distribution of health providers in the U.S. contributes to healthcare access challenges. According to the Association of American Medical Colleges (AAMC), there is estimated to be a shortage

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<sup>26</sup> Source: U.S. Department of Health and Human Services Office of Disease Prevention and Health Promotion (2023). *Healthy People 2030: Health Care Access and Quality*. Retrieved September 14<sup>th</sup>, 2023 from <https://health.gov/healthypeople/objectives-and-data/browse-objectives/health-care-access-and-quality>.

<sup>27</sup> Source: Phillips, K.A., Marshall, D.A., Adler, L., Figueroa, J., Haeder, S.F., Hamad, R., Hernandez, I., Moucheraud, C., Nikpay, S. (2023). Ten health policy challenges for the next ten years. *Health Affairs Scholar*. Retrieved from: <https://academic.oup.com/healthaffairsscholar/article/1/1/qxad010/7203673>.

of 37,800 to 124,000 physicians in the U.S. by 2034, which will impact both primary and specialty care.<sup>28</sup> Access issues are anticipated to increase in coming years. Growing shortages of both nurses and doctors are being driven by several factors, including population growth, the aging U.S. population requiring higher levels of care, provider burnout (physical, mental and emotional exhaustion) made worse by the COVID-19 pandemic, and a lack of clinical training programs and faculty – particularly for nurses.<sup>29</sup> The aging of the current physician workforce is also driving anticipated personnel shortages. In Maryland, 35.8% of actively practicing physicians were over the age of 60 in 2020.<sup>30</sup> Access is also impacted by the number of actively practicing physicians overall. In 2020, there were just 7,075 primary care physicians in Maryland, with 23,791 physicians actively practicing overall.<sup>30</sup>

The ability to access healthcare is not evenly distributed across groups in the population. Groups who may have trouble accessing care include the chronically ill and disabled (particularly those with mental health or substance use disorders), low-income or homeless individuals, people located in certain geographical areas (rural areas; tribal communities), members of the LGBTQIA+ community, and certain age groups – particularly the very young or the very old.<sup>31</sup> In addition, individuals with limited English proficiency (LEP) face barriers to accessing care, experience lower quality care and have worse outcomes for health concerns. LEP is known to worsen health disparities and can make challenges related to other SDoH (access to housing, employment, etc.) worse.<sup>32</sup> Both primary and secondary data resources analyzed for this report highlight the need for greater access to health services within Baltimore County.

Access to care and overall community health are affected by SDoH, which have a critical impact on health needs and outcomes. The World Health Organization defines SDoH as the non-medical factors that influence health outcomes. These are the conditions in which people are born, grow, work, live and age, and the wider set of external forces and systems shaping the conditions of daily life. Examples of SDoH that can influence health equity in positive or negative ways include income, education, unemployment/job security, food insecurity, housing, early childhood development, social inclusion or non-discrimination, structural conflict and access to affordable, high-quality healthcare.<sup>33</sup>

As seen in Figure 4.7, the American Hospital Association categorizes SDoH factors into the following domains: food, housing, transportation, health behaviors, violence, education, social support and employment.

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<sup>28</sup> Source: Association of American Medical Colleges (AAMC) (2021). *The complexities of physician supply and demand: Projections from 2019 to 2034*. Retrieved from:

<https://www.aamc.org/media/54681/download?attachment>.

<sup>29</sup> Source: University of Southern California Keck School of Medicine (2023). *A Public Health Crisis: Staffing Shortages in Health Care*. Retrieved September 14<sup>th</sup>, 2023, from <https://mphdegree.usc.edu/blog/staffing-shortages-in-health-care>.

<sup>30</sup> Source: AAMC (2021). *Maryland physician workforce profile*. Retrieved January 24, 2024, from <https://www.aamc.org/media/58211/download>

<sup>31</sup> Source: Joszt, L. (2018). 5 Vulnerable Populations in Healthcare. *American Journal of Managed Care*. Retrieved September 14<sup>th</sup>, 2023 from <https://www.ajmc.com/view/5-vulnerable-populations-in-healthcare>.

<sup>32</sup> Source: Espinoza, J. and Derrington, S. (2021). How Should Clinicians Respond to Language Barriers That Exacerbate Health Inequity? *AMA Journal of Ethics*. Retrieved from: <https://journalofethics.ama-assn.org/article/how-should-clinicians-respond-language-barriers-exacerbate-health-inequity/2021-02>.

<sup>33</sup> Source: WHO (2023). *Social Determinants of Health*. Retrieved September 14<sup>th</sup>, 2023, from [https://www.who.int/health-topics/social-determinants-of-health#tab=tab\\_1](https://www.who.int/health-topics/social-determinants-of-health#tab=tab_1).

**Figure 4.7: Social Determinants of Health**

Source: American Hospital Association

SDoH are not experienced equally by all people and are often linked to one another. The impacts of SDoH on populations are profound, can persist across generations, and often drive health inequities based on race, ethnicity or socioeconomic status. When health systems use their resources to address SDoH among patient populations, it can strengthen the quality of the care they provide while reducing health inequities.<sup>34</sup> Evidence-based SDoH programs that can be adopted by hospitals or health systems that may reduce healthcare costs and improve outcomes include supportive housing for individuals with chronic health conditions, food and nutrition access, patient transportation services, cash payment or income support for individuals with disabilities, and multidisciplinary patient care coordination teams.<sup>35</sup> Research published in JAMA suggests that collecting patient data on social adversity and health-related social needs (HRSN) can not only be used to develop better trust and support for their patients but can also help identify broader social needs in the community.<sup>36</sup>

Throughout the primary and secondary data findings below, various SDoH emerged as areas of priority need that impact Baltimore County residents' ability to live healthy lives or to access medical care. Specifically, based on these findings, key concerns include dynamics related to transportation, food insecurity, housing and homelessness, and neighborhood safety and violence. County health leaders will continue to evaluate their potential to play a role in impacting these domains in the years to come.

<sup>34</sup> Source: American Medical Association (2022). *What are social determinants of health?* Retrieved September 14<sup>th</sup>, 2023, from <https://www.ama-assn.org/delivering-care/health-equity/what-are-social-determinants-health>.

<sup>35</sup> Source: Whitman, A., De Lew, N., Chappel, A., Aysola, V., Zuckerman, R. & Sommers, B. (2022). *Addressing Social Determinants of Health: Examples of Successful Evidence-Based Strategies and Current Federal Efforts*. Retrieved from <https://aspe.hhs.gov/sites/default/files/documents/e2b650cd64cf84aae8ff0fae7474af82/SDOH-Evidence-Review.pdf>.

<sup>36</sup> Chen, A., Gwynn, K. & Schmidt, S. (2023). Addressing health-related social needs in the clinical, community, and policy domains. *JAMA Network*. Retrieved January 31, 2024 from: <https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2804105>.

### Secondary Data Findings

Various factors contribute to healthcare access, not all of which were determined to be of high need for Baltimore County, as detailed in Appendix 4. Relative to the state of Maryland U.S., Baltimore County performs well on a number of access to care metrics, including the ratios of population to primary care physicians, non-physician primary care providers, and mental health providers. However, Baltimore County has a number of large hospitals and health systems located within its borders, so these ratios suggest that many people who reside outside the county travel there to receive care. Access to care may not be equitable across all county populations, particularly those with socioeconomic or transportation-related challenges. The total population ratio per primary physician worsened from 2020 to 2023 in Baltimore County, growing from 990 to 1,100. Baltimore County also had a higher ratio of population to dental providers when compared to the state, suggesting that some residents may have difficulty caring for their oral health.

While Baltimore County performed better than the state of Maryland on preventive health measures such as annual mammograms or flu vaccines for the Medicare population, it performed worse than the state for preventable hospital stays. A high rate of hospital stays for health conditions that are typically treated in an outpatient situation, such as diabetes, suggests that community members are not able to consistently access primary care, which could help them manage their condition without being admitted to the hospital.

| Table 4.4: Access to Care Indicators                           |                  |                |          |               |
|----------------------------------------------------------------|------------------|----------------|----------|---------------|
| Indicator                                                      | Baltimore County | Baltimore City | Maryland | United States |
| Total Population per Primary Care Physician                    | 1,100            | 800            | 1,130    | 1,310         |
| Total Population per non-Physician Primary Care Provider       | 770              | 320            | 770      | 810           |
| Total Population per Dentist                                   | 1,300            | 1,210          | 1,260    | 1,380         |
| Total Population per Mental Health Provider                    | 260              | 170            | 310      | 340           |
| Annual Percentage of Medicare Enrollees Receiving Mammograms   | 41%              | 36%            | 37%      | 37%           |
| Annual Percentage of Medicare Enrollees Receiving Flu Vaccines | 59%              | 51%            | 55%      | 51%           |

As previously described in the Context and National Perspective section above, SDoH have an impact on individual health status, and many SDoH factors can influence a person's ability to access healthcare. A lack of access to reliable transportation or transit is a key barrier that can prevent someone from being able to see their provider, and can influence their ability to thrive in other areas of their life as well (such as getting to school or work). Baltimore County has high proportions of the population commuting long distances to work and driving alone to do so. While not a direct indicator of healthcare access issues, individuals who must travel long distances for work may also need to travel significantly for other essential needs, including medical care. Baltimore County also has higher traffic volume when compared to the

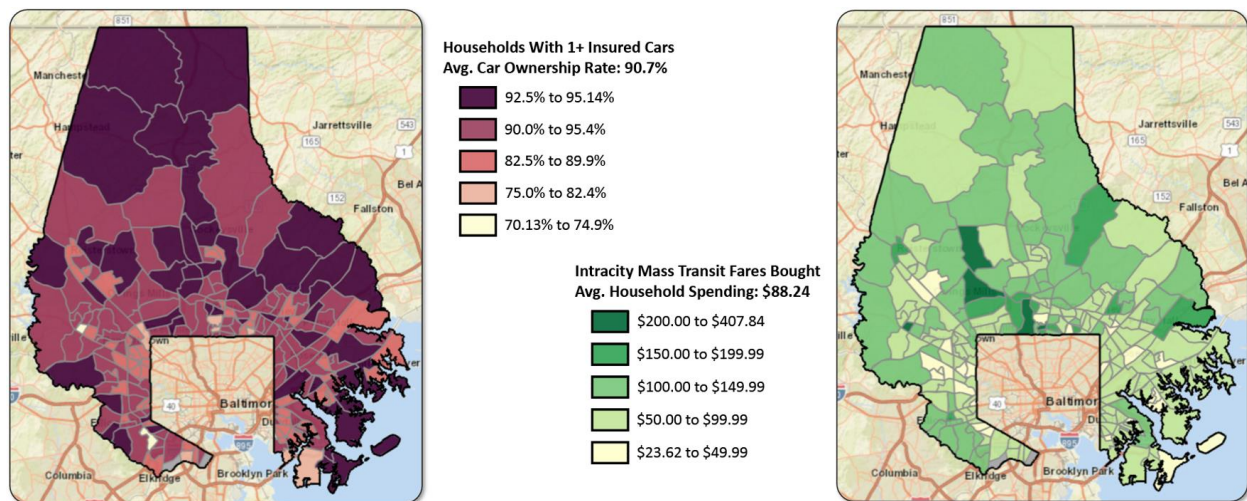
state of Maryland, which has the potential to impact health via air pollution and overall quality of life as well.

**Table 4.5: Social Determinants of Health – Transportation Indicators**

| Indicator                   | Baltimore County | Baltimore City | Maryland | United States |
|-----------------------------|------------------|----------------|----------|---------------|
| Driving Alone to Work       | 75%              | 58%            | 70%      | 73%           |
| Long Commute- Driving Alone | 45%              | 43%            | 50%      | 37%           |
| Traffic Volume              | 835              | 1,443          | 695      | 505           |

Car ownership is not uniform across the county. Households located further from the city border are most likely to own at least one vehicle. As seen in Figure 4.8, low rates of car ownership are correlated with higher spending on mass transit. Baltimore County residents who are reliant on mass transportation to get around may be limited as to where they can seek care based on where bus or other transit lines are available.

**Figure 4.8: Percentage of Car Ownership and Amount of Mass Transit Spending**



Access to healthy food is a key SDoH that directly impacts an individual's health status. One in ten Baltimore County residents is food insecure – higher than the state of Maryland but lower than Baltimore City or the U.S. overall. In addition, just over half of children in Baltimore County are eligible for free or reduced lunch programs. Families with limited resources may find it difficult to provide nutritious meals to their children at home, which could contribute to chronic health conditions later in life.

**Table 4.6: Social Determinants of Health – Food Insecurity Indicators**

| Indicator                                   | Baltimore County | Baltimore City | Maryland | United States |
|---------------------------------------------|------------------|----------------|----------|---------------|
| Food Environment Index                      | 8.3              | 7.5            | 8.7      | 7             |
| Food Insecurity                             | 10%              | 16%            | 9%       | 12%           |
| Limited Access to Healthy Foods             | 4%               | 2%             | 4%       | 6%            |
| Children Eligible for Free or Reduced Lunch | 52%              | 66%            | 45%      | 53%           |

Access to safe, affordable housing is another SDoH that can contribute to overall health status. Individuals who struggle to afford housing may be forced to make difficult choices between paying housing bills or paying for needed medications or health services. While Baltimore County has a higher proportion of affordable housing and a lower proportion of people living with severe housing problems compared to the city or the state, it has a slightly lower proportion of homeowners compared to Maryland overall.

**Table 4.7: Social Determinants of Health – Housing and Homelessness Indicators**

| Indicator                                              | Baltimore County | Baltimore City | Maryland | United States |
|--------------------------------------------------------|------------------|----------------|----------|---------------|
| Percentage of Households with Severe Housing Problems  | 15%              | 21%            | 16%      | 17%           |
| Percentage of Owner-Occupied Housing                   | 66%              | 48%            | 67%      | 65%           |
| Percent of Renters with Severe Housing Cost Burden     | 14%              | 20%            | 14%      | 14%           |
| Percentage of Sold Housing Units Considered Affordable | 64.1%            | 91.9%          | 56.7%    | N/A           |

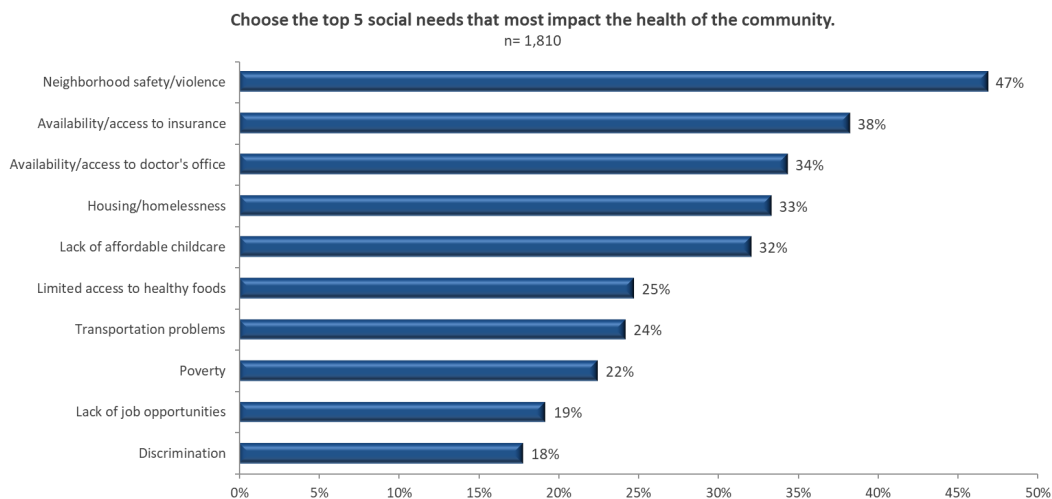
Neighborhood safety and violence is another significant SDoH concern in Baltimore County. All countywide safety indicators were higher than state and national levels, with the exception of motor vehicle crash deaths. Rates of firearm fatalities and deaths due to injuries were both higher than the rate for the state of Maryland, although significantly lower than in Baltimore City. Notably, the juvenile arrest rate in Baltimore County is much higher than the rates in the city, the state or the U.S. overall.

| Table 4.8: Social Determinants of Health – Neighborhood Safety and Violence Indicators |                  |                |          |               |
|----------------------------------------------------------------------------------------|------------------|----------------|----------|---------------|
| Indicator                                                                              | Baltimore County | Baltimore City | Maryland | United States |
| Injury Mortality (per 100,000 population)                                              | 109              | 200            | 88       | 76            |
| Homicides (per 100,000 population)                                                     | 9                | 43             | 9        | 6             |
| Firearm Fatalities (per 100,000 population)                                            | 13               | 44             | 12       | 12            |
| Motor Vehicle Crash Deaths (per 100,000 population)                                    | 8                | 9              | 9        | 12            |
| Juvenile Arrests per 1,000 Juveniles                                                   | 39               | 25             | 27       | 24            |

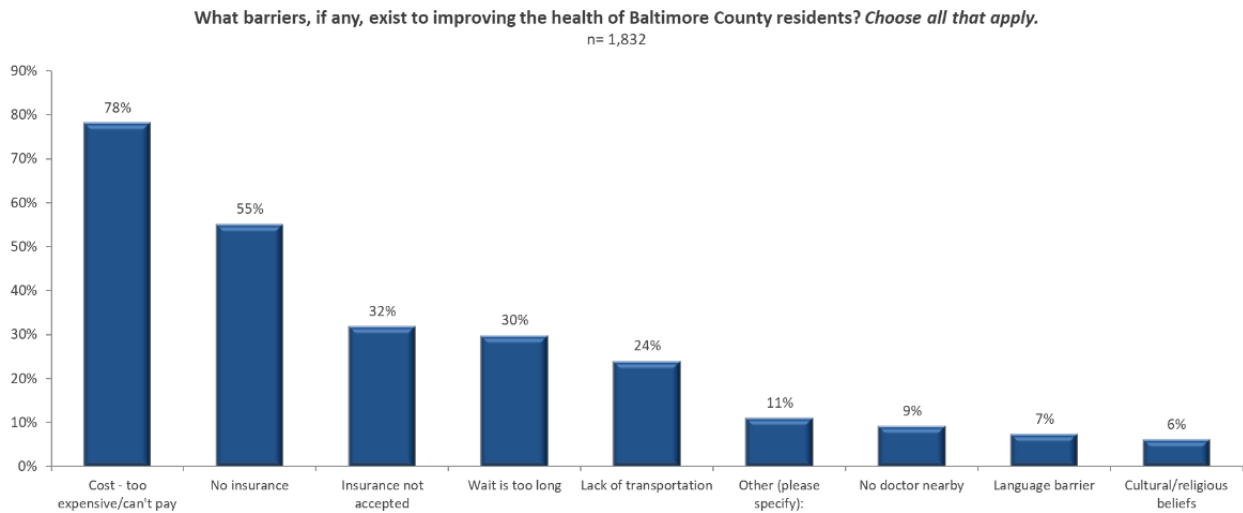
#### Primary Data Findings – Community Member Survey

Respondents to the community member survey identified several social needs related to access to care and other SDoH factors. Availability and access to health insurance (38%) and the doctor's office (34%) were identified among the top five social needs impacting community health. Neighborhood safety and violence was identified as the top social need impacting community health (47%). Figure 4.9 shows high levels of concern related to multiple SDoH and access factors, such as access to healthy food, housing and homelessness, and neighborhood safety.

**Figure 4.9**

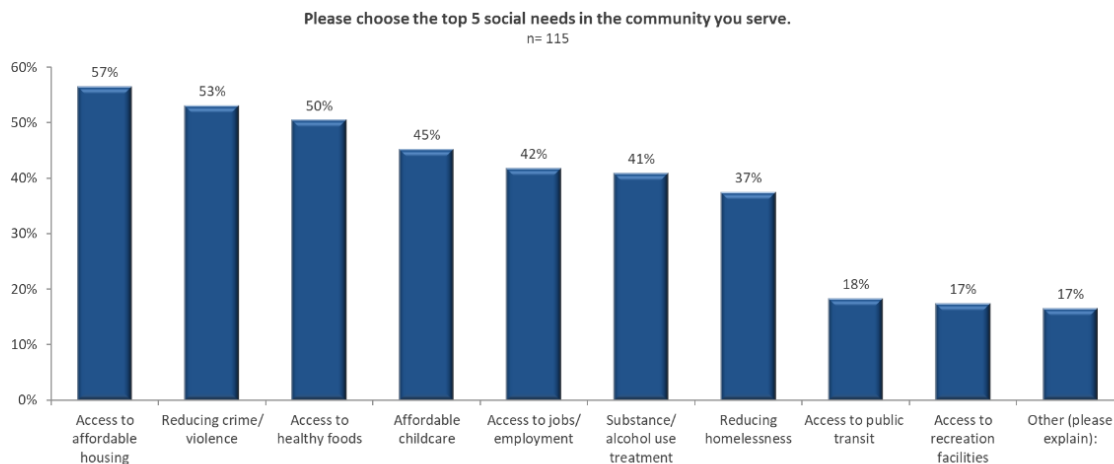


Community members were also asked to identify top barriers to improving and accessing care, as seen in Figure 4.10 below. Cost of care (78%) and inability to obtain insurance (55%) were the top two barriers to care. The overall cost of healthcare was identified as a consistent barrier in both the key leader survey and the community member survey.

**Figure 4.10**

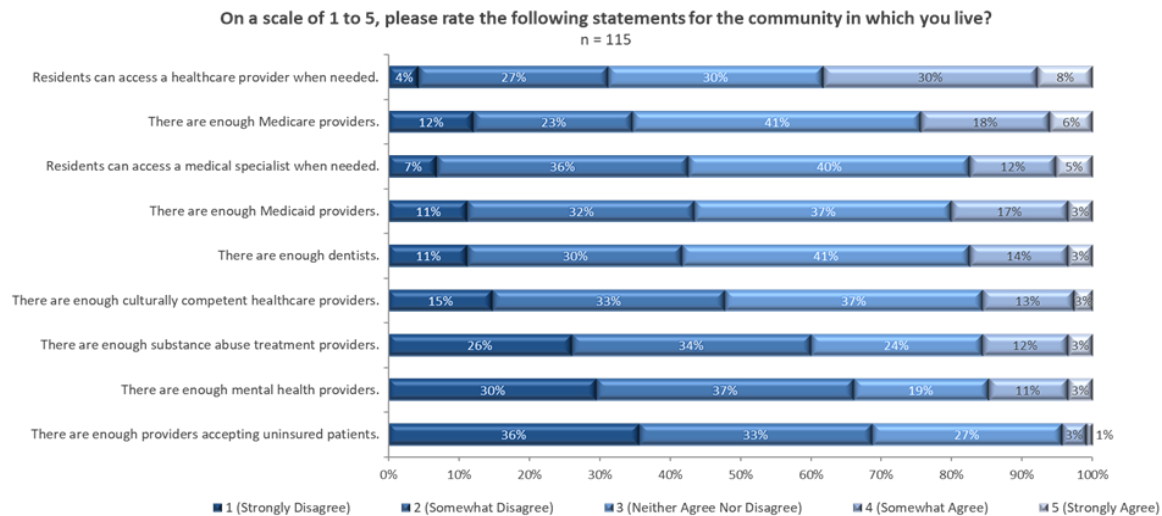
### Primary Data Findings – Key Leader Survey

Nearly half (45.2%) of respondents to the key leader survey ranked access to care among the highest priority health needs in Baltimore County, while 37.4% identified the need for primary and preventive healthcare as a top concern. Access to care and its impact on other SDoH factors was a significant focus when respondents were asked to identify the top social needs in Baltimore County as well. The most significant social need identified by key leaders was access to affordable housing at 57%. Reducing crime and violence was noted as well, with 53% of respondents identifying that need as a priority. While access to healthcare was not specifically identified as a top social need, many of the top social needs have the potential to impact an individual's ability to access high quality medical care. This includes access to jobs or employment, affordable childcare and access to public transit. Other top identified social concerns that medical providers may be able to impact through referrals to community resources include access to healthy foods and services to address homelessness.

**Figure 4.11**

Overall, a high percentage of respondents (38%) agreed that residents could access a healthcare provider when needed. However, respondents did not find this to be consistent across all provider or patient types. Over half of respondents (69%) felt that there were not enough providers that accepted uninsured patients. Just under half (43%) of key leaders felt that Baltimore County residents were not able to access a medical specialist when needed, and the same percentage of respondents also felt that there were not enough providers serving the Medicaid population.

**Figure 4.12**



Respondents were also asked to identify any barriers to improving the health of residents in the communities they serve, as seen in Figure 4.13. Nearly three-quarters (72%) of respondents identified the cost of care as a top barrier to community health improvement. This was followed by health literacy (63%) and appointment availability (54%). Transportation was also noted as a barrier by more than half of respondents, underscoring the impact this particular SDoH has on health and well-being.

**Figure 4.13**

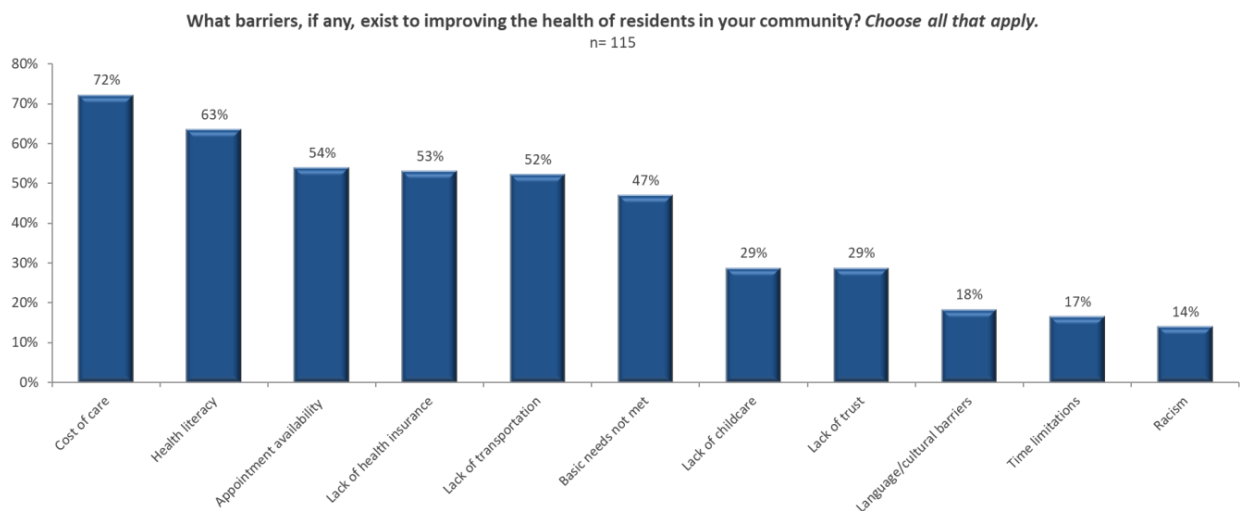
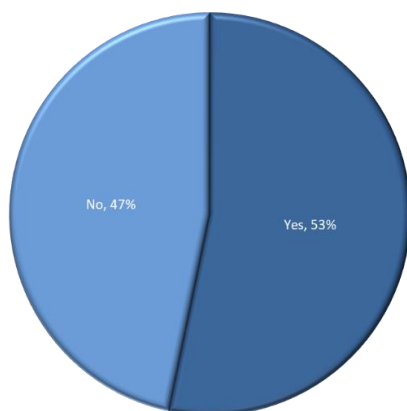


**Figure 4.14**

Do you feel that the residents of the community you serve are health literate? n = 115

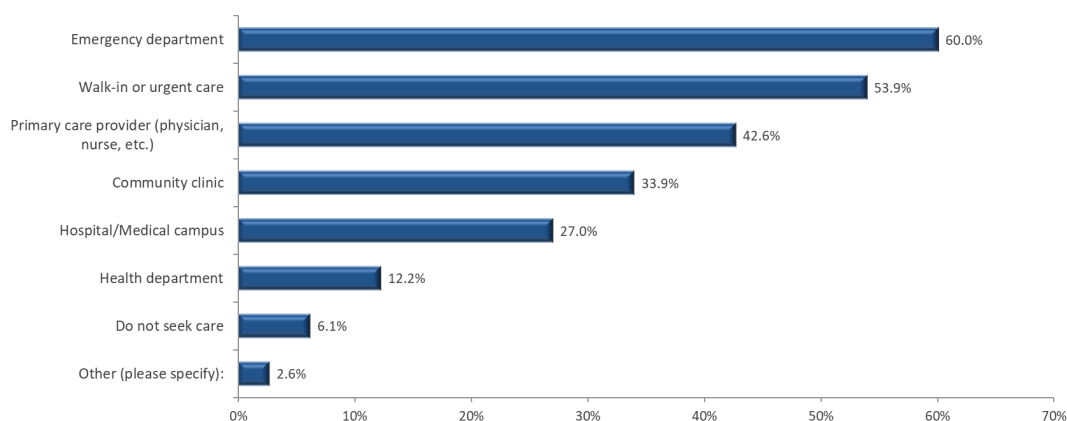


Health literacy was identified as the second highest barrier to improving community health in the key leader survey. As a follow up question, key leaders were asked whether they felt that the residents of the community they serve were health literate, or able to understand health-related information when it is presented to them. Nearly half of respondents (47%) indicated that they felt their community members were not able to understand health-related information, as seen in Figure 4.14.

Finally, key leaders were asked to identify the most common settings where community members seek care. Figure 4.15 shows that the majority of respondents (60%) selected the emergency department as the most common location of care. The second most common was walk in/urgent care, at 53.9%. This aligns with community survey results that noted a lack of appointment availability and the high cost of care as major barriers. Individuals cannot be turned away at emergency departments for care, and many low-income individuals may not be able to see a primary care provider in a timely fashion, or may lack health insurance to access primary care in the first place.

**Figure 4.15**

Members of your community typically seek medical care through... Please select all that apply  
n = 115

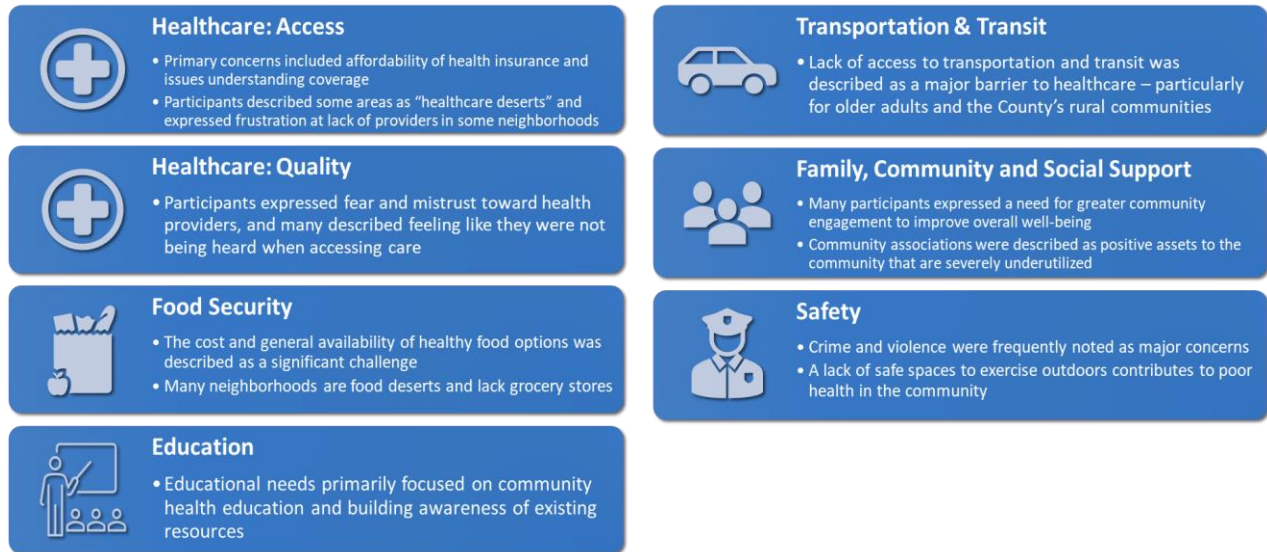


### Primary Data Findings – Focus Groups

Focus groups conducted during the CHNA process identified access to care and quality of care as two significant health factors impacting Baltimore County residents. Other SDoH factors that may impact health or the ability to access healthcare were also noted, such as housing and homelessness, transportation, community health education, food security, and family, community, and social support.

Seven specific needs related to access to care or SDoH were identified through the focus groups as priority concerns for the community. Figure 4.16 below illustrates the major focus group themes related to each health or social need. Many of these needs were cross-identified through the key leader and community surveys as well.

**Figure 4.16: Key Focus Group Findings**



Focus group participants were asked to describe some of the reasons members of their community may not seek out healthcare, even when it’s needed. Three key themes emerged around these topics: access and availability to transportation; obtaining and maintaining health insurance; and the ease in scheduling appointments or seeing their provider in a timely manner. Participants cited a lack of access to transportation as a theme when discussing their inability to not only reach medical services, but to access other supportive services who can provide health education or additional resources. Community members also expressed concerns around accessing, obtaining, or ensuring that their insurance was enough to cover necessary medical expenses, and understanding how to access their benefits or find financial assistance to pay medical bills. A third concern raised by community members was around the difficulty in not only getting an appointment, but how long they needed to wait to see their provider. Participants also described SDoH as impacting community members’ ability to access care. Food insecurity was a particular concern, as the cost of food and other necessities may force individuals to de-prioritize healthcare to meet their basic needs.

Participants were also asked about their experiences with the medical services in their community. Various concerns were raised, including frustration at receiving an automated response when they call their provider, instead of receiving assistance from a physical person. Other concerns were around the amount of time spent with providers and the thoroughness of the exams they received. Community members generally expressed happiness with the central location of their providers.

In addition to transportation, focus group participants noted other SDoH challenges that directly impact their ability to access healthcare and live healthy lives. The high cost of healthy food was described as a driver of poor health in the community, as well as an important basic need that may force people to make difficult choices between paying for food or paying for prescriptions or medical care. Community members

also described a need for increased levels of family, community and social support as a way to improve overall community health and well-being. Some participants noted that their neighborhoods did not feel as tight knit as they had in the past and felt that this lack of connection contributed to negative mental health impacts or social isolation for vulnerable people. Finally, many community members who participated in the focus groups described community violence as a significant challenge that impacts community members' ability to walk or exercise outdoors, and as a contributor to high levels of stress that impact overall health and well-being.

Community members who participated in focus groups were asked how they best thought the above issues could be addressed. Multiple suggestions were provided, such as adjusting income qualifications for assistance programs to align with the cost of living, creating better navigation services to connect community members with resources, providing and advertising in-home visits, and standardizing more frequent welfare and support checks for vulnerable community members.

## CHAPTER 4 | HEALTH RESOURCE INVENTORY

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The following section details existing resources, facilities, and programs throughout Baltimore County.

### Health Resources

The list of resources below is representative of the services available in Baltimore County; however, this list is not exhaustive. Additionally, while the resources, facilities, and programs listed in this section have been categorized into common groups, these organizations and programs may offer additional services as well. Please note that while the county overall may be adequately served by existing capacity in some areas, not every area of the county is equally served, and the need for additional resources may be greater in one geography as compared to another.

As shown, this health resource inventory was compiled based on input and information from all Steering Committee partners and have been categorized into the following areas, including Healthcare Facilities, Home-based Health Services, Other Healthcare Services, and Community Services.

#### Healthcare Facilities

- Baltimore County Department of Health – Offers a variety of health services for the general public and specialty groups, including general health services, children’s health services, senior health services, uninsured health services, and women’s health services. Services are provided via four clinical bureaus.
- Northwest Hospital of LifeBridge Health – 231-bed hospital offering a variety of services at its hospital location as well as nearby outpatient facilities offering service such as outpatient surgery, adult day care, and physical rehabilitation.
- Sheppard Pratt – Provider of mental health, substance use, special education, developmental disability, and social services offering services in inpatient, outpatient, and virtual settings.
- Greater Baltimore Medical Center Healthcare – 228-bed medical center offering a variety of services at its hospital and main campus medical office buildings as well as primary care offices throughout the community. GBMC also provides and operates integrated behavioral health services, The Geckle Diabetes and Nutrition Center, and the Bariatric Surgery and Comprehensive Obesity Management Program.
- University of Maryland St. Joseph Medical Center – 218-bed hospital offering a variety of services at its hospital and associated practices. UM SJMC also offers many community programs to support families, chronic disease and pain management, physical activity and fall prevention. Additionally, the Barbara Posner Wellness and Support Center offers many support services for cancer patients. St. Clare Medical Outreach is a devoted team that provides primary care and health education to those who have no access to healthcare.
- MedStar Franklin Square Medical Center – 338-bed hospital offering a variety of services at its hospital location as well as primary care, family health, diabetes prevention, nutrition, and smoking cessation services in outpatient settings. Additionally, MedStar Health operates numerous Diabetes Institute locations, the MedStar Health Research Institute, and various behavioral health and outpatient psychiatry services. MedStar Health also offers numerous support groups including those focused on living well with chronic pain, diabetes, and stroke.

Home-based Health Services

| Organization                                                 | Example Service Offerings                                                               |
|--------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| Affiliated Santé Group's Baltimore County Mobile Crisis Team | Dispatches to assist in crisis events related to mental health                          |
| Baltimore County Department of Aging                         | Many evidence-based programs such as Stepping On Fall Prevention, BeCAUSE, senior meals |
| Baltimore County Department of Health                        | Community Health Workers, Nurse home visiting case management                           |
| Baltimore County Department of Social Services               | In-home aides and case management for specific populations, guardianship unit           |
| Meals on Wheels of Central Maryland                          | Home-delivered meals, Grocery Assistance Program                                        |
| Sheppard Pratt                                               | In-home medication management                                                           |

Other Healthcare Services

Other healthcare services are offered by the following organizations.

| Organization                                   |
|------------------------------------------------|
| Baltimore County Department of Health          |
| Baltimore County Department of Social Services |
| Baltimore County Public Schools                |
| Baltimore Medical Systems, Inc.                |
| Center for Family Success                      |
| Chase Brexton                                  |
| Gilchrist                                      |
| House of Ruth                                  |
| Maryland Department of Health                  |
| Nueva Vida                                     |
| Planned Parenthood                             |
| St. Clare Medical Outreach                     |
| Total Health Care                              |
| Towson University Institute for Well Being     |

Community Services

Additional community services are offered by the following organizations.

| Organization                                  |
|-----------------------------------------------|
| Alzheimer's support group                     |
| American Cancer Society                       |
| American Diabetes Association                 |
| American Heart Association                    |
| Assistance Center of Towson Churches          |
| Baltimore County Communities for the Homeless |
| Baltimore County Public Library               |

| Organization                                     |
|--------------------------------------------------|
| Baltimore County Recreation and Parks            |
| Baltimore County Senior Centers                  |
| Baltimore Hunger Project                         |
| Baltimore Jobs Program                           |
| BCPS Allied Health Magnets                       |
| CCBC                                             |
| Community Assistance Network                     |
| Epiphany Community Services                      |
| Food distribution sites (various)                |
| Gilchrist Grief Counseling and Support Resources |
| Harbel Prevention and Recovery Center            |
| Healthy Babies Collaborative                     |
| Healthcare Access Maryland                       |
| Healthcare for the Homeless                      |
| Humanim                                          |
| Hungry Harvest                                   |
| League for People with Disabilities              |
| MD Food Bank                                     |
| Mental Health Association of Maryland            |
| Mosaic Community Services                        |
| Moveable Feast                                   |
| NAMI                                             |
| Orokawa Y at Towson                              |
| Pro Bono Counseling                              |
| Southeast Network                                |
| Streets of Hope                                  |
| Student Support Network                          |
| United Way                                       |

## CHAPTER 5 | NEXT STEPS

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The CHNA findings are used to develop effective community health improvement strategies to address the priority needs identified throughout the process. The next and final step in the CHNA process is to develop community-based health improvement strategies and action plans to address the priorities identified in this assessment. The organizations making up the Steering Committee will leverage information from this CHNA to develop implementation and action plans for their local community, while also working together with other members of the Steering Committee to ensure the priority need areas are being addressed in the most efficient and effective way. The Steering Committee believes that the most effective strategies will be those that have the collaborative support of community organizations and residents. The strategies developed will include measurable objectives through which progress can be measured.

**APPENDICES**

## APPENDIX 1 | SUMMARY OF PRIOR CHNA IMPLEMENTATION PLANS

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A CHNA is an ongoing process that begins with an evaluation of the previous CHNA. In 2021, Baltimore County completed its previous assessment. Associated implementation strategies focused on three priority areas, as listed below:

### Priority Health Need Areas

- Behavioral Health, including Mental Health and Substance Use Disorders
- Physical Health
- Health Disparities

Each member organization of the Steering Committee developed goals and implementation plans to address these priority health needs. Below are brief summaries of each organization's 2021-2024 CHNA implementation plans.

#### Baltimore County Department of Health

BCDH's vision is healthy people living, working and playing in Baltimore County. To achieve this, BCDH works to promote health and well-being among individuals and families; provide quality health, housing and social services; prevent disease through education, advocacy, outreach and connection to resources and treatment; administers entitlement and benefits programs; conducts investigations and inspections; and offers clinical and case management services.

The BCDH fiscal year (FY) 2021 Community Health Improvement Plan (CHIP) addresses the following priority areas: Behavioral Health (including Mental Health and Substance Use Disorders (SUDs)), Physical Health/Chronic Disease and Health Disparities. Due to ongoing challenges related to the COVID-19 pandemic, some planned action items still need to be conducted. However, BCDH has continued to provide and increased harm reduction services to individuals with SUDs along with enhanced crisis response services for those with mental health disorders. The Health Department has increased services for those with chronic disease with the implementation of a chronic disease program focusing on hypertension and diabetes. To address health disparities, the chronic disease program provides screening for hypertension and diabetes to those at highest risk, addressing the disparity. The Department implemented a TOPS (Take Off Pounds Sensibly) program in conjunction with a predominantly African American church. In addition, the Department is participating in a countywide task force for New Americans. The Department continues to expand the use of bilingual staff and enhance cultural competencies.

#### Greater Baltimore Medical Center Healthcare

GMBC offers a variety of services through its three work systems: a 228-bed licensed facility; GBMC Health Partners, a group of 30+ physician practices; and Gilchrist, dedicated to geriatric primary care, hospice,

and bereavement counseling. GBMC also provides and operates integrated behavioral health services, The Geckle Diabetes and Nutrition Center, and the Bariatric Surgery and Comprehensive Obesity Management Program.

The GBMC 2022-2024 CHNA Implementation Plan addressed the following priority need areas: Health Disparities, Behavioral Health (including mental health and SUDs), and Physical Health. Activities undertaken to address health disparities included providing healthy meals to food-insecure patients through Moveable Feast and an aging-in-place initiative developed with Maryland Volunteer Lawyers Service. To address behavioral health, GBMC and Sheppard Pratt provided integrated behavioral health at all primary care practices through the Collaborative Care Model; partnered with organizations of the CHNA Committee and the Baltimore County Police Department to promote National Prescription Drug Takeback Day events; and assisted with community engagement initiatives to implement the Greater Baltimore Regional Integrated Crisis System to expand the capacity of mobile crisis teams and community-based providers to reduce police interaction and overreliance on emergency departments. Physical health-focused initiatives included collaborative efforts to improve the built environment, Walk with a Doc events, promotion of pre-diabetes risk assessments for patients, and providing affordable healthy produce to patients, staff and the community through Hungry Harvest.

### **MedStar Franklin Square Medical Center**

MFSMC is located in eastern Baltimore County, and offers comprehensive, technology-based surgical services, including the latest, most innovative treatment for patients with various medical conditions. Its specialty service lines include medicine, oncology, neurosciences, cardiology, obstetrics and gynecology, orthopedics, neonatal intensive care, behavioral health, and ambulatory services.

MedStar's 2021 CHNA process identified three overarching community health needs: health and wellness, access to care and services, and SDoH. The hospitals conduct many community programs related to chronic disease including diabetes prevention and management classes, blood pressure screenings, tobacco cessation programming, and stroke support groups. To address behavioral health issues, MedStar Health has expanded the SBIRT (Screening, Brief Intervention & Referral to Treatment) strategy in emergency department and primary care settings and embedded Peer Recovery Coaches on hospital care teams. Relative to maternal and child health, the hospital has supported and coordinated an expanded Healthy Babies Collaborative and increased its Birth and Family education scope. To better provide access to care and services, MedStar Health has included mental health services as part of its primary care model and conducted social needs screenings and support linkages as part of care delivery. It has partnered with outside organizations to address social determinants of health (SDoH), including the MedStar Health Uber transportation program and workforce development initiatives. MedStar Health assumed the full cost for continuing the Public Health Workforce Support for Disadvantaged Areas post-collaboration grant. To address food access challenges, the Food Rx program is now available through three hospitals with added community partnerships.

### **Northwest Hospital of LifeBridge Health**

Northwest Hospital is a nonprofit hospital with 367 private rooms, which has been dedicated to the needs of the greater northwest Baltimore community for over 50 years, caring for the citizens of Baltimore County, western Baltimore City, Carroll County, Howard County and beyond. Northwest Hospital's 2021-

2024 implementation plan addressed the following priority areas: chronic heart disease, diabetes, mental health and SUDs, community health and wellness education, health disparities, and workforce development.

To address these respective issues, LifeBridge and Northwest Hospital staff implemented virtual and in-person chronic disease management education classes, increased staff to expand reach into surrounding communities, provided staff to assist patients with navigating and applying for Medicaid health insurance, utilized Sinai Hospital of Baltimore's vocational services and workforce readiness program (VSP) for training and workforce development services, and created new partnerships while strengthening existing ones with community based organizations--including with local faith-based organizations--to improve access and trust for patients needing medical and behavioral health services.

Some examples of programs and services implemented in the Northwest service area supporting community health include:

- *SBIRT Program:* Peer recovery coaches stationed in the hospital's Emergency Department who connect SUD patients with treatment and community resources. In FY23, Northwest Hospital provided over 8,000 screenings.
- *Cardiovascular Telemonitoring Program:* Remote patient monitoring program to improve the quality of care, patient outcomes, and reduce hospital utilization for patients with chronic diseases by improving patient-provider communication, improving coordination of care, and improving time of follow up with a Primary Care Provider. In FY23, Northwest enrolled 102 patients in the GetWell Loop Chronic Disease Management program.
- *Community Care Coordination:* Care management services provided to high-risk community members. This program includes collaboration with internal and external mental health practices and referrals to community support resources. The initiative also coordinates transportation to medical appointments and social services. In FY23, this service provided 16,559 encounters.
- *Community Pastoral Outreach:* Community Pastoral Outreach provides supportive leadership with members of the faith community within Northwest's catchment area and beyond. This program assists congregations (all faiths) to develop health and wellness ministries; provides community pastoral care with participants of established programs; helps faith communities develop workshops, seminars, classes in relation to faith and health, along with specific health concerns; and engages in faith relations (e.g., with local governments, nonprofits, colleges and universities) throughout LifeBridge service areas.

### **University of Maryland St. Joseph Medical Center**

UM SJMC is a 221-licensed bed, Catholic acute care hospital located in Towson, Maryland. UM SJMC is a member of the University of Maryland Medical System, a multi-hospital system with academic, community and specialty service missions reaching every part of the state and beyond.

In its 2022–2024 Community Health Improvement Implementation Plan, UM SJMC outlined a number of key objectives and action items to address each of the main priority areas identified by the county's 2020-

2021 CHNA. UM SJMC offered community health screenings for a variety of conditions, including breast cancer, cervical cancer, blood pressure, type 2 diabetes and stroke or abdominal aortic aneurysm, as well as bone density and body composition screenings. UM SJMC also hosted community events, including blood drives in partnership with the Red Cross, a community market featuring fresh fruits and vegetables, wellness fairs, vaccination clinics, and virtual community health education events. To address chronic health needs in the community, UM SJMC offered its Chronic Disease Self-Management Program and Prevent T2 – a CDC-developed diabetes prevention program. UM SJMC also completed the development of a new, evidence-based behavioral health curriculum, which will launch in Spring 2024.

## APPENDIX 2 | COUNTY DEMOGRAPHIC AND SOCIOECONOMIC DETAIL

Detailed information regarding the demographics and socioeconomics of Baltimore County can be found in the tables below.

### County Demographics

#### Age and Total Population

The table below shows the total population in Baltimore County, Baltimore City, Maryland and the United States.

| Table A2.1: Total Population, 2023 |                  |                |           |               |
|------------------------------------|------------------|----------------|-----------|---------------|
|                                    | Baltimore County | Baltimore City | Maryland  | United States |
| Population                         | 859,710          | 573,794        | 6,259,408 | 337,470,185   |

Source: ESRI 2023

The table below shows the percentage of Baltimore County, Baltimore City, Maryland and United States residents by age cohort.

| Table A2.2: Age Distribution, 2023 |                  |                |          |               |
|------------------------------------|------------------|----------------|----------|---------------|
|                                    | Baltimore County | Baltimore City | Maryland | United States |
| Percentage below 15                | 16.4%            | 16.8%          | 17.6%    | 18.0%         |
| Percentage between 15 and 44       | 38.9%            | 43.7%          | 39.2%    | 39.6%         |
| Percentage between 45 and 64       | 24.9%            | 23.0%          | 25.7%    | 24.6%         |
| Percentage 65 and older            | 19.7%            | 16.5%          | 17.5%    | 17.8%         |

Source: ESRI 2023

#### Sex

The table below shows the total population in Baltimore County, Baltimore City, Maryland and the United States by sex.

| Table A2.3: Sex Distribution, 2023 |                  |                |          |               |
|------------------------------------|------------------|----------------|----------|---------------|
|                                    | Baltimore County | Baltimore City | Maryland | United States |
| Female                             | 52.2%            | 52.8%          | 51.3%    | 50.6%         |
| Male                               | 47.8%            | 47.2%          | 48.7%    | 49.4%         |

Source: ESRI 2023

The table below shows the percentage and total population of Baltimore County, Baltimore City, Maryland and the United States by sex and age cohort.

| Table A2.4: Sex and Age Distribution, 2023 |                  |               |                |               |                  |               |                    |               |
|--------------------------------------------|------------------|---------------|----------------|---------------|------------------|---------------|--------------------|---------------|
|                                            | Baltimore County |               | Baltimore City |               | Maryland         |               | United States      |               |
|                                            | Count            | Pct. of Total | Count          | Pct. of Total | Count            | Pct. of Total | Count              | Pct. of Total |
| <b>Total</b>                               | <b>859,710</b>   | <b>100.0%</b> | <b>573,794</b> | <b>100.0%</b> | <b>6,259,408</b> | <b>100.0%</b> | <b>337,470,185</b> | <b>100.0%</b> |
| 0-14 years                                 | 141,397          | 16.4%         | 96,327         | 16.8%         | 1,104,084        | 17.6%         | 60,750,786         | 18.0%         |
| 15-44 years                                | 334,433          | 38.9%         | 250,740        | 43.7%         | 2,451,298        | 39.2%         | 133,591,630        | 39.6%         |
| 45-65 years                                | 214,154          | 24.9%         | 131,800        | 23.0%         | 1,606,433        | 25.7%         | 83,061,508         | 24.6%         |
| 65+ years                                  | 169,726          | 19.7%         | 94,927         | 16.5%         | 1,097,593        | 17.5%         | 60,066,261         | 17.8%         |
| <b>Males</b>                               | <b>411,367</b>   | <b>47.8%</b>  | <b>270,691</b> | <b>47.2%</b>  | <b>3,046,001</b> | <b>48.7%</b>  | <b>166,821,938</b> | <b>49.4%</b>  |
| 0-14 years                                 | 71,977           | 17.5%         | 48,640         | 18.0%         | 563,396          | 18.5%         | 31,023,901         | 51.1%         |
| 15-44 years                                | 164,997          | 40.1%         | 120,887        | 44.7%         | 1,223,965        | 40.2%         | 67,793,310         | 50.7%         |
| 45-65 years                                | 101,173          | 24.6%         | 62,390         | 23.0%         | 773,251          | 25.4%         | 40,903,399         | 49.2%         |
| 65+ years                                  | 73,220           | 17.8%         | 38,774         | 14.3%         | 485,389          | 15.9%         | 27,101,328         | 45.1%         |
| <b>Females</b>                             | <b>448,343</b>   | <b>52.2%</b>  | <b>303,103</b> | <b>52.8%</b>  | <b>3,213,407</b> | <b>51.3%</b>  | <b>170,648,247</b> | <b>50.6%</b>  |
| 0-14 years                                 | 69,420           | 15.5%         | 47,687         | 15.7%         | 540,688          | 16.8%         | 29,726,885         | 48.9%         |
| 15-44 years                                | 169,436          | 37.8%         | 129,853        | 42.8%         | 1,227,333        | 38.2%         | 65,798,320         | 49.3%         |
| 45-65 years                                | 112,981          | 25.2%         | 69,410         | 22.9%         | 833,182          | 25.9%         | 42,158,109         | 50.8%         |
| 65+ years                                  | 96,506           | 21.5%         | 56,153         | 18.5%         | 612,204          | 19.1%         | 32,964,933         | 54.9%         |

Source: ESRI 2023

### Race

The table below shows the total population in Baltimore County, Baltimore City, Maryland and the United States by race.

| Table A2.5: 2023 Racial Distribution    |                  |               |                |               |           |               |               |               |
|-----------------------------------------|------------------|---------------|----------------|---------------|-----------|---------------|---------------|---------------|
|                                         | Baltimore County |               | Baltimore City |               | Maryland  |               | United States |               |
|                                         | Count            | Pct. of Total | Count          | Pct. of Total | Count     | Pct. of Total | Count         | Pct. of Total |
| White Non-Hispanic                      | 431,552          | 50.2%         | 146,924        | 25.6%         | 2,867,623 | 45.8%         | 191,314,266   | 56.7%         |
| Black Non-Hispanic                      | 260,766          | 30.3%         | 332,377        | 57.9%         | 1,834,049 | 29.3%         | 40,898,542    | 12.1%         |
| Asian                                   | 57,506           | 6.7%          | 21,210         | 3.7%          | 439,514   | 7.0%          | 20,811,620    | 6.2%          |
| American Indian & Alaska Native         | 1,921            | 0.2%          | 1,270          | 0.2%          | 11,977    | 0.2%          | 2,284,715     | 0.7%          |
| Native Hawaiian/ Other Pacific Islander | 255              | 0.0%          | 152            | 0.0%          | 2,635     | 0.0%          | 643,202       | 0.2%          |

Source: ESRI 2023

### Ethnicity

The table below shows the total population in Baltimore County, Baltimore City, Maryland and the United States by ethnicity.

| Table A2.6: 2023 Ethnic Distribution |                  |               |                |               |           |               |               |               |
|--------------------------------------|------------------|---------------|----------------|---------------|-----------|---------------|---------------|---------------|
|                                      | Baltimore County |               | Baltimore City |               | Maryland  |               | United States |               |
|                                      | Count            | Pct. of Total | Count          | Pct. of Total | Count     | Pct. of Total | Count         | Pct. of Total |
| Hispanic                             | 66,577           | 7.7%          | 47,869         | 8.3%          | 788,675   | 12.6%         | 65,536,136    | 19.4%         |
| Non-Hispanic                         | 793,133          | 92.3%         | 525,925        | 91.7%         | 5,470,733 | 87.4%         | 271,934,049   | 80.6%         |

Source: ESRI 2023

### Language

The table below shows the total population in Baltimore County, Baltimore City, Maryland and the United States by language spoken at home.

| Table A2.7: 2022 Language Spoken at Home |                  |                |          |               |
|------------------------------------------|------------------|----------------|----------|---------------|
|                                          | Baltimore County | Baltimore City | Maryland | United States |
| English Only                             | 85.8%            | 89.0%          | 79.3%    | 78.0%         |
| Spanish                                  | 4.0%             | 4.7%           | 8.9%     | 13.3%         |
| Indo-European Languages                  | 4.5%             | 2.5%           | 4.7%     | 3.8%          |
| Asian and Pacific Islander Languages     | 2.7%             | 1.9%           | 3.9%     | 3.6%          |
| Other Languages                          | 3.0%             | 1.8%           | 3.2%     | 1.2%          |

Source: ACS 2022

## **Socioeconomic Detail**

### Household Income

The table below shows the median household income of Baltimore County, Baltimore City, Maryland and the United States.

| Table A2.8: 2023 Median Household Income |                  |                |          |               |
|------------------------------------------|------------------|----------------|----------|---------------|
|                                          | Baltimore County | Baltimore City | Maryland | United States |
| Income                                   | \$82,607         | \$55,224       | \$93,432 | \$72,603      |

Source: ESRI 2023

### Poverty

The table below shows the percentage of households living below the federal poverty level in Baltimore County, Baltimore City, Maryland and the United States.

**Table A2.9: 2021 Percent of Households Below the Federal Poverty Level**

|                   | Baltimore County | Baltimore City | Maryland | United States |
|-------------------|------------------|----------------|----------|---------------|
| Percent Below FPL | 9.1%             | 19.7%          | 9.1%     | 12.4%         |

Source: ESRI 2023

**Food Stamps/SNAP**

The table below shows the percentage of households receiving food stamps or SNAP in Baltimore County, Baltimore City, Maryland and the United States.

**Table A2.10: 2021 Percent of Households Receiving Food Stamps/SNAP**

|                                                     | Baltimore County | Baltimore City | Maryland  | United States |
|-----------------------------------------------------|------------------|----------------|-----------|---------------|
| Households Receiving Food Stamps/SNAP               | 34,031           | 56,208         | 238,288   | 14,105,231    |
| Total Households                                    | 333,180          | 248,855        | 2,363,944 | 124,010,992   |
| Percentage of Households receiving Food Stamps/SNAP | 10.2%            | 22.6%          | 10.1%     | 11.37%        |

Source: ESRI 2023

**Educational Attainment**

The table below shows the percentage of the population in Baltimore County, Baltimore City, Maryland and the United States and the United States broken out by educational attainment.

**Table A2.11: 2023 Educational Attainment**

|                                 | Baltimore County | Baltimore City | Maryland | United States |
|---------------------------------|------------------|----------------|----------|---------------|
| Less than 9 <sup>th</sup> Grade | 2.6%             | 3.5%           | 3.2%     | 4.1%          |
| Some High School/No Diploma     | 4.8%             | 8.8%           | 4.9%     | 5.5%          |
| High School Diploma             | 22.1%            | 23.9%          | 21.4%    | 22.9%         |
| GED/Alternative Credential      | 3.3%             | 5.2%           | 3.2%     | 4.1%          |
| Some College/No Diploma         | 17.1%            | 16.9%          | 16.4%    | 17.7%         |
| Associate's Degree              | 7.8%             | 6.5.7%         | 7.5%     | 9.5%          |
| Bachelor's Degree               | 23.8%            | 18.4%          | 23.3%    | 22.3%         |
| Graduate/ Professional Degree   | 18.4%            | 17.7%          | 20.2%    | 13.9%         |

Source: ESRI 2023

### Unemployment

The table below shows the percentage of the population that is unemployed in Baltimore County, Baltimore City, Maryland and the United States and the United States broken out by age cohort.

| Table A2.12: 2023 Unemployment        |                  |                |          |               |
|---------------------------------------|------------------|----------------|----------|---------------|
|                                       | Baltimore County | Baltimore City | Maryland | United States |
| Percentage unemployed ages 16 to 24   | 1.3%             | 1.7%           | 1.2%     | 1.3%          |
| Percentage unemployed ages 25 to 54   | 1.9%             | 2.8%           | 1.9%     | 2.2%          |
| Percentage unemployed ages 55 to 64   | 0.6%             | 0.7%           | 0.5%     | 0.6%          |
| Percentage unemployed ages 65 or more | 0.3%             | 0.5%           | 0.2%     | 0.2%          |

Source: ESRI 2023

### Uninsured Population

The table below shows the percentage of the population that is uninsured in Baltimore County, Baltimore City, Maryland and the United States and the United States broken out by age cohort.

| Table A2.13: 2021 Uninsured Population |                  |                |          |               |
|----------------------------------------|------------------|----------------|----------|---------------|
|                                        | Baltimore County | Baltimore City | Maryland | United States |
| Percentage uninsured ages 18 or below  | 0.9%             | 0.8%           | 0.9%     | 1.3%          |
| Percentage uninsured ages 19 to 34     | 1.9%             | 2.2%           | 2.1%     | 3.2%          |
| Percentage uninsured ages 35 to 64     | 2.3%             | 2.9%           | 2.8%     | 4.2%          |
| Percentage uninsured ages 65 or more   | 0.1%             | 0.1%           | 0.1%     | 0.1%          |

Source: ACS 2021

## APPENDIX 3 | SECONDARY DATA METHODOLOGY AND SOURCES

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Many individual secondary data measures were analyzed as part of the CHNA process. These data provide detailed insight into the health status and health-related behavior of residents in the county. These secondary data are based on statistics of actual occurrences, such as the incidence of certain diseases, as well as statistics related to SDoH.

### Methodology

All individual secondary data measures were grouped into six categories and 20 corresponding focus areas based on “common themes.” In order to draw conclusions about the secondary data for Baltimore County, its performance on each data measure was compared to targets/benchmarks. If Baltimore County’s performance was more than five percent worse than the comparative benchmark, it was concluded that improvements could be needed to better the health of the community. Conversely, if an area performed more than five percent better than the benchmark, it was concluded that while a need is still present, the significance of that need relative to others is likely less acute. The most recently available data were compared to these targets/benchmarks in the following order (as applicable):

- For all available data sources, state and national averages were compared.
- Peer County for Comparison: For the purposes of this analysis, Baltimore City has been identified as a peer county for comparison, due to the two counties’ relatively similar population density and demographic makeup.

The following methodology was used to assign a priority level to each individual secondary data measure:

- If the data were more than 5 percent worse = High need
- If the data were within or equal to 5 percent (better or worse) = Medium need
- If the data were more than 5 percent better = Low need

These measures are noted with an asterisk.

Additionally, data measures were also viewed with regard to performance over time and whether the measure has improved or worsened compared to the prior CHNA timeframe.

## Data Sources

The following tables are organized by each of the twenty focus areas and contain information related to the secondary data measures analyzed including a description of each measure, the data source, and most recent data time periods.

**Table A3.1: Access to Care**

| Measure                                                                                                          | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Data Source                                                                                                                                 | Most Recent Data Year(s) |
|------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| Uninsured (percent of population < 65 without health insurance)                                                  | Percentage of the population under age 65 without health insurance coverage.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | ESRI Business Analyst. Data accessed September 2023.                                                                                        | 2021                     |
| Primary Care (ratio of population to primary care physicians - population per one provider)                      | Ratio of the population to primary care physicians. Primary care physicians include practicing non-federal physicians (M.D.'s and D.O.'s) under age 75 specializing in general practice medicine, family medicine, internal medicine, and pediatrics. The ratio represents the number of individuals served by one physician in a county, if the population was equally distributed across physicians. Prior to the 2013 County Health Rankings, primary care physicians were defined only as M.D.s. In 2013, D.O.s were incorporated into the definition of primary care physicians and obstetrics/gynecology was removed as a primary care physician type. | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2020                     |
| Dentists (ratio of population to dentists - population per one dentist)                                          | Ratio of the population to dentists. The ratio represents the population served by one dentist if the entire population of a county was distributed equally across all practicing dentists.                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | ESRI Business Analyst. Data accessed September 2023.                                                                                        | 2021                     |
| Other primary care providers (ratio of population to other primary care providers - population per one provider) | Ratio of the county population to the number of other primary care providers. Other primary care providers include nurse practitioners (NP), physician assistants (PA), and clinical nurse specialists. Please note that the methods for calculating this measure changed in the 2017 Rankings.                                                                                                                                                                                                                                                                                                                                                              | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2022                     |
| Children receiving dental care (ages 0 to 20)                                                                    | This indicator reflects the percentage of children (aged 0-20 years) enrolled in Medicaid (320+ days) who                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Maryland Department of Health, State Health Improvement Process                                                                             | 2021                     |

| Measure                                                                                                | Description                                                                                                                                                                                                                                                                                                                                        | Data Source                                                                                                                                 | Most Recent Data Year(s) |
|--------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
|                                                                                                        | received at least one dental visit during the past year.                                                                                                                                                                                                                                                                                           | (SHIP). Data accessed September 2023.                                                                                                       |                          |
| ED visit rate due to addiction-related conditions                                                      | This indicator shows the rate of emergency department visits related to substance use disorders (per 100,000 population).                                                                                                                                                                                                                          | Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.                                       | 2017                     |
| ED visit rate due to asthma                                                                            | This indicator shows the rate of emergency department visits due to asthma (per 10,000 population).                                                                                                                                                                                                                                                | Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.                                       | 2017                     |
| ED visit rate due to diabetes                                                                          | This indicator shows the emergency department visit rate due to diabetes (per 100,000 population).                                                                                                                                                                                                                                                 | Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.                                       | 2017                     |
| ED visit rate due to hypertension                                                                      | This indicator shows the rate of emergency department visits due to hypertension (per 100,000 population).                                                                                                                                                                                                                                         | Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.                                       | 2017                     |
| ED visit rate due to dental problems                                                                   | This indicator shows the emergency department visit rate related to dental problems (per 100,000 population).                                                                                                                                                                                                                                      | Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.                                       | 2017                     |
| Persons with a usual primary care provider                                                             | This indicator shows the percentage of people who reported that they had one person they think of as their personal doctor or healthcare provider.                                                                                                                                                                                                 | Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.                                       | 2021                     |
| Uninsured ED visits                                                                                    | This indicator shows the percentage of persons without health (medical) insurance.                                                                                                                                                                                                                                                                 | Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.                                       | 2017                     |
| Mental health providers (ratio of population to mental health providers - population per one provider) | Ratio of the population to mental health providers. Mental health providers are defined as psychiatrists, psychologists, licensed clinical social workers, counselors, marriage and family therapists, and mental health providers that treat alcohol and other drug abuse, as well as advanced practice nurses specializing in mental healthcare. | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2022                     |

| Measure | Description                                                                                                                                                                                                                                                                                           | Data Source | Most Recent Data Year(s) |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|--------------------------|
|         | The ratio represents the number of individuals served by one mental health provider in a county, if the population were equally distributed across providers. In 2015, marriage and family therapists and mental health providers that treat alcohol and other drug abuse were added to this measure. |             |                          |

**Table A3.2: Built Environment**

| Measure                                                                                                         | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Data Source                                                                                                                                 | Most Recent Data Year(s) |
|-----------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| Food environment index (index of factors that contribute to a healthy food environment, 0 (worst) to 10 (best)) | <p>The Food Environment Index measures the quality of the food environment in a county on a scale from 0 to 10. The Food Environment Index is comprised of two variables: Limited access to healthy foods from the USDA's Food Environment Atlas estimates the percentage of the population who are low income and do not live close to a grocery store. Living close to a grocery store is defined differently in rural and nonrural areas: in rural areas, it means living less than 10 miles from a grocery store whereas in nonrural areas, it means less than 1 mile. Low income is defined as having an annual family income of less than or equal to 200 percent of the federal poverty threshold for the family size. Food insecurity from Feeding America estimates the percentage of the population who did not have access to a reliable source of food during the past year. The two variables are scaled from 0 to 10 (zero being the worst value in the nation, and 10 being the best) and averaged to produce the Food Environment Index. In 2016, the average value for counties was 7.0 and most counties fell between about 5.4 and 8.3.</p> | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2019 & 2020              |
| Access to exercise opportunities (percent of                                                                    | Percentage of individuals in a county who live reasonably close to a                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Robert Wood Johnson Foundation & University                                                                                                 | 2022 & 2020              |

| Measure                                                                 | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Data Source                                                                                                                                 | Most Recent Data Year(s) |
|-------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| the population with adequate access to locations for physical activity) | <p>location for physical activity. Locations for physical activity are defined as parks or recreational facilities. Individuals are considered to have access to exercise opportunities if they: reside in a census block that is within a half mile of a park or reside in an urban census block that is within one mile of a recreational facility or reside in a rural census block that is within three miles of a recreational facility. The numerator is the number of individuals who live in census blocks meeting at least one of the above criteria. The denominator is the total county population. Locations for physical activity are defined as parks or recreational facilities. Parks include local, state, and national parks. Recreational facilities include YMCAs as well as businesses identified by the following Standard Industry Classification (SIC) codes and include a wide variety of facilities including gyms, community centers, dance studios and pools: 799101, 799102, 799103, 799106, 799107, 799108, 799109, 799110, 799111, 799112, 799201, 799701, 799702, 799703, 799704, 799707, 799711, 799717, 799723, 799901, 799908, 799958, 799969, 799971, 799984, or 799998. The way this measure is calculated has changed over time. In 2018, County Health Rankings switched from using North American Information Classification System (NAICS) codes to using Standard Industry Classification (SIC) codes due to lack of availability of a nationally reliable and updated data source.</p> | of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023.                                             |                          |
| % Broadband Access                                                      | Percentage of households with broadband internet connection.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2017-2021                |

**Table A3.4: Diet and Exercise**

| Measure                                                                                  | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Data Source                                                                                                                                 | Most Recent Data Year(s) |
|------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| Physical inactivity<br>(percent of adults that report no leisure time physical activity) | Percentage of adults ages 20 and over reporting no leisure-time physical activity in the past month. Examples of physical activities include running, calisthenics, golf, gardening, or walking for exercise. The method for calculating Physical Inactivity changed. Data for Physical Inactivity are provided by the CDC Interactive Diabetes Atlas which combines 3 years of survey data to provide county-level estimates. In 2011, BRFSS changed their methodology to include cell phone and landline participants. Previously only landlines were used to collect data. Physical Inactivity is created using statistical modeling. | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2020                     |
| Physical Activity<br>(percentage)                                                        | This indicator shows the percentage of persons who reported at least 150 minutes of moderate physical activity or at least 75 minutes of vigorous physical activity per week.                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.                                       | 2019                     |

**Table A3.5: Education**

| Measure                                       | Description                                                                                                                                                                                                                                                                                                                                                                                                                      | Data Source                                                                                                                                 | Most Recent Data Year(s) |
|-----------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| Students entering kindergarten ready to learn | This indicator shows the percentage of students who enter Kindergarten ready to learn.                                                                                                                                                                                                                                                                                                                                           | Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.                                       | 2017                     |
| School Segregation                            | The extent to which students within different race and ethnicity groups are unevenly distributed across schools when compared with the racial and ethnic composition of the local population. The index ranges from 0 to 1 with lower values representing a school composition that approximates race and ethnicity distributions in the student populations within the county, and higher values representing more segregation. | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2021-2022                |

| Measure                           | Description                                                                                                                                                                                                       | Data Source                                                                                                                                 | Most Recent Data Year(s) |
|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| School Funding Adequacy           | The average gap in dollars between actual and required spending per pupil among public school districts. Required spending is an estimate of dollars needed to achieve U.S. average test scores in each district. | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2020                     |
| % Less than 9 <sup>th</sup> Grade | Percentage of adults over age 25 who have less than a 9 <sup>th</sup> grade education.                                                                                                                            | ESRI Business Analyst. Data accessed September 2023.                                                                                        | 2023                     |
| % Some High School                | Percentage of adults over age 25 who attended some high school but did not earn their diploma or alternative credential.                                                                                          | ESRI Business Analyst. Data accessed September 2023.                                                                                        | 2023                     |
| % High School Diploma             | Percentage of adults over age 25 who earned a high school diploma.                                                                                                                                                | ESRI Business Analyst. Data accessed September 2023.                                                                                        | 2023                     |
| % GED/Alternative Credential      | Percentage of adults over age 25 who earned a GED or an alternative credential.                                                                                                                                   | ESRI Business Analyst. Data accessed September 2023.                                                                                        | 2023                     |
| % Some College                    | Percentage of adults over age 25 who attended some college but did not earn their diploma.                                                                                                                        | ESRI Business Analyst. Data accessed September 2023.                                                                                        | 2023                     |
| % Associate's Degree              | Percentage of adults over age 25 who earned an Associate's degree.                                                                                                                                                | ESRI Business Analyst. Data accessed September 2023.                                                                                        | 2023                     |
| % Bachelor's Degree               | Percentage of adults over age 25 who earned a four-year college Bachelor's degree.                                                                                                                                | ESRI Business Analyst. Data accessed September 2023.                                                                                        | 2023                     |
| % Graduate/ Professional Degree   | Percentage of adults over age 25 who earned a graduate or professional degree.                                                                                                                                    | ESRI Business Analyst. Data accessed September 2023.                                                                                        | 2023                     |

**Table A3.6: Employment**

| Measure                                                      | Description                                                                                                                                                                                                                                                                                                                                                                      | Data Source                                          | Most Recent Data Year(s) |
|--------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|--------------------------|
| Unemployment rate (percent of population age 16+ unemployed) | Percentage of a county's workforce that is not employed. The numerator is the number of individuals over age 16 in a county who are seeking work but do not have a job. The denominator is the total labor force, which includes all individuals over age 16 who are actively searching for work and unemployed plus those who are employed. Unemployment estimates are modeled. | ESRI Business Analyst. Data accessed September 2023. | 2023                     |

**Table A3.7: Environmental Quality**

| Measure                                                                                    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Data Source                                                                                                                                 | Most Recent Data Year(s) |
|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| Air pollution (avg daily measure of fine particulate matter in micrograms per cubic meter) | <p>Average daily density of fine particulate matter in micrograms per cubic meter. Fine particulate matter is defined as particles of air pollutants with an aerodynamic diameter less than 2.5 micrometers (PM2.5).</p> <p>Air Pollution is modeled. For 2017, County Health Rankings is using data provided by the EPHT Network. From 2013-2016 the County Health Rankings used data provided by the NASA Applied Sciences Program, which used a similar methodology but also incorporates satellite data. For 2012 and prior years of the County Health Rankings, data were obtained from the EPHT Network, but the measures of air quality differed from the current measure: County Health Rankings reported the average number of days annually that both PM2.5 and ozone pollution were reported to be over the accepted limit.</p> | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2019                     |
| Presence of Water Violation                                                                | Indicator of the presence of health-related drinking water violations. 'Yes' indicates the presence of a violation, 'No' indicates no violation.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2021                     |
| Days with Unhealthy Air Quality                                                            | Number of days where the daily 8-hour maximum concentration of ozone exceeded 71 parts per billion, the minimum value deemed by the Environmental Protection Agency as unhealthy for sensitive groups.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | American Lung Association. Data accessed September 2023.                                                                                    | 2019-2021                |
| Days with Unhealthy Particle Pollution                                                     | Number of days where the daily 24-hour maximum concentration for particles with diameter less than 2.5 micrometers exceeded 33.5 micrograms per cubic meter, the minimum value deemed by the Environmental Protection Agency as unhealthy for sensitive groups.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | American Lung Association. Data accessed September 2023.                                                                                    | 2019-2021                |

**Table A3.8: Family, Community, and Social Support**

| Measure                                                                       | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Data Source                                                                                                                                 | Most Recent Data Year(s) |
|-------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| Percentage of children that live in single-parent household                   | Percentage of children (less than 18 years of age) in family households that live in a household headed by a single parent. The single parent could be a male or female and is without the presence of a spouse. Foster children and children living in non-family households or group quarters are not included in either the numerator or denominator.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2017-2021                |
| Social associations (number of membership associations per 10,000 population) | Number of organizations per 10,000 population in a county. The numerator is the number of organizations or associations in a county. Associations include membership organizations such as civic organizations, bowling centers, golf clubs, fitness centers, sports organizations, political organizations, labor organizations, business organizations, and professional organizations. The denominator is the population of a county. Social Associations does not measure all of the social support available within a county. Data and business codes are self-reported by businesses in a county. We use the primary business code of organizations, which in some cases may not match up with our notion of what should be labeled as a civic organization. This measure does not take into account other important social connections offered via family support structures, informal networks, or community service organizations, all of which are important to consider when understanding the amount of social support available within a county. | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2020                     |
| Disconnected youth                                                            | Percentage of teens and young adults ages 16-24 who are neither working nor in school.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2017-2021                |

| Measure                               | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Data Source                                                                                                                                 | Most Recent Data Year(s) |
|---------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| Residential segregation - black/white | Degree to which two or more groups live separately from one another in a geographic area. The index of dissimilarity is a demographic measure of the evenness with which two groups (black and white residents, in this case) are distributed across the component geographic areas (census tracts, in this case) that make up a larger area (counties, in this case). The index score can be interpreted as the percentage of either black or white residents that would have to move to different geographic areas in order to produce a distribution that matches that of the larger area. | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2017-2021                |
| Percentage not proficient in English  | Percentage of population that is not proficient in English.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2017-2021                |
| Childcare Cost Burden                 | Childcare costs for a household with two children as a percent of median household income.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2022 & 2021              |
| Childcare Centers                     | Number of childcare centers per 1,000 population under 5 years old.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2010-2022                |
| Diversity Index                       | Likelihood of two people chosen at random being from a different race/ethnicity.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | ESRI Business Analyst. Data accessed September 2023.                                                                                        | 2023                     |

**Table A3.9: Food Security**

| Measure                                               | Description                                                                                             | Data Source                                                         | Most Recent Data Year(s) |
|-------------------------------------------------------|---------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|--------------------------|
| Percentage of households experiencing food insecurity | Percentage of the population who did not have access to a reliable source of food during the past year. | Robert Wood Johnson Foundation & University of Wisconsin Population | 2020                     |

| Measure                                                             | Description                                                                                                                                                                                                                                                                 | Data Source                                                                                                                                 | Most Recent Data Year(s) |
|---------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
|                                                                     | This measure was modeled using information from the Community Population Survey, Bureau of Labor Statistics, and American Community Survey. More detailed information can be found here. This is one of two measures that are used to construct the Food Environment Index. | Health Institute, County Health Rankings. Data accessed September 2023.                                                                     |                          |
| Limited access to healthy foods                                     | Percentage of population who are low-income and do not live close to a grocery store.                                                                                                                                                                                       | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2019                     |
| Children eligible for free or reduced-price lunch                   | Percentage of children enrolled in public schools, grades PK - 12, eligible for free (family income less than 130 percent of federal poverty level) or reduced price (family income less than 185 percent of federal poverty level) lunch.                                  | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2020-2021                |
| Food Insecurity Among Middle School Students: All races/ethnicities | Percentage of students who, when asked, said they were worried that their food money would run out before they could buy more, and/or if the food their family bought did not last and they did not have money to get more.                                                 | The Maryland Youth Risk Behavior Survey/Youth Tobacco Survey (YRBS/YTS). Data accessed September 2023.                                      | 2021-2022                |
| Food Insecurity Among High School Students: All races/ethnicities   | Percentage of students who, when asked, said they were worried that their food money would run out before they could buy more, and/or if the food their family bought did not last and they did not have money to get more.                                                 | The Maryland Youth Risk Behavior Survey/Youth Tobacco Survey (YRBS/YTS). Data accessed September 2023.                                      | 2021-2022                |

**Table A3.10: Housing and Homelessness**

| Measure                                                                                                                                                               | Description                                                                                                                                                                                                                                              | Data Source                                                                                                                                 | Most Recent Data Year(s) |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| Severe housing problems (percentage of households with at least 1 of 4 housing problems: overcrowding, high housing costs, or lack of kitchen or plumbing facilities) | Percentage of households with one or more of the following housing problems: Housing unit lacks complete kitchen facilities; Housing unit lacks complete plumbing facilities; Household is severely overcrowded; or Household is severely cost burdened. | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2015-2019                |

| Measure                                                                              | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Data Source                                                                                                                                 | Most Recent Data Year(s) |
|--------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
|                                                                                      | Incomplete kitchen facilities is defined as a unit which lacks a sink with running water, a range or a refrigerator. Incomplete plumbing facilities is defined as lacking hot and cold piped water, a flush toilet, or a bathtub/shower. Severe overcrowding is defined as more than 1.5 persons per room. Severe cost burden is defined as monthly housing costs (including utilities) that exceed 50 percent of monthly income. The numerator is the number of households in a county with at least one of the above housing problems and the denominator is the number of total households in a county. |                                                                                                                                             |                          |
| Percentage of owner-occupied housing                                                 | Percentage of occupied housing units that are owned.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2017-2021                |
| Percentage of people spending more than 50 percent of their income on rental housing | Number of renter-occupied housing units spending 50 or more percent of household income on rent as a percentage of total renter-occupied housing units.                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2017-2021                |
| Affordable Housing (percentage)                                                      | This indicator shows the percentage of housing units sold that are affordable on the median teacher's salary.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.                                       | 2016                     |

**Table A3.11: Income**

| Measure                                                           | Description                                                                                                                                                                                                                                            | Data Source                                                                                                                                 | Most Recent Data Year(s) |
|-------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| Children in poverty (percent of children under age 18 in poverty) | Percentage of children under age 18 living in poverty. Poverty status is defined by family size and income and is measured at the household level. If a household's income is lower than the poverty threshold for a household of their size, they are | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2021                     |

| Measure                                                                                               | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Data Source                                                                                                                                 | Most Recent Data Year(s) |
|-------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
|                                                                                                       | considered to be in poverty. Poverty thresholds differ by household size and geography. For more information on how poverty thresholds are calculated please see the Census poverty page. Children in Poverty estimates are modeled.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                             |                          |
| Median household income                                                                               | Income where half of households in a county earn more and half of households earn less. Income, defined as “Total income”, is the sum of the amounts reported separately for: wage or salary income; net self-employment income; interest, dividends, or net rental or royalty income or income from estates and trusts; Social Security or Railroad Retirement income; Supplemental Security Income (SSI); public assistance or welfare payments; retirement, survivor, or disability pensions; and all other income. Receipts from the following sources are not included as income: capital gains; money received from the sale of property (unless the recipient was engaged in the business of selling such property); the value of income “in kind” from food stamps, public housing subsidies, medical care, employer contributions for individuals, etc.; withdrawal of bank deposits; money borrowed; tax refunds; exchange of money between relatives living in the same household; gifts and lump-sum inheritances, insurance payments, and other types of lump-sum receipts. | ESRI Business Analyst. Data accessed September 2023.                                                                                        | 2023                     |
| Income inequality (ratio of household income at the 80th percentile to income at the 20th percentile) | Ratio of household income at the 80th percentile to that at the 20th percentile, i.e., when the incomes of all households in a county are listed from highest to lowest, the 80th percentile is the level of income at which only 20 percent of households have higher incomes, and the 20th percentile is the level of income at which only 20 percent of households                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2017-2021                |

| Measure                                                  | Description                                                                                                                          | Data Source                                                                                                                                        | Most Recent Data Year(s) |
|----------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
|                                                          | have lower incomes. A higher inequality ratio indicates greater division between the top and bottom ends of the income spectrum.     |                                                                                                                                                    |                          |
| Percentage of individuals living in poverty              | Number of people living below poverty level as percent of total population.                                                          | MedStar Franklin Square, FY21 Community Health Needs Assessment Advisory Taskforce Kickoff Meeting. Data accessed September 2023.                  | 2017-2021                |
| Household Income (\$, 000s) - All                        | Average annual household income in 2014-2015 for children (now in their mid-30s) who grew up in this area.                           | The Opportunity Atlas, developed in partnership by the U.S. Census Bureau, Harvard University, and Brown University. Data accessed September 2023. | 2014-2015                |
| % Asset Limited, Income Constrained, Employed Households | Percentage of households who are earning more than the Federal Poverty Level, but not enough to afford the basics where they live.   | United for ALICE. Data accessed September 2023.                                                                                                    | 2021                     |
| Gender Pay Gap                                           | Ratio of women's median earnings to men's median earnings for all full-time, year-round workers, presented as "cents on the dollar." | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023.        | 2017-2021                |

**Table A3.12: Length of Life**

| Measure                                                                                          | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Data Source                                                                                                                                 | Most Recent Data Year(s) |
|--------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| Premature Death (years of potential life lost before age 75 per 100,000 population age-adjusted) | Number of events (i.e., deaths, births, etc.) in a given time period (three-year period) divided by the average number of people at risk during that period. Years of potential life lost measures mortality by giving more weight to deaths at earlier ages than deaths at later ages. Premature deaths are deaths before age 75. All of the years of potential life lost in a county during a three-year period are summed and divided by the total population of the county during that same time period-this | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2018-2020                |

| Measure                          | Description                                                                                                                                                                                                                                                                                                                                         | Data Source                                                                                                                                 | Most Recent Data Year(s) |
|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
|                                  | value is then multiplied by 100,000 to calculate the years of potential life lost under age 75 per 100,000 people. These are age-adjusted.                                                                                                                                                                                                          |                                                                                                                                             |                          |
| Premature Age-Adjusted Mortality | Number of deaths among residents under age 75 per 100,000 population (age-adjusted).                                                                                                                                                                                                                                                                | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2018-2020                |
| Life expectancy                  | Average number of additional years that someone at a given age would be expected to live if current mortality conditions remained constant throughout their lifetime. Based on life expectancy at birth. State data are a single year while county data are a three-year aggregate. Data were not reported in the County Health Book prior to 2013. | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2018-2020                |
| Child mortality                  | Number of deaths among children under age 18 per 100,000 population                                                                                                                                                                                                                                                                                 | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2017-2020                |

**Table A3.13: Maternal and Infant Health**

| Measure                                                                | Description                                                                                                                                                                                                                                                                        | Data Source                                                                                                                                 | Most Recent Data Year(s) |
|------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| Low birthweight (percent of live births with birthweight < 2500 grams) | Percentage of live births where the infant weighed less than 2,500 grams (approximately 5 lbs., 8 oz.). The numerator is the number of low birthweight infants born over a 7-year time span, while the denominator is the total number of births in a county during the same time. | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2014-2020                |
| Infant mortality                                                       | Number of all infant deaths (within 1 year), per 1,000 live births.                                                                                                                                                                                                                | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data                          | 2014-2020                |

| Measure | Description | Data Source              | Most Recent Data Year(s) |
|---------|-------------|--------------------------|--------------------------|
|         |             | accessed September 2023. |                          |

**Table A3.14: Mental Health**

| Measure                                                           | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Data Source                                                                                                                                 | Most Recent Data Year(s) |
|-------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| Poor mental health days (avg number in past 30 days age-adjusted) | <p>Average number of mentally unhealthy days reported in past 30 days. This measure is based on responses to the Behavioral Risk Factor Surveillance System (BRFSS) question: "Thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?" The value reported in the County Health Rankings is the average number of days a county's adult respondents report that their mental health was not good. Poor Mental Health Days is age-adjusted. Prior to the 2016 County Health Rankings, the CDC's BRFSS provided the County Health Rankings with county-level estimates that were constructed from seven years of responses from participants who used a landline phone. However, even with multiple years of data, these did not provide reliable estimates for all counties, particularly those with smaller respondent samples. In 2016, the CDC began producing single-year estimates at the county level using a combination of BRFSS data and a multilevel modeling approach based on respondent answers and individual characteristics such as age, sex, and race/ethnicity, along with county-level poverty and county and state-level contextual effects. Poor Mental Health Days estimates are created using statistical modeling.</p> | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2020                     |
| Frequent mental distress                                          | Percentage of adults who reported ≥14 days in response to the question, "Now, thinking about your mental                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Robert Wood Johnson Foundation & University of Wisconsin Population                                                                         | 2020                     |

| Measure                                                    | Description                                                                                                                                        | Data Source                                                                                                                                 | Most Recent Data Year(s) |
|------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
|                                                            | health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?" | Health Institute, County Health Rankings. Data accessed September 2023.                                                                     |                          |
| ED visit rate due to mental health conditions              | This indicator shows the rate of emergency department visits related to mental health disorders (per 100,000 population).                          | Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.                                       | 2017                     |
| Suicide Rate                                               | This indicator shows the suicide rate per 100,000 population.                                                                                      | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2016-2020                |
| Hospitalization rate due to Alzheimer's or other dementias | This indicator shows the rate of hospitalizations related to Alzheimer's or other dementias (per 100,000 population).                              | Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.                                       | 2017                     |
| % Visited Mental Health Provider                           | Percent of adults who saw a psychologist or psychiatrist in the past 12 months.                                                                    | ESRI Business Analyst. Data accessed September 2023.                                                                                        | 2023                     |
| % Used Prescription Antidepressant Medications             | Percent of adults who were prescribed and used antidepressant medications in the last 12 months.                                                   | ESRI Business Analyst. Data accessed September 2023.                                                                                        | 2023                     |
| % Used Prescription Antianxiety Medications                | Percent of adults who were prescribed and used antianxiety medications in the last 12 months.                                                      | ESRI Business Analyst. Data accessed September 2023.                                                                                        | 2023                     |
| % Depressive Disorder Diagnosis                            | Percent of adults reporting that a health professional has told them that they have a depressive disorder.                                         | American Health Rankings. Data accessed September 2023.                                                                                     | 2022                     |

**Table A3.15: Physical Health**

| Measure                                                                            | Description                                                                                                                                                                                                                                                                                                                                                    | Data Source                                                                                                                                 | Most Recent Data Year(s) |
|------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| Poor or fair health (percent of adults reporting fair or poor health age-adjusted) | Percentage of adults in a county who consider themselves to be in poor or fair health. This measure is based on responses to the Behavioral Risk Factor Surveillance Survey (BRFSS) question: "In general, would you say that your health is excellent, very good, good, fair, or poor?" The value reported in the County Health Rankings is the percentage of | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2020                     |

| Measure                                                                                | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Data Source                                                                                                                                 | Most Recent Data Year(s) |
|----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
|                                                                                        | <p>respondents who rated their health “fair” or “poor.” Poor or Fair Health is age-adjusted. Prior to the 2016 County Health Rankings, the CDC’s BRFSS provided the County Health Rankings with county-level estimates that were constructed from seven years of responses from participants who used a landline phone. However, even with multiple years of data, these did not provide reliable estimates for all counties, particularly those with smaller respondent samples. In 2016, the CDC began producing single-year estimates at the county level using a combination of BRFSS data and a multilevel modeling approach based on respondent answers and individual characteristics such as age, sex, and race/ethnicity, along with county-level poverty and county and state-level contextual effects. Poor or Fair Health estimates are created using statistical modeling.</p> |                                                                                                                                             |                          |
| Poor physical health days (avg number of unhealthy days in past 30 days, age-adjusted) | <p>Average number of physically unhealthy days reported in past 30 days. This measure is based on responses to the Behavioral Risk Factor Surveillance System (BRFSS) question: “Thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good?” The value reported in the County Health Rankings is the average number of days a county’s adult respondents report that their physical health was not good. Poor Physical Health Days is age-adjusted. Prior to the 2016 County Health Rankings, the CDC’s BRFSS provided the County Health Rankings with county-level estimates that were constructed from seven years of responses from participants who used a landline phone. However, even with multiple years of data,</p>                                                            | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2020                     |

| Measure                                                        | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Data Source                                                                                                                                 | Most Recent Data Year(s) |
|----------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
|                                                                | these did not provide reliable estimates for all counties, particularly those with smaller respondent samples. In 2016, the CDC began producing single-year estimates at the county level using a combination of BRFSS data and a multilevel modeling approach based on respondent answers and individual characteristics such as age, sex, and race/ethnicity, along with county-level poverty and county and state-level contextual effects. Poor Physical Health Days estimates are created using statistical modeling.                                                                                                                                                                                                                                                       |                                                                                                                                             |                          |
| Adult obesity (percent of adults that report a BMI $\geq 30$ ) | Based on responses to the Behavioral Risk Factor Surveillance Survey (BRFSS) and is the percentage of the adult population (age 20 and older) that reports a body mass index (BMI) greater than or equal to 30 kg/m <sup>2</sup> . Participants are asked to self-report their height and weight. From these reported values, BMIs for the participants are calculated. The method for calculating Adult Obesity changed. Data for Adult Obesity are provided by the CDC Interactive Diabetes Atlas which combines 3 years of survey data to provide county-level estimates. In 2011, BRFSS changed their methodology to include cell phone and landline participants. Previously only landlines were used to collect data. Adult Obesity is created using statistical modeling. | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2020                     |
| Frequent physical distress                                     | Percentage of adults who reported $\geq 14$ days in response to the question, "Thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good?"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2020                     |
| Diabetes prevalence                                            | Prevalence of diagnosed diabetes in a given county. Respondents were considered to have diagnosed diabetes if they responded "yes" to the question, "Has a doctor ever told                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data                          | 2020                     |

| Measure                                                          | Description                                                                                                                                                                                                                                                      | Data Source                                                                                                                                 | Most Recent Data Year(s) |
|------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
|                                                                  | you that you have diabetes?"<br>Women who indicated that they only had diabetes during pregnancy were not considered to have diabetes.                                                                                                                           | accessed September 2023.                                                                                                                    |                          |
| Insufficient Sleep                                               | Percentage of adults who report fewer than 7 hours of sleep on average.                                                                                                                                                                                          | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2020                     |
| Adolescents who are obese                                        | This indicator shows the percentage of adolescent public high school students who are obese.                                                                                                                                                                     | Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.                                       | 2016                     |
| Sudden unexpected infant death rate                              | This indicator shows the rate of sudden unexpected infant deaths (SUIDs) per 1,000 live births. Sudden unexpected infant deaths (SUIDs) include deaths from Sudden Infant Death Syndrome (SIDS), unknown cause, accidental suffocation and strangulation in bed. | Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.                                       | 2016-2020                |
| Adults who are not overweight or obese (percentage)              | This indicator shows the percentage of adults who are not overweight or obese.                                                                                                                                                                                   | Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.                                       | 2021                     |
| Cancer mortality rate                                            | This indicator shows the age-adjusted mortality rate from cancer (per 100,000 population).                                                                                                                                                                       | Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.                                       | 2018-2020                |
| Age-Adjusted Mortality Rate from Heart Disease                   | This indicator shows the age-adjusted mortality rate from heart disease (per 100,000 population).                                                                                                                                                                | Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.                                       | 2018-2020                |
| Age-adjusted Death Rate due to Diabetes (per 100,000 population) | Age-adjusted Death Rate due to Diabetes (per 100,000 population).                                                                                                                                                                                                | MD Vital Statistics Report. Data accessed September 2023.                                                                                   | 2020                     |
| Age-adjusted Death Rate due to Stroke (per 100,000 population)   | Age-adjusted Death Rate due to Stroke (per 100,000 population).                                                                                                                                                                                                  | MD Vital Statistics Report. Data accessed September 2023.                                                                                   | 2020                     |

**Table A3.16: Quality of Care**

| Measure                                                                                            | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Data Source                                                                                                                                 | Most Recent Data Year(s) |
|----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| Preventable hospital stays (rate for ambulatory sensitive conditions per 1,000 Medicare enrollees) | Hospital discharge rate for ambulatory care-sensitive conditions per 1,000 fee-for-service Medicare enrollees. That means it looks at people who were discharged from the hospital for conditions that, with appropriate care, can normally be treated without the need for a hospital stay. Examples of these conditions include convulsions, chronic obstructive pulmonary disease, bacterial pneumonia, asthma, congestive heart failure, hypertension, angina, cellulitis, diabetes, gastroenteritis, kidney/urinary infection, and dehydration. Preventable hospital stays are measured among fee-for-service Medicare enrollees and is age-adjusted. | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2020                     |
| Mammography screening (percent of female Medicare enrollees)                                       | Percentage of female Medicare enrollees ages 67-69 that received at least one mammogram during the last two years. The numerator is women ages 67-69 on Medicare who have received at least one mammogram during the past year. The denominator is all women ages 67-69 on Medicare in a specific geography.                                                                                                                                                                                                                                                                                                                                               | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2020                     |
| Children and adults who are vaccinated annually against seasonal influenza                         | Percentage of fee-for-service (FFS) Medicare enrollees that had an annual flu vaccination.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2020                     |
| Children receiving blood lead screening                                                            | This indicator reflects the percentage of children (aged 12-35 months) enrolled in Medicaid (90+ days) screened for lead in their blood.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.                                       | 2021                     |
| Children with elevated blood lead levels                                                           | Number of children (0-72 months old) with blood lead levels > 10 µg/dL divided by the Total Number of Children (0-72 months old) tested.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.                                       | 2020                     |

| Measure             | Description                                                                                                       | Data Source                                                                                           | Most Recent Data Year(s) |
|---------------------|-------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|--------------------------|
| Early prenatal care | This indicator shows the percentage of pregnant women who receive prenatal care beginning in the first trimester. | Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023. | 2020                     |

**Table A3.17: Safety**

| Measure                                 | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Data Source                                                                                                                                 | Most Recent Data Year(s) |
|-----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| Injury mortality per 100,000 population | Number of deaths from planned (e.g., homicide or suicide) and unplanned (e.g., motor vehicle deaths) injuries per 100,000 population. This measure includes injuries from all causes and intents over a 5-year period. Deaths are counted in the county of residence for the person who died, rather than the county where the death occurred.                                                                                                                                                                                                                                                                                                                                                                                                                      | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2016-2020                |
| Motor vehicle crash deaths              | Number of deaths due to traffic accidents involving a motor vehicle per 100,000 population. Motor vehicle crash deaths include traffic accidents involving motorcycles; 3-wheel motor vehicles; cars; vans; trucks; buses; street cars; ATVs; industrial, agricultural, and construction vehicles; and bicyclists or pedestrians when colliding with any of the previously listed motor vehicles. Deaths due to boating accidents and airline crashes are not included in this measure. In prior years, non-traffic motor vehicle accidents were included in this definition. ICD10 codes included are V02-V04 (.1, .9), V09.2, V12-V14 (.3-.9), V19 (.4-.6), V20-V28 (.3-.9), V29-V79 (.4-.9), V80 (.3-.5), V81.1, V82.1, V83-V86 (.0-.3), V87 (.0-.8), and V89.2. | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2014-2020                |
| Homicides                               | Number of deaths from assaults, defined as ICD-10 codes X85-Y09, per 100,000 population                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data                          | 2016-2020                |

| Measure                                | Description                                                                                                                      | Data Source                                                                                                                                 | Most Recent Data Year(s) |
|----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
|                                        |                                                                                                                                  | accessed September 2023.                                                                                                                    |                          |
| Firearm fatalities                     | Number of deaths due to firearms, defined as ICD-10 codes W32-W34, X72-X74, X93-X95, Y22-Y24, and Y35.0, per 100,000 population. | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2019                     |
| Juvenile arrests                       | Rate of delinquency cases per 1,000 juveniles.                                                                                   | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2022                     |
| Child maltreatment rate                | This indicator shows the rate of children who are maltreated per 1,000 population under the age of 18.                           | Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.                                       | 2018-2020                |
| Fall-related death rate                | This indicator shows the rate of fall-related deaths per 100,000 population.                                                     | Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.                                       | 2017                     |
| Pedestrian injury rate on public roads | This indicator shows the rate of pedestrian injuries on public roads per 100,000 population.                                     | Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.                                       | 2020                     |
| Domestic Violence                      | Number of domestic violence crimes divided by total population.                                                                  | Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.                                       | 2020                     |

**Table A3.18 Sexual Health**

| Measure                                                      | Description                                                      | Data Source                                                                                                                                 | Most Recent Data Year(s) |
|--------------------------------------------------------------|------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| Sexually transmitted infections (chlamydia rate per 100,000) | Number of newly diagnosed chlamydia cases per 100,000 population | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2020                     |

| Measure                                        | Description                                                                                                    | Data Source                                                                                                                                 | Most Recent Data Year(s) |
|------------------------------------------------|----------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| Teen birth rate (per 1,000 females ages 15-19) | Number of births to females ages 15-19 per 1,000 females                                                       | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2014-2020                |
| HIV prevalence                                 | Number of diagnosed cases of HIV for persons aged 13 years and older in a county per 100,000 population.       | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2020                     |
| HIV incidence rate                             | This indicator shows the rate of adult/adolescent cases (age 13+) diagnosed with HIV (per 100,000 population). | Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.                                       | 2021                     |

**Table A3.19: Substance Use Disorders**

| Measure                         | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Data Source                                                                                                                                 | Most Recent Data Year(s) |
|---------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| Excessive drinking              | Percentage of adults that report either binge drinking, defined as consuming more than 4 (women) or 5 (men) alcoholic beverages on a single occasion in the past 30 days, or heavy drinking, defined as drinking more than one (women) or 2 (men) drinks per day on average. Please note that the methods for calculating this measure changed in the 2011 Rankings and again in the 2016 Rankings. Excessive Drinking estimates are created using statistical modeling. | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2020                     |
| Alcohol-impaired driving deaths | Percentage of motor vehicle crash deaths which had alcohol involvement. The National Highway Traffic Safety Administration defines a fatal crash as alcohol-related or alcohol-involved if either a driver or a non-motorist (usually a pedestrian or bicyclist) had a measurable or estimated blood alcohol concentration of 0.01 grams per deciliter or above. Alcohol-Impaired                                                                                        | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2016-2020                |

| Measure                                          | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Data Source                                                                                                                                 | Most Recent Data Year(s) |
|--------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
|                                                  | Driving Deaths are measured in the county of occurrence.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                             |                          |
| Drug overdose deaths                             | Number of deaths due to drug poisoning per 100,000 population. ICD-10 codes used include X40-X44, X60-X64, X85, and Y10-Y14. These codes cover accidental, intentional, and undetermined poisoning by and exposure to: 1) nonopioid analgesics, antipyretics and antirheumatics, 2) antiepileptic, sedative-hypnotic, antiparkinsonism and psychotropic drugs, not elsewhere classified, 3) narcotics and psychodysleptics [hallucinogens], not elsewhere classified, 4) other drugs acting on the autonomic nervous system, and 5) other and unspecified drugs, medicaments and biological substances. | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2018-2020                |
| Opioid prescriptions dispensed (per 100 persons) | Opioid prescriptions dispensed (per 100 persons).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Center for Disease Control and Prevention. Data accessed September 2023.                                                                    | 2020                     |

**Table A3.20: Tobacco Use**

| Measure                              | Description                                                                                                                                                                                                                                                                                       | Data Source                                                                                                                                 | Most Recent Data Year(s) |
|--------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| Adult smoking                        | Percentage of the adult population that currently smokes every day or most days and has smoked at least 100 cigarettes in their lifetime. Please note that the methods for calculating this measure changed in the 2016 Rankings. Adult Smoking estimates are created using statistical modeling. | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2020                     |
| Adolescents who use tobacco products | This indicator shows the percentage of adolescents (public high school students) who used any tobacco product in the last 30 days.                                                                                                                                                                | Maryland Department of Health, State Health Improvement Process (SHIP). Data accessed September 2023.                                       | 2016                     |

**Table A3.21: Transportation Options and Transit**

| Measure                                                                                                                     | Description                                                                                                                                                                                                                                                                                | Data Source                                                                                                                                 | Most Recent Data Year(s) |
|-----------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| Driving alone to work (percent of the workforce that drives alone to work)                                                  | Percentage of the workforce that usually drives alone to work. The numerator is the number of workers who commute alone to work via a car, truck, or van. The denominator is the total workforce.                                                                                          | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2017-2021                |
| Long commute/driving alone (among workers who commute in their car alone, the percentage that commute more than 30 minutes) | Percentage of workers who drive alone (via car, truck, or van) with a commute longer than 30 minutes. The numerator is the number of workers who drive alone for more than 30 minutes during their commute. The denominator is the number of workers who drive alone during their commute. | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2017-2021                |
| Traffic volume                                                                                                              | Average traffic volume per meter of major roadways in the county.                                                                                                                                                                                                                          | Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed September 2023. | 2019                     |
| % Car Ownership                                                                                                             | Percent of households that own at least one insured car.                                                                                                                                                                                                                                   | ESRI Business Analyst. Data accessed September 2023.                                                                                        | 2023                     |
| Household Intracity Mass Transit Spending                                                                                   | Average household spending on fares for mass transit trips within the county.                                                                                                                                                                                                              | ESRI Business Analyst. Data accessed September 2023.                                                                                        | 2023                     |

## APPENDIX 4 | SECONDARY DATA COMPARISONS

### Description of Focus Area Comparisons

When viewing the secondary data summary tables, please note that the following color shadings have been included to identify how Baltimore County compares to Maryland and the national benchmark. If both statewide Maryland and national data was available, Maryland data was preferentially used as the target/benchmark value.

**Secondary Data Summary Table Color Comparisons**

| Color Shading                                                                     | Priority Level | Baltimore County Description                                                                                                                                                                                     |
|-----------------------------------------------------------------------------------|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | Low            | Represents measures in which Baltimore County scores are <b>more than five percent better</b> than the most applicable target/benchmark and for which a low priority level was assigned.                         |
|  | Medium         | Represents measures in which Baltimore County scores are comparable to the most applicable target/benchmark scoring <b>within or equal to five percent</b> , and for which a medium priority level was assigned. |
|  | High           | Represents measures in which Baltimore County scores are <b>more than five percent worse</b> than the most applicable target/benchmark and for which a high priority level was assigned.                         |

Note: Please see the methodology section of this report for more information on assigning need levels to the secondary data.

Please note that to categorize each metric in this manner and identify the priority level, the Baltimore County value was compared to the benchmark by calculating the percentage difference between the values, relative to the benchmark value:

$$(Baltimore\ Co\ Value - Benchmark\ Value) / (Benchmark) \times 100 = \% \text{ Difference Used to Identify Priority Level}$$

For example, for the % Limited Access to Healthy Foods metric, the following calculation was completed:

$$(4.4 - 3.6) / (3.6) \times 100\% = 22.2\% = \text{Displayed as High Priority Level, Shaded in Red}$$

This metric indicates that the percentage of the population with limited access to healthy foods in Baltimore County is 22 percent worse (or, in this case, higher) than the percentage of the population with limited access to healthy foods in the state of Maryland.

**Detailed Focus Area Benchmarks****Table A4.1: Access to Care**

| Measure                                       | National Benchmark | Maryland Benchmark | Baltimore County Data | Most Recent Data Year | Baltimore County Need |
|-----------------------------------------------|--------------------|--------------------|-----------------------|-----------------------|-----------------------|
| % Uninsured                                   | 10.0%              | 6.7%               | 6.5%                  | 2021                  | Medium                |
| Primary Care Physicians Ratio                 | 1,310:1            | 1,133:1            | 1,098:1               | 2020                  | Medium                |
| Dentist Ratio                                 | 1,380:1            | 1,258:1            | 1,299:1               | 2021                  | Medium                |
| Other Primary Care Provider Ratio             | 810:1              | 775:1              | 772:1                 | 2022                  | Medium                |
| Children receiving dental care                | N/A                | 56.3               | 55.0                  | 2021                  | Medium                |
| ED visits due to addiction-related conditions | N/A                | 2,017              | 1,689                 | 2017                  | Low                   |
| ED visits due to asthma                       | N/A                | 68.4               | 68.0                  | 2017                  | Medium                |
| ED visits due to diabetes                     | N/A                | 243.7              | 224.6                 | 2017                  | Low                   |
| ED visits due to hypertension                 | N/A                | 351.2              | 340.7                 | 2017                  | Medium                |
| ED visits due to dental care                  | N/A                | 362.7              | 281.1                 | 2017                  | Low                   |
| Persons with usual primary care provider      | N/A                | 87.3%              | 88.6%                 | 2021                  | Medium                |
| Uninsured ED visits                           | N/A                | 8.6                | 7.9                   | 2017                  | Low                   |

**Table A4.2: Built Environment**

| Measure                                 | National Benchmark | Maryland Benchmark | Baltimore County Data | Most Recent Data Year | Baltimore County Need |
|-----------------------------------------|--------------------|--------------------|-----------------------|-----------------------|-----------------------|
| Food Environment Index                  | 7.0                | 8.7                | 8.3                   | 2019/2020             | Low                   |
| % with Access to Exercise Opportunities | 84.0%              | 92.0%              | 97.2%                 | 2020/2022             | Medium                |
| Broadband Access                        | 87.0%              | 90.0%              | 89.0%                 | 2017-2021             | Medium                |

**Table A4.3: Diet and Exercise**

| Measure               | National Benchmark | Maryland Benchmark | Baltimore County Data | Most Recent Data Year | Baltimore County Need |
|-----------------------|--------------------|--------------------|-----------------------|-----------------------|-----------------------|
| % Physically Inactive | 22.0%              | 20.6%              | 25.0%                 | 2020                  | High                  |

**Table A4.4: Education**

| Measure                                       | National Benchmark | Maryland Benchmark | Baltimore County Data | Most Recent Data Year | Baltimore County Need |
|-----------------------------------------------|--------------------|--------------------|-----------------------|-----------------------|-----------------------|
| Students entering kindergarten ready to learn | N/A                | 45.0%              | 47.0%                 | 2017                  | Medium                |
| School segregation                            | 0.25               | 0.26               | 0.18                  | 2021-2022             | Low                   |
| School funding adequacy                       | 1,062              | 724                | -260                  | 2020                  | High                  |

**Table A4.5: Employment**

| Measure      | National Benchmark | Maryland Benchmark | Baltimore County Data | Most Recent Data Year | Baltimore County Need |
|--------------|--------------------|--------------------|-----------------------|-----------------------|-----------------------|
| % Unemployed | 5.4%               | 3.8%               | 4.1%                  | 2023                  | High                  |

**Table A4.6: Environmental Quality**

| Measure             | National Benchmark | Maryland Benchmark | Baltimore County Data | Most Recent Data Year | Baltimore County Need |
|---------------------|--------------------|--------------------|-----------------------|-----------------------|-----------------------|
| Average Daily PM2.5 | 7.4                | 7.4                | 8.3                   | 2019                  | High                  |

**Table A4.7: Family, Community and Social Support**

| Measure                                | National Benchmark | Maryland Benchmark | Baltimore County Data | Most Recent Data Year | Baltimore County Need |
|----------------------------------------|--------------------|--------------------|-----------------------|-----------------------|-----------------------|
| % Children in Single-Parent Households | 25.0%              | 26.2%              | 29.1%                 | 2017-2021             | High                  |
| Social Association Rate                | 9.1                | 8.9                | 8.1                   | 2020                  | High                  |
| % Disconnected Youth                   | 7.0%               | 6.0%               | 6.1%                  | 2017-2021             | Medium                |
| Segregation Index – Black/White        | 63.0               | 63.5               | 59.7                  | 2017-2021             | Low                   |
| % Not Proficient in English            | 14.0%              | 3.0%               | 2.0%                  | 2017-2021             | Low                   |

| Measure               | National Benchmark | Maryland Benchmark | Baltimore County Data | Most Recent Data Year | Baltimore County Need |
|-----------------------|--------------------|--------------------|-----------------------|-----------------------|-----------------------|
| Diversity Index       | 72.1               | 74.3               | 68.4                  | 2023                  | High                  |
| Childcare Cost Burden | 27.0%              | 22.0%              | 22.0%                 | 2021/2022             | Low                   |
| Childcare Centers     | 7.0                | 6.0                | 5.0                   | 2010-2022             | High                  |

**Table A4.8: Food Security**

| Measure                                                | National Benchmark | Maryland Benchmark | Baltimore County Data | Most Recent Data Year | Baltimore County Need |
|--------------------------------------------------------|--------------------|--------------------|-----------------------|-----------------------|-----------------------|
| % Food Insecure                                        | 12.0%              | 9.0%               | 10.3%                 | 2020                  | High                  |
| % Limited Access to Health Foods                       | 6.0%               | 3.6%               | 4.4%                  | 2019                  | High                  |
| % Eligible for Free or Reduced Lunch                   | 53.0%              | 45.0%              | 52.0%                 | 2020-2021             | High                  |
| % Households with Children Receiving Public Assistance | 24.4%              | 21.2%              | 23.3%                 | 2020                  | High                  |
| Food Insecurity: Middle Schoolers                      | N/A                | 27.5%              | 31.6%                 | 2021-2022             | High                  |
| Food Insecurity: Middle Schoolers                      | N/A                | 27.5%              | 30.9%                 | 2021-2022             | High                  |

**Table A4.9: Housing and Homelessness**

| Measure                      | National Benchmark | Maryland Benchmark | Baltimore County Data | Most Recent Data Year | Baltimore County Need |
|------------------------------|--------------------|--------------------|-----------------------|-----------------------|-----------------------|
| % Severe Housing Problems    | 17.0%              | 15.7%              | 15.3%                 | 2015-2019             | Medium                |
| % Homeowners                 | 65.0%              | 67.3%              | 66.5%                 | 2017-2021             | Medium                |
| % Severe Housing Cost Burden | 14.0%              | 14.0%              | 14.0%                 | 2017-2021             | Medium                |
| % Affordable Housing         | N/A                | 48.1%              | 64.1%                 | 2016                  | Low                   |

**Table A4.10: Income**

| Measure                 | National Benchmark | Maryland Benchmark | Baltimore County Data | Most Recent Data Year | Baltimore County Need |
|-------------------------|--------------------|--------------------|-----------------------|-----------------------|-----------------------|
| % Children in Poverty   | 17.0%              | 14.0%              | 14.2%                 | 2021                  | Medium                |
| Median Household Income | \$69,700           | \$93,432           | \$82,607              | 2023                  | High                  |
| Income Inequality       | 4.9                | 4.5                | 4.3                   | 2017-2021             | Medium                |
| % Living in Poverty     | 12.8%              | 10.3%              | 9.8%                  | 2017-2021             | Medium                |
| ALICE Households        | 28%                | 29%                | 34%                   | 2021                  | High                  |
| Gender Pay Gap          | 0.81               | 0.87               | 0.85                  | 2017-2021             | Medium                |

**Table A4.11: Length of Life**

| Measure                           | National Benchmark | Maryland Benchmark | Baltimore County Data | Most Recent Data Year | Baltimore County Need |
|-----------------------------------|--------------------|--------------------|-----------------------|-----------------------|-----------------------|
| Years of Potential Life Lost Rate | 7,300              | 7,547              | 8,370.7               | 2018-2020             | High                  |
| Premature Age-Adjusted Mortality  | 360                | 360                | 390                   | 2018-2020             | High                  |
| Life Expectancy                   | 78.5               | 78.6               | 77.5                  | 2018-2020             | Medium                |
| Child Mortality Rate              | 50.0               | 48.5               | 54.3                  | 2017-2020             | High                  |

**Table A4.12: Maternal and Infant Health**

| Measure               | National Benchmark | Maryland Benchmark | Baltimore County Data | Most Recent Data Year | Baltimore County Need |
|-----------------------|--------------------|--------------------|-----------------------|-----------------------|-----------------------|
| % Low Birthweight     | 8.0%               | 8.7%               | 9.1%                  | 2014-2020             | Medium                |
| Infant Mortality Rate | 6.0                | 6.3                | 6.5                   | 2014-2020             | Medium                |

**Table A4.13: Mental Health**

| Measure                                | National Benchmark | Maryland Benchmark | Baltimore County Data | Most Recent Data Year | Baltimore County Need |
|----------------------------------------|--------------------|--------------------|-----------------------|-----------------------|-----------------------|
| Mental Health Provider Ratio           | 340:1              | 315:1              | 262:1                 | 2022                  | Low                   |
| Average No. of Mentally Unhealthy Days | 4.4                | 4.1                | 4.5                   | 2020                  | High                  |
| % Frequent Mental Distress             | 14.0%              | 12.7%              | 14.5%                 | 2020                  | High                  |

| Measure                                                    | National Benchmark | Maryland Benchmark | Baltimore County Data | Most Recent Data Year | Baltimore County Need |
|------------------------------------------------------------|--------------------|--------------------|-----------------------|-----------------------|-----------------------|
| ED visits due to mental health conditions                  | N/A                | 4,291.5            | 4,210.1               | 2017                  | Medium                |
| Hospitalization rate due to Alzheimer's or other dementias | N/A                | 515.5              | 559.0                 | 2017                  | High                  |
| % Visited Mental Health Provider                           | N/A                | 4.7%               | 4.9%                  | 2023                  | High                  |
| % Used Prescription Antidepressant Medications             | N/A                | 6.7%               | 7.0%                  | 2023                  | High                  |
| % Used Prescription Antianxiety Medications                | N/A                | 7.6%               | 7.9%                  | 2023                  | Medium                |
| Depression rate                                            | 20.5%              | 16.6%              | 20.7%                 | 2022                  | High                  |
| Suicide death rate                                         | 14.0               | 10.0               | 11.0                  | 2016-2020             | High                  |

Table A4.14: Physical Health

| Measure                                    | National Benchmark | Maryland Benchmark | Baltimore County Data | Most Recent Data Year | Baltimore County Need |
|--------------------------------------------|--------------------|--------------------|-----------------------|-----------------------|-----------------------|
| % Adults with Obesity                      | 32.0%              | 30.9%              | 31.7%                 | 2020                  | Medium                |
| % Adults with Diabetes                     | 9.0%               | 9.1%               | 8.8%                  | 2020                  | Medium                |
| % Frequent Physical Distress               | 9.0%               | 6.8%               | 7.7%                  | 2020                  | High                  |
| % Insufficient Sleep                       | 33.0%              | 34.1%              | 34.2%                 | 2020                  | Medium                |
| % Fair or Poor Health                      | 12.0%              | 10.6%              | 12.0%                 | 2020                  | High                  |
| Avg. No. of Physically Unhealthy Days      | 3.0                | 2.5                | 2.5                   | 2020                  | Medium                |
| Adolescents who are obese                  | N/A                | 15.9               | 14.7                  | 2016                  | Low                   |
| Adults who are not overweight or obese (%) | N/A                | 33.4               | 34.1                  | 2021                  | Medium                |
| Age-Adjusted Death Rate                    | N/A                | 163.3              | 180.9                 | 2018-2020             | High                  |

| Measure                               | National Benchmark | Maryland Benchmark | Baltimore County Data | Most Recent Data Year | Baltimore County Need |
|---------------------------------------|--------------------|--------------------|-----------------------|-----------------------|-----------------------|
| from Heart Disease                    |                    |                    |                       |                       |                       |
| Cancer Mortality Rate                 | N/A                | 145.5              | 158.3                 | 2018-2020             | High                  |
| Sudden unexpected infant death rate   | N/A                | 0.8                | 0.7                   | 2016-2020             | Low                   |
| Age-adjusted Death Rate due to Stroke | 38.8               | 42.5               | 47.1                  | 2020                  | High                  |

**Table A4.15: Quality of Care**

| Measure                                                        | National Benchmark | Maryland Benchmark | Baltimore County Data | Most Recent Data Year | Baltimore County Need |
|----------------------------------------------------------------|--------------------|--------------------|-----------------------|-----------------------|-----------------------|
| Children/adults vaccinated annually against seasonal influenza | 51.0%              | 55.0%              | 59.0%                 | 2020                  | Low                   |
| Mammography screening                                          | 37.0%              | 37.0%              | 41.0%                 | 2020                  | Low                   |
| Preventable hospital stays                                     | 28.1               | 26.5               | 30.1                  | 2020                  | High                  |
| Children receiving blood lead screening                        | N/A                | 67.1               | 69.8                  | 2021                  | Medium                |
| Children with elevated blood lead levels                       | N/A                | 0.2                | 0.6                   | 2020                  | High                  |
| Early prenatal care                                            | N/A                | 70.2%              | 71.8%                 | 2020                  | Medium                |

**Table A4.16: Safety**

| Measure                    | National Benchmark | Maryland Benchmark | Baltimore County Data | Most Recent Data Year | Baltimore County Need |
|----------------------------|--------------------|--------------------|-----------------------|-----------------------|-----------------------|
| Firearm fatalities         | 12.0               | 12.3               | 12.9                  | 2019                  | High                  |
| Homicides                  | 6.0                | 9.1                | 8.8                   | 2016-2020             | Medium                |
| Injury mortality           | 76.0               | 88.3               | 109.4                 | 2016-2020             | High                  |
| Juvenile arrests           | 24.0               | 27.1               | 38.9                  | 2022                  | High                  |
| Motor vehicle crash deaths | 12.0               | 8.9                | 8.3                   | 2014-2020             | Low                   |
| Child maltreatment rate    | N/A                | 4.6                | 3.7                   | 2018-2020             | Low                   |

| Measure                                | National Benchmark | Maryland Benchmark | Baltimore County Data | Most Recent Data Year | Baltimore County Need |
|----------------------------------------|--------------------|--------------------|-----------------------|-----------------------|-----------------------|
| Domestic Violence                      | N/A                | 568.6              | 1079.0                | 2020                  | High                  |
| Fall-related death rate                | N/A                | 10.6               | 15.5                  | 2017                  | High                  |
| Pedestrian injury rate on public roads | N/A                | 53.5               | 54.4                  | 2020                  | Medium                |

**Table A4.17: Sexual Health**

| Measure             | National Benchmark | Maryland Benchmark | Baltimore County Data | Most Recent Data Year | Baltimore County Need |
|---------------------|--------------------|--------------------|-----------------------|-----------------------|-----------------------|
| Teen Birth Rate     | 19.0               | 15.2               | 13.2                  | 2014-2020             | Low                   |
| HIV Prevalence Rate | 380.0              | 655.4              | 466.8                 | 2020                  | Low                   |
| HIV Incidence Rate  | N/A                | 15.0               | 14.8                  | 2021                  | Medium                |
| Chlamydia Rate      | 481.3              | 535.9              | 533.1                 | 2020                  | Medium                |

**Table A4.18: Substance Use Disorders**

| Measure                        | National Benchmark | Maryland Benchmark | Baltimore County Data | Most Recent Data Year | Baltimore County Need |
|--------------------------------|--------------------|--------------------|-----------------------|-----------------------|-----------------------|
| Drug Overdose Mortality Rate   | 23.0               | 41.1               | 50.8                  | 2018-2020             | High                  |
| % Excessive Drinking           | 19.0%              | 14.6%              | 16.9%                 | 2020                  | High                  |
| % Driving Deaths with Alcohol  | 27.0%              | 28.3%              | 26.8%                 | 2016-2020             | Low                   |
| Opioid prescriptions dispensed | 43.3               | 39.5               | 41.7                  | 2020                  | High                  |

**Table A4.19: Tobacco Use**

| Measure                              | National Benchmark | Maryland Benchmark | Baltimore County Data | Most Recent Data Year | Baltimore County Need |
|--------------------------------------|--------------------|--------------------|-----------------------|-----------------------|-----------------------|
| % Smokers                            | 16.0%              | 11.1%              | 13.8%                 | 2020                  | High                  |
| Adolescents who use tobacco products | N/A                | 14.4%              | 16.5%                 | 2016                  | High                  |

**Table A4.20: Transportation Options and Transit**

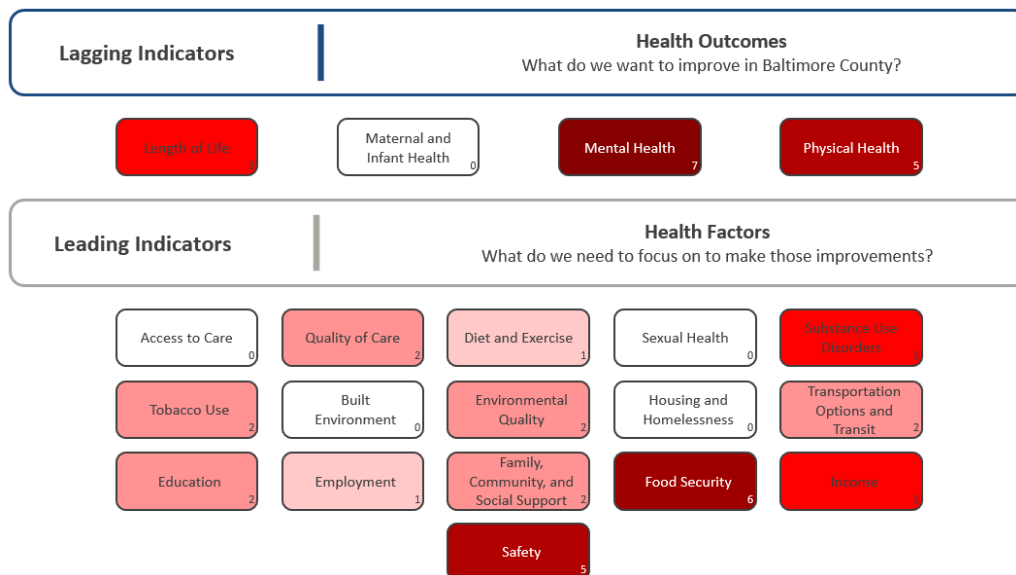
| <b>Measure</b>                | <b>National Benchmark</b> | <b>Maryland Benchmark</b> | <b>Baltimore County Data</b> | <b>Most Recent Data Year</b> | <b>Baltimore County Need</b> |
|-------------------------------|---------------------------|---------------------------|------------------------------|------------------------------|------------------------------|
| Traffic Volume                | 505.0                     | 695.2                     | 835.4                        | 2019                         | High                         |
| % Drive Alone to Work         | 73.0%                     | 69.8%                     | 75.1%                        | 2017-2021                    | High                         |
| % Long Commute – Drives Alone | 37.0%                     | 49.6%                     | 45.1%                        | 2017-2021                    | Low                          |
| % Car Ownership               | N/A                       | 89.8%                     | 90.7%                        | 2023                         | Medium                       |
| Mass Transit Spending         | N/A                       | 102.6                     | 88.2                         | 2023                         | Low                          |

## APPENDIX 5 | SECONDARY DATA SUMMARY

The table and graphic below include summaries of potential priority need areas, as identified by the secondary data analysis process, as well as priority areas of need identified by other state, local, and national sources.

| Priority Area                                 | Secondary Data Findings | MedStar Health 2021 | Kennedy Krieger 2022 | Sheppard Pratt 2022 | Baltimore County 2020 | Alive! Maryland 2022 | Healthy People 2030 |
|-----------------------------------------------|-------------------------|---------------------|----------------------|---------------------|-----------------------|----------------------|---------------------|
| Social Determinants of Health*                | ✓                       | ✓                   | ✓                    | ✓                   | ✓                     | ✓                    | ✓                   |
| Access to Health Care                         | ✓                       | ✓                   | ✓                    | ✓                   | ✓                     | ✓                    | ✓                   |
| Mental Health and Behavioral Health/ Wellness | ✓                       | ✓                   | ✓                    | ✓                   | ✓                     | ✓                    |                     |
| Health Equity                                 | ✓                       | ✓                   | ✓                    |                     | ✓                     | ✓                    | ✓                   |
| Health Literacy and Communication             |                         | ✓                   | ✓                    | ✓                   |                       | ✓                    | ✓                   |
| Transportation                                | ✓                       | ✓                   | ✓                    | ✓                   | ✓                     |                      |                     |
| Substance Abuse                               | ✓                       | ✓                   |                      | ✓                   | ✓                     |                      |                     |
| Chronic Disease (Physical Health)             | ✓                       | ✓                   |                      |                     | ✓                     |                      |                     |
| Specialty Care                                |                         | ✓                   | ✓                    |                     |                       | ✓                    |                     |
| Staffing Support                              |                         |                     | ✓                    | ✓                   |                       | ✓                    |                     |
| Childhood Support                             | ✓                       |                     | ✓                    |                     |                       |                      |                     |
| Obesity/Diabetes/Fitness/Nutrition            |                         | ✓                   |                      |                     | ✓                     |                      |                     |
| Primary Care                                  |                         | ✓                   |                      |                     |                       | ✓                    |                     |
| Sexual Health                                 |                         |                     |                      |                     |                       | ✓                    |                     |

\* Data indicate needs particularly in areas related to safety, food security, and income.



Values in bottom right represent number of measures with high need.

\*Access to care metrics are based on the ratio of county population to providers, which does not account for the significant in-migration that occurs into Baltimore County facilities for healthcare.

## APPENDIX 6 | DETAILED PRIMARY DATA FINDINGS

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Primary data were collected through web-based Key Leader and Community surveys, and focus groups, which were conducted in-person or in a virtual format.

### Methodologies

The methodologies varied based on the type of primary data being analyzed. The following section describes the various methodologies used to analyze the primary data, along with key findings.

#### Focus Groups

The following 13 focus groups were conducted virtually or in person between October 3, 2023 and November 3, 2023. These groups included representation from key leaders, non-profit partners, patients, and community members, with over 90 participants providing responses.

- Pikesville Senior Center
- Behavioral Health Advisory Council
- Housing Community of Development/Catholic Charities
- GBMC Veteran patients
- Cherry Hill seniors
- Concord Baptist Church
- Jewish Community Center of Greater Baltimore
- Northwest Hospital Diabetes Center
- Eastern Family Resource Center
- Rosedale Senior Center
- Immaculate Heart of Mary Parkville
- Towson & Parkville YMCA
- Prevent T2 (Diabetes prevention group)

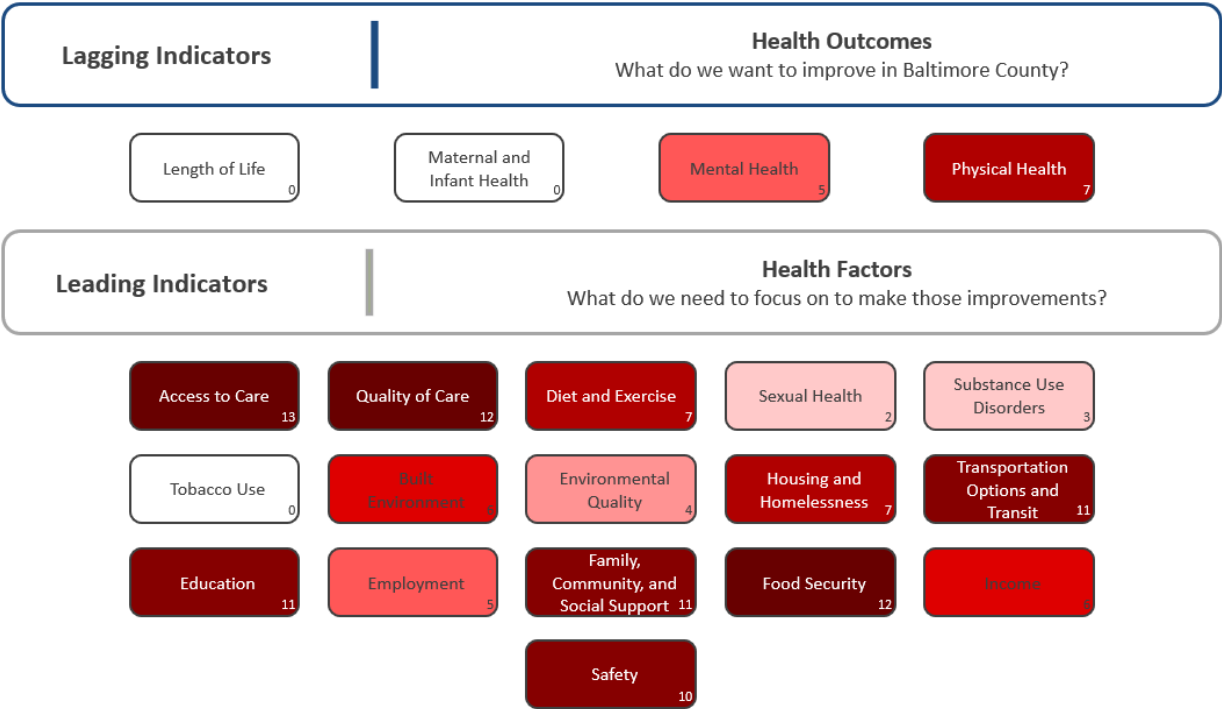
Input was gathered on the following topics:

- Community health concerns
- Access to care
- Social and environmental concerns that may impact health

Key findings from the focus groups are summarized by topic in the graphic below.



Focus Group Findings by Category



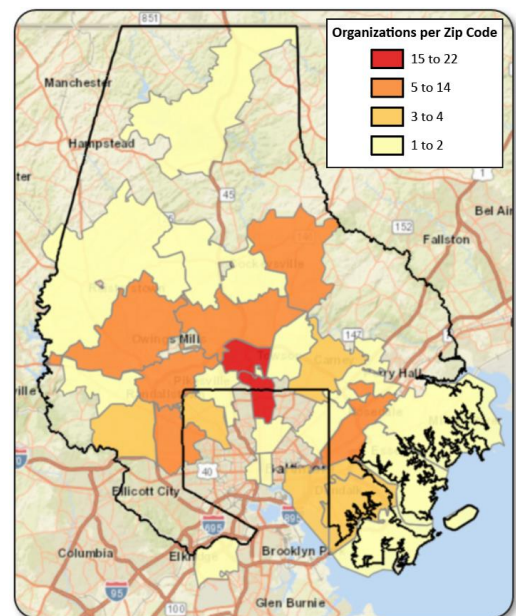
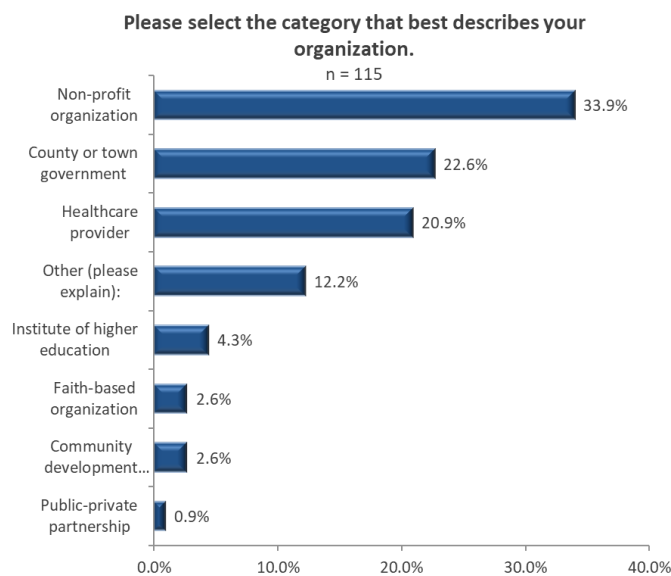
### Key Leader Web Survey

A total of 115 key leaders completed the web-based Key Leader Survey, which was live from September 5, 2023 to November 3, 2023.

Key leaders represented a variety of organizations with geographies throughout Baltimore County. Broad categories included:

- Nonprofit partners
- Government officials
- Healthcare providers
- Academic partners
- First responders
- Business leaders

The chart below shows the distribution of Key Leader survey respondents by type of organization. The map below shows the geographic distribution of Key Leader survey respondents based on the ZIP code in which the organization they represent is located.



In general, survey questions focused on the following topics:

- Top community health needs of Baltimore County
- Top social drivers that impact health
- Availability of community resources
- Access to care (barriers to care and locations of care)
- Health literacy

The key findings from the Key Leader Survey are detailed below:

- Key leaders identified the top 3 health needs of Baltimore County as: mental health/suicide, substance/alcohol use and housing.
- Key leaders identified the following areas as having the most impact on health in the community: access to affordable housing, crime and violence, and access to healthy foods.
- Key leaders identified cost of care, health literacy, and appointment availability as the most significant barriers to care.
- Residents in poverty were identified as the community group in Baltimore County most in need of assistance.
- The most common suggestions for improving community health focused on increasing affordable housing, community engagement, affordable healthcare, transportation, and adding more recreational facilities and neighborhood/mobile clinics.

Charts detailing key findings from the Key Leader Survey are displayed below:

**Figure A6.1**  
How do you believe the health of the community you serve has changed over the past three years?  
n= 115

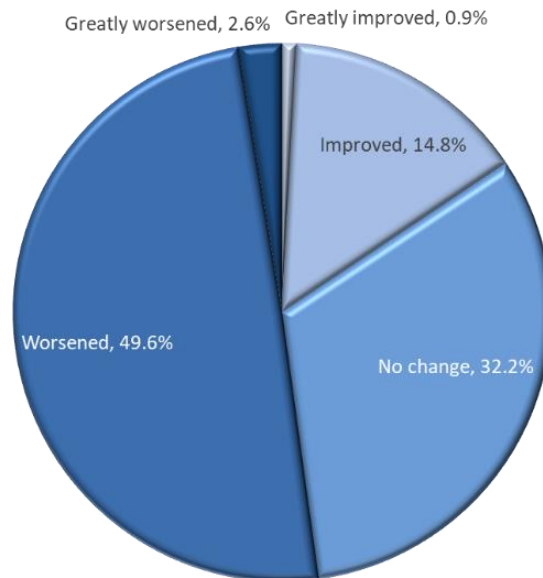
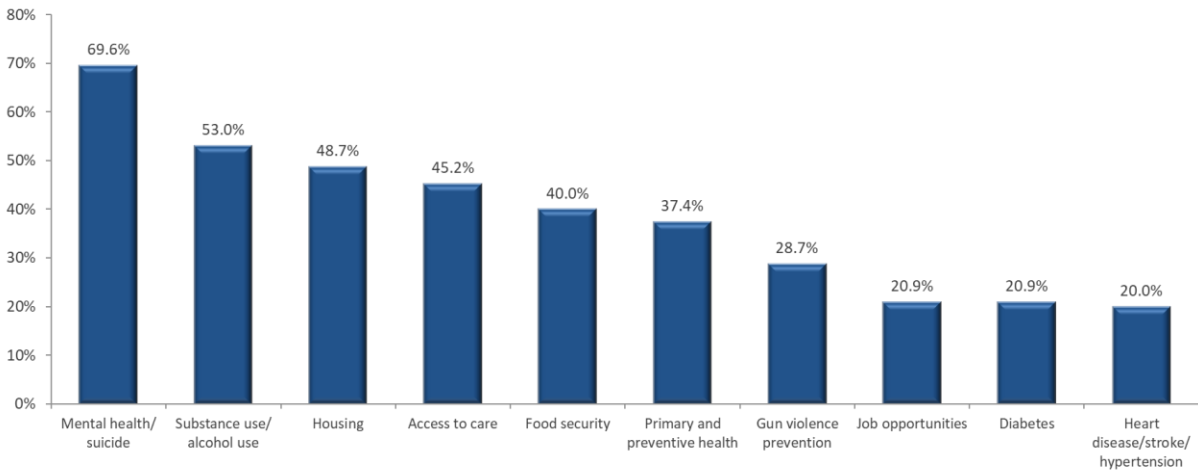


**Figure A6.2**

Please select the top FIVE (5) community health needs of the Baltimore County.  
n= 115

**Figure A6.3**

Please choose the top 5 social needs in the community you serve.  
n= 115

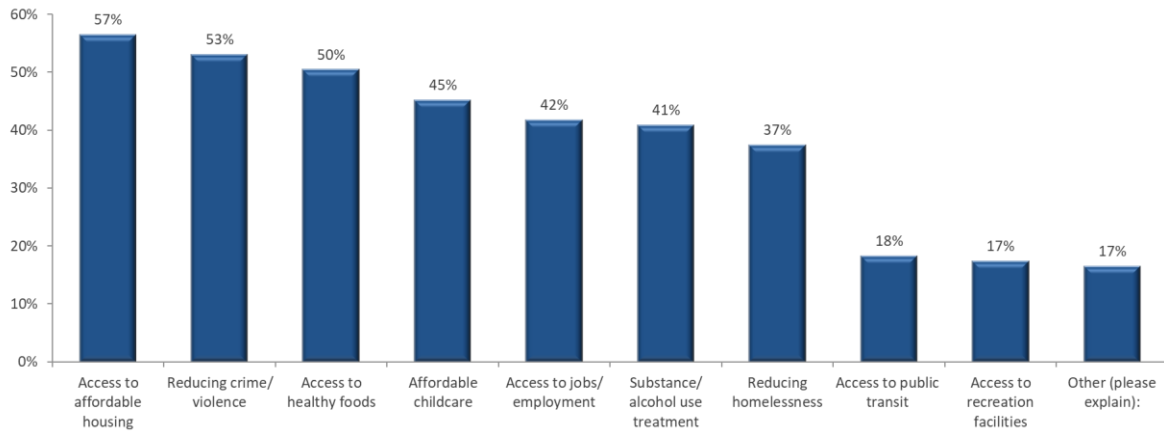
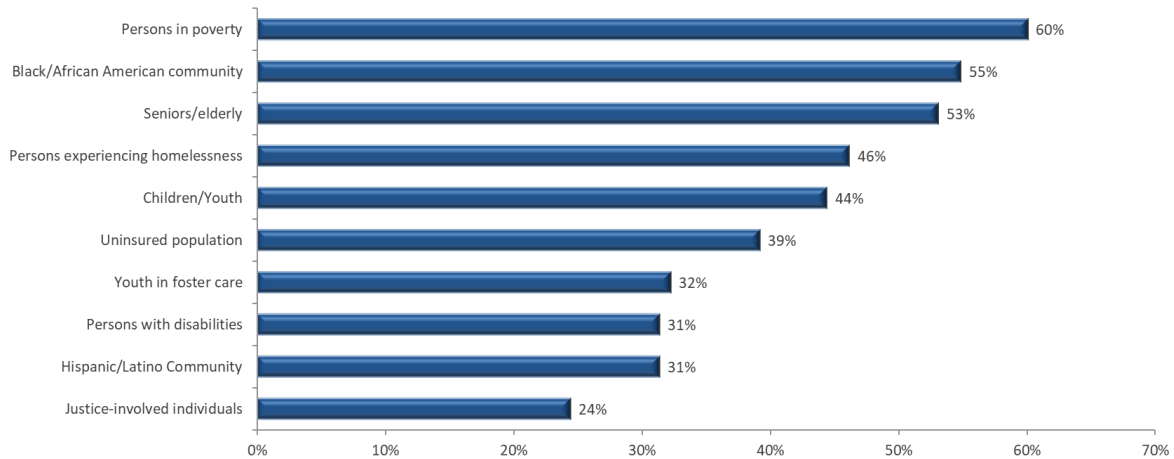


**Figure A6.4**Choose the group(s) that needs more help in the community you serve. *Choose all that apply.*

n = 115

**Figure A6.5**

On a scale of 1 to 5, please rate the following statements for the community in which you live?

n = 115

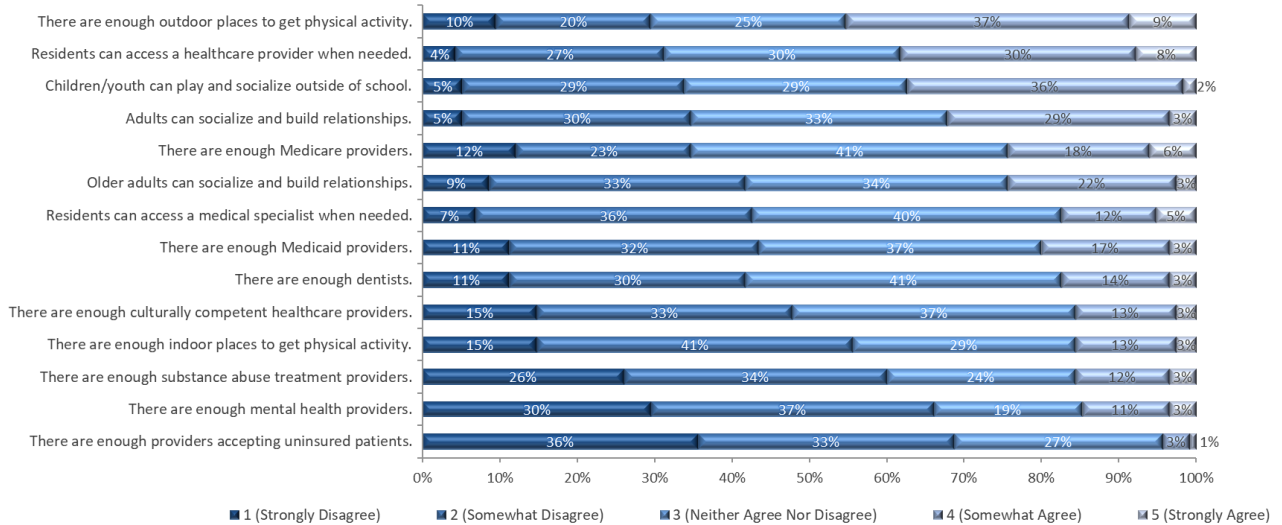


Figure A6.6

Do you believe that health and social needs are uniform across Baltimore County? n = 115

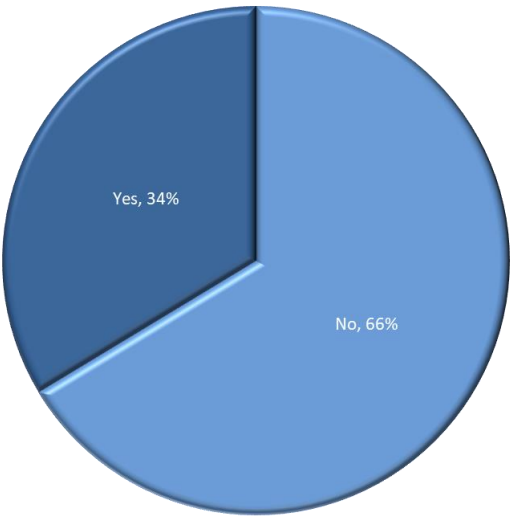


Figure A6.7

What barriers, if any, exist to improving the health of residents in your community? Choose all that apply. n= 115

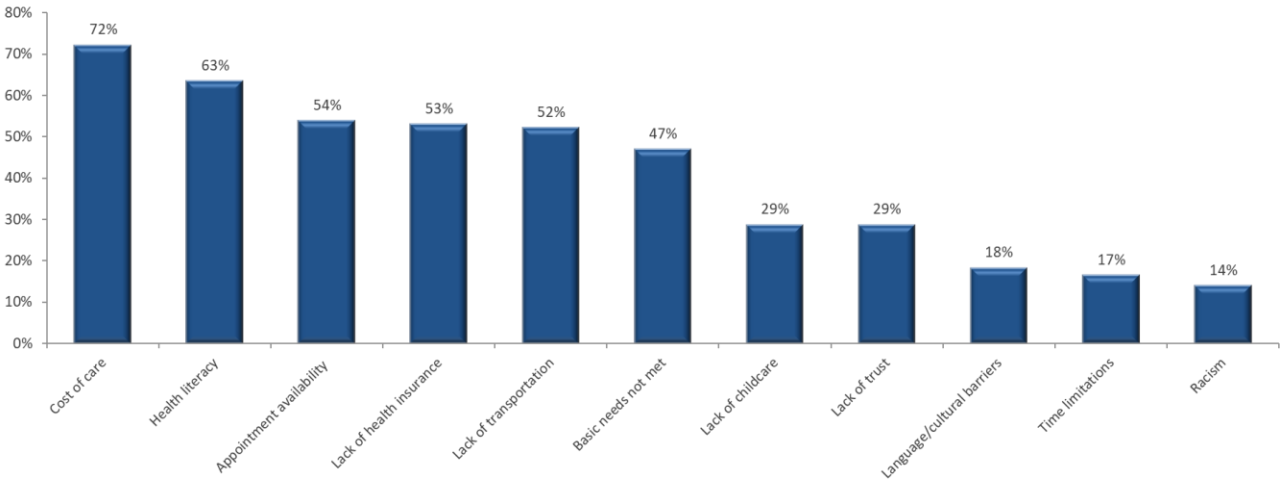


**Figure A6.8**

Do you feel that the residents of the community you serve are health literate? n = 115

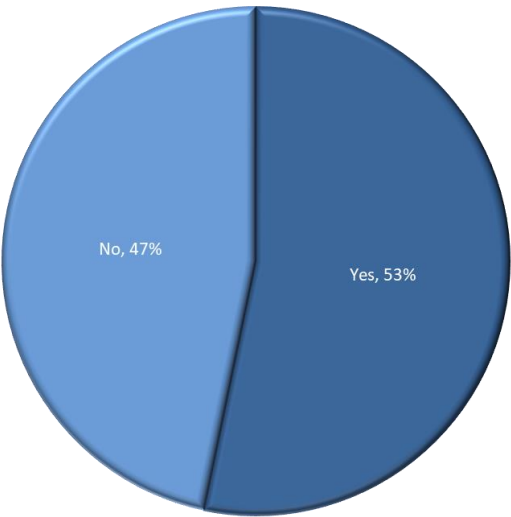
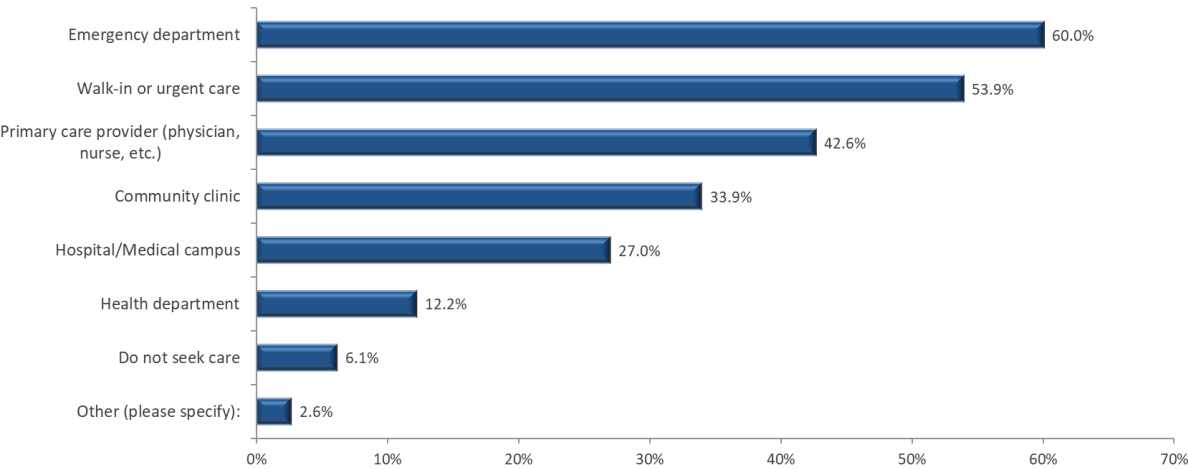


**Figure A6.9**

Members of your community typically seek medical care through... Please select all that apply n= 115



The questions administered via the Key Leader Survey instrument are below:

**Baltimore County | 2024 Key Community Health Leader Survey**

**1. Please select the category that best describes your organization.**

- a. Faith-based organization
- b. Non-profit organization
- c. Media
- d. County or town government
- e. Institute of higher education
- f. Healthcare provider
- g. Public – private partnership
- h. Community Development Corporation
- i. Other (please explain) \_\_\_\_\_

**2. What is the ZIP code of your organization/facility? Please write 5-digit ZIP code.**

\_\_\_\_\_

**3. How do you believe the health of the community you serve has changed over the past three years?**

- a. Greatly improved
  - b. Improved
  - c. No change
  - d. Worsened
  - e. Greatly worsened
- [if “Greatly improved” or “Improved”] In what way(s) has the health of the community you serve improved?
  - [if “Greatly worsened” or “Worsened”] In what way(s) has the health of the community you serve worsened?

**4. From the list provided, please rank the top FIVE (5) community health needs of Baltimore County.**

- a. Access to Care
- b. Accidents (falls)
- c. Cancer
- d. Dental Health
- e. Diabetes
- f. Food security
- g. Gun violence prevention
- h. Heart Disease/Stroke/Hypertension
- i. Maternal/Infant Health
- j. Mental Health/Suicide
- k. Primary and Preventive Health Care

- l. Obesity
  - m. Sexually Transmitted Disease
  - n. Substance Use/Alcohol Use
  - o. Tobacco and Electronic Smoking Devices
  - p. Housing
  - q. Uninsured
  - r. Other (please explain)
  - s. None
  - t. Unsure/Do not know
  - u. Prefer not to respond
- 5. What resources are available in the community you serve to address the top health issues you identified?**
- 
- 6. Please share any additional information regarding these health issues and your reasons for ranking them this way.**
- 
- 7. In your opinion, which FIVE (5) of the following need the most improvement within the community you serve? If a need that requires the most improvement is not listed, please select "Other" and write it in.**
- a. Access to affordable housing
  - b. Access to healthy foods
  - c. Access to public transit (buses, commuter rail, etc.)
  - d. Access to recreation facilities, parks or playgrounds
  - e. Access to substance use/alcohol use treatment
  - f. Affordable childcare
  - g. Availability of alternative transportation options (biking, walking, carpooling, etc.)
  - h. Improved air quality
  - i. Improved water quality
  - j. Medication/local pharmacy access
  - k. Reducing homelessness
  - l. Reducing crime/violence
  - m. Language/Immigrant services
  - n. Other (please explain)
  - o. None
  - p. Unsure/Do not know
  - q. Prefer not to respond
- 8. Please share any additional information regarding these needs and your reasons for prioritizing them.**
-

**9. In your opinion, which population sub-group(s) has the greatest need for additional resources within the community you serve? Please select all that apply. If a population sub-group that needs additional resources is not listed, please select "Other" and write it in.**

- a. Black/African American community
- b. Children/Youth
- c. Hispanic/Latino community
- d. LGBTQIA+ community
- e. Justice-involved individuals
- f. Persons experiencing homelessness
- g. Persons in poverty
- h. Persons with disabilities
- i. Refugees/Immigrants
- j. Seniors/Elderly
- k. Uninsured population
- l. Women in pregnancy
- m. Young adults
- n. Youth in foster care
- o. Other (please explain) \_\_\_\_\_
- p. None
- q. Unsure/Do not know
- r. Prefer not to respond

**10. Please share any additional information regarding these population sub-group(s) and your reasons for choosing them.**

---

**11. On a scale of 1 to 5 (with 1 being strongly disagree and 5 being strongly agree), please rate each of the following statements for the community you serve:**

- a. Residents can access a doctor, including nurse practitioners and physician assistants (Family/General Practitioner, Ob/Gyn, Pediatrician) when needed.
- b. Residents can access a medical specialist (Cardiologist, Dermatologist, etc.) when needed.
- c. There are enough providers accepting Medicaid in the community.
- d. There are enough providers accepting Medicare in the community.
- e. There are enough providers accepting patients without insurance in the community.
- f. There are enough dentists in the community.
- g. There are enough culturally competent healthcare providers in the community.
- h. There are enough mental health providers in the community.
- i. There are enough substance abuse treatment providers in the community.

**12. From the list provided, where do you feel most members of the community you serve most often seek medical care? Choose all that apply.**

- a. Community Clinic
- b. Hospital/Medical Campus
- c. Emergency Department
- d. Walk-in or Urgent Care
- e. Primary care provider (physician, nurse, etc.)
- f. Health department
- g. Other (please specify): \_\_\_\_\_
- h. Do not seek care

**13. Why do you think members of the community you serve primarily seek care in the location(s) you selected above? \_\_\_\_\_**

**14. What are the most significant barriers that keep people in the community you serve from accessing healthcare when they need it? Choose all that apply.**

- a. Availability of providers/ appointments
- b. Basic needs not met (food/shelter)
- c. Gender biases
- d. Inability to navigate healthcare system
- e. Inability to pay out of pocket expenses (co pays, prescriptions)
- f. Lack of/limited childcare
- g. Lack of health insurance coverage
- h. Lack of/limited transportation
- i. Lack of trust
- j. Language/cultural barriers
- k. Racism
- l. Time limitations
- m. None/no barriers
- n. Other: \_\_\_\_\_

**15. Please share any additional information regarding these barriers and your reasons for choosing them. \_\_\_\_\_**

**16. Do you believe health and social needs are similar across Baltimore County?**

- a. Yes
- b. No
- c. Prefer not to answer

• [If “No”]:

- In your opinion, which geographic areas experience the greatest level of need? \_\_\_\_\_

- Please describe any unique health and social needs you have observed within these areas: \_\_\_\_\_

**17. What challenges do older adults face in the community you serve?**

---

**18. Do you feel that the people in the community you serve are health literate, or able to understand health-related information?**

- a. Yes
- b. No
- c. Prefer not to answer

**19. What strategies do you find most effective in communicating information related to health or social needs to members of the community you serve?**

---

**20. On a scale of 1 to 5 (with 1 being strongly disagree and 5 being strongly agree), please rate each of the following statements for the community you serve:**

- a. There are enough indoor places to get regular exercise or physical activity in the community you serve.
- [If disagree or strongly disagree]: Please share any additional information related to the answer you selected.
- b. There are enough outdoor places to get regular exercise or physical activity in the community you serve.
- [If disagree or strongly disagree]: Please share any additional information related to the answer you selected.

**21. On a scale of 1 to 5 (with 1 being strongly disagree and 5 being strongly agree), please rate each of the following statements for the community you serve:**

- a. Children and youth living in the community you serve have access to places to play and socialize outside of school.
- [If disagree or strongly disagree]: What strategies could help address loneliness or social isolation in children/youth in the community you serve?
- b. Adults in the community you serve have access to places to socialize and build relationships outside of work or home.
- [If disagree or strongly disagree]: What strategies could help address loneliness or social isolation in adults in the community you serve?

- c. Older adults in the community you serve have access to places to socialize and build relationships outside of the home.
- [If disagree or strongly disagree]: What strategies could help address loneliness or social isolation in older adults in the community you serve?

**22. Have you already gotten, or do you plan to get, your annual flu shot?**

- a. Yes
- b. No
- c. Prefer not to answer

**23. What ideas or suggestions do you have to improve health in the community you serve?**

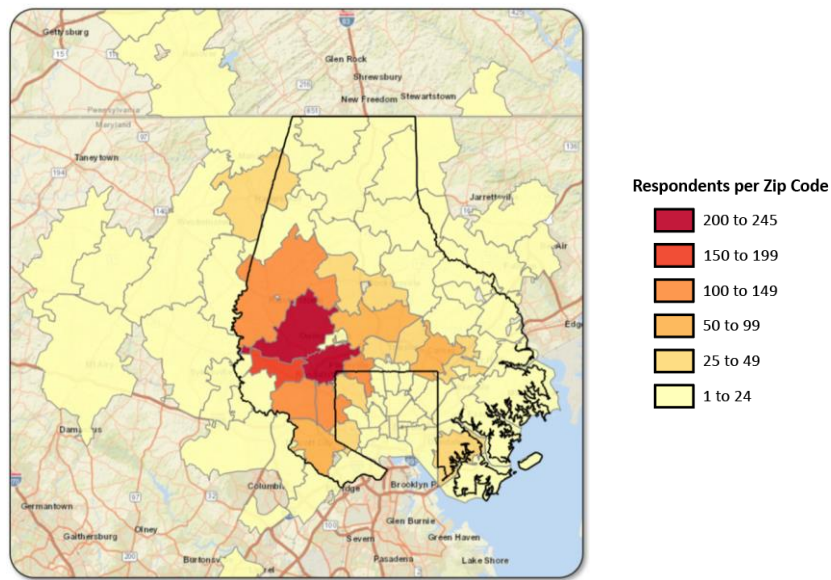
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**Thank you for completing the survey!**

### Community Survey

A total of 2,034 surveys were completed by individuals living, working or receiving healthcare in the Baltimore County community. For the sake of accessibility, the survey was available in both English and Spanish. Approximately 1% of the surveys were completed in Spanish. Consistent with one of the survey process goals, survey community member respondents were representative of a broad geographic area encompassing areas throughout the county. The map below provides additional information on survey respondents' ZIP code of residence.

**Figure A6.10: Respondent Zip Code of Residence**



In general, survey questions focused on:

- Community health problems and concerns
- Community social/environmental problems and concerns
- Access to healthcare
- Food insecurity
- Dental care

The key findings from the Community Survey are detailed below:

- Community members identified the top 3 health needs of Baltimore County as Heart Disease/High Blood Pressure, Overweight/Obesity, and Diabetes. These were followed very closely by mental health.
- Relative to areas that have the most impact on health, community members mentioned: violence and safety, and housing and homelessness.
- Community members identified the cost of care as the largest barrier to health in the community.
- The most common suggestions for improving community health were increasing affordability and insurance coverage, community outreach and programming, availability of grocery stores,

number of providers, transportation, mental health resources, education, safety, and mobile health services.

Charts detailing key findings from the Community Member Survey are displayed below:

**Figure A6.11**

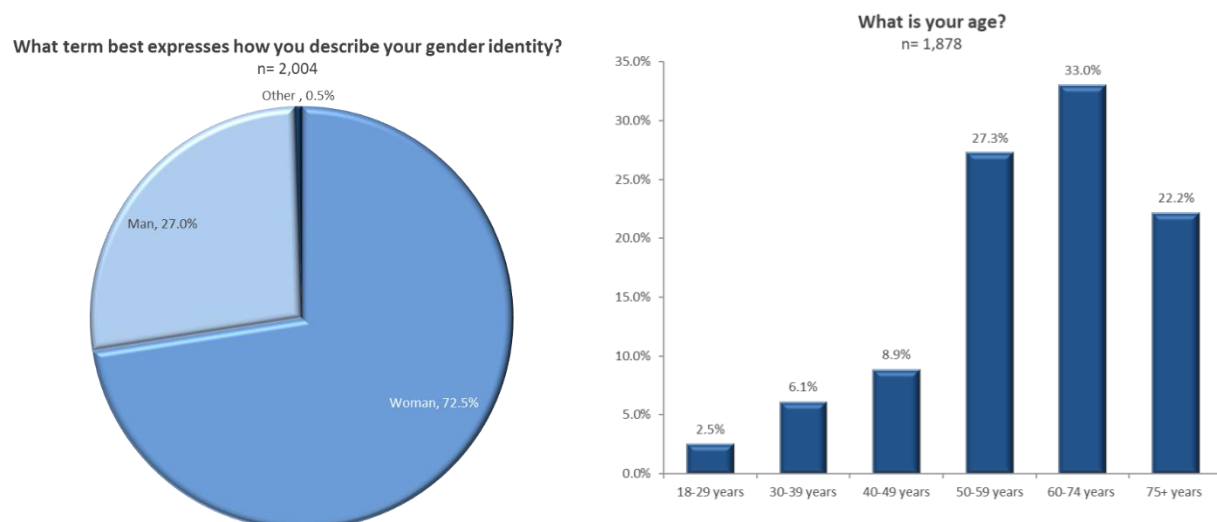


**Figure A6.12**

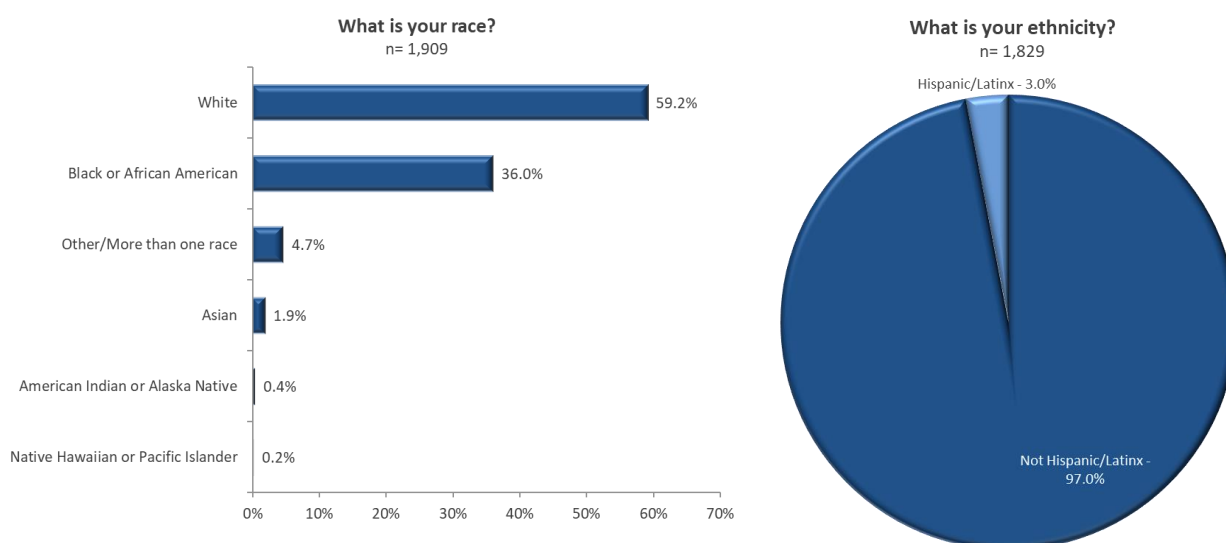


Figure A6.13

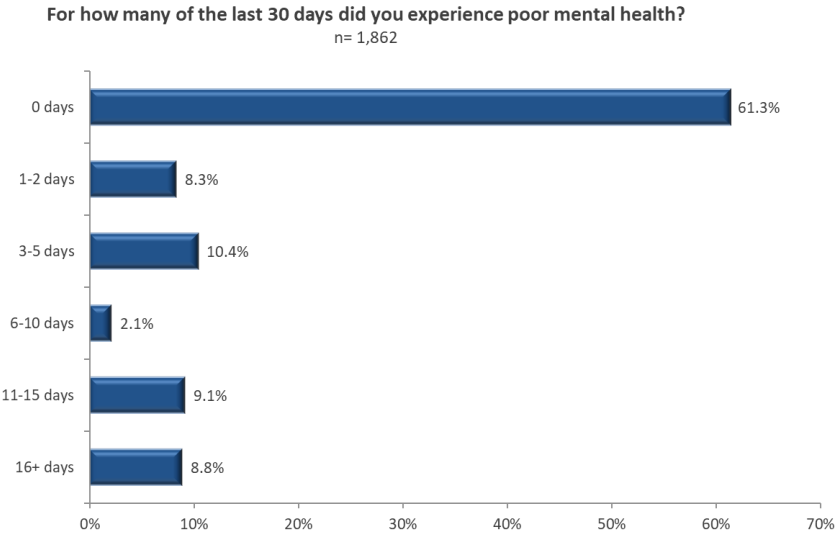


Figure A6.14

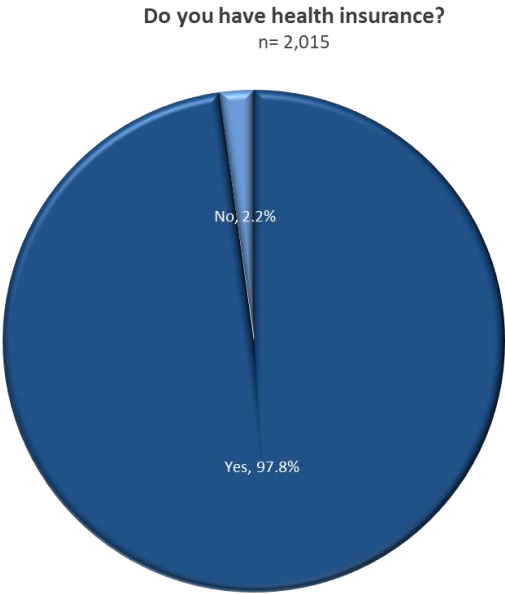


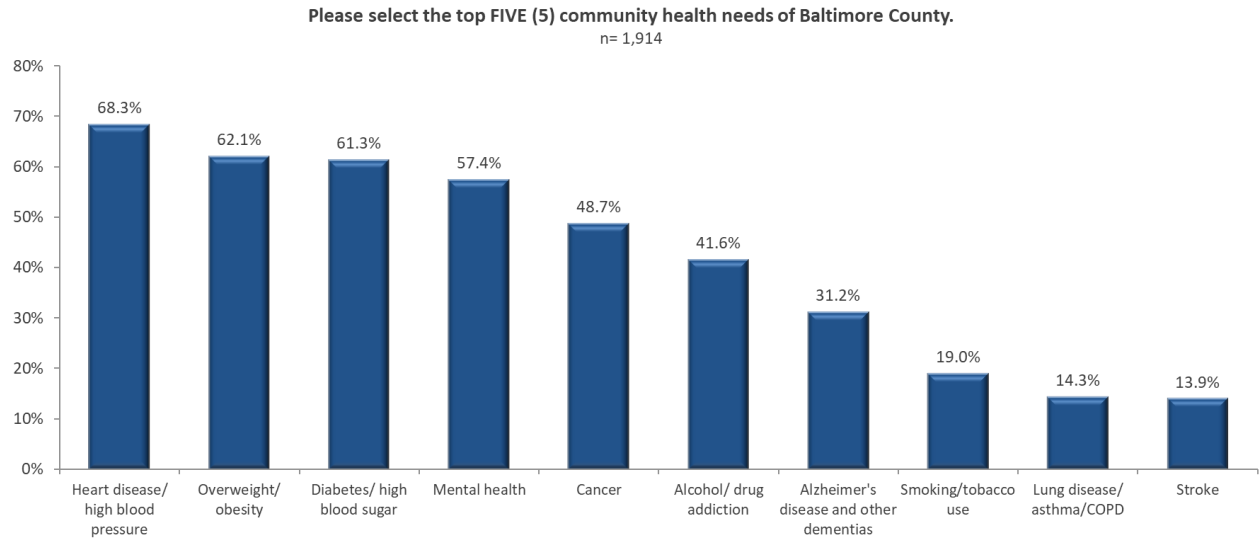
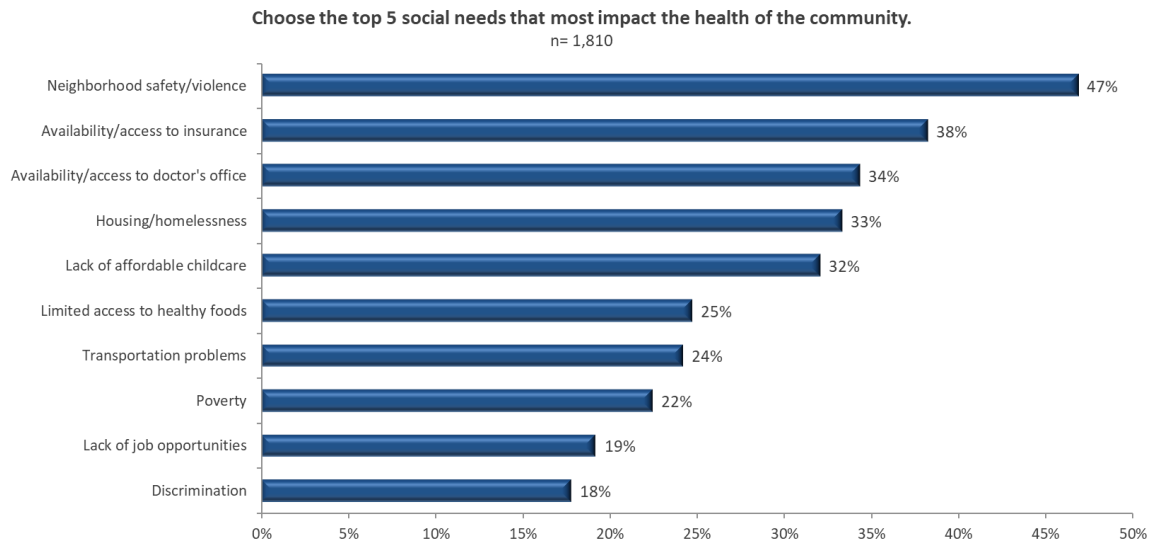
**Figure A6.15****Figure A6.16**

Figure A6.17

What barriers, if any, exist to improving the health of Baltimore County residents? *Choose all that apply.*  
n= 1,832

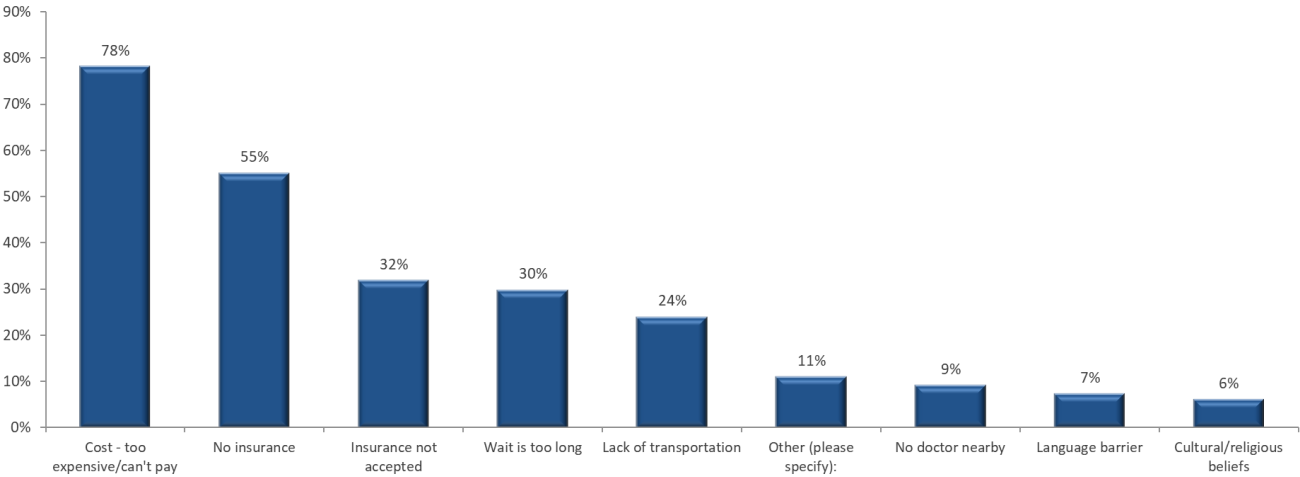
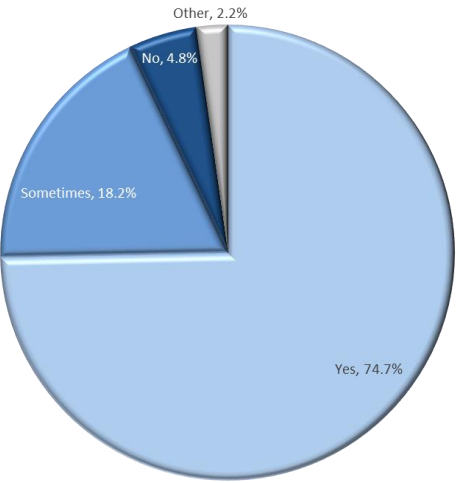
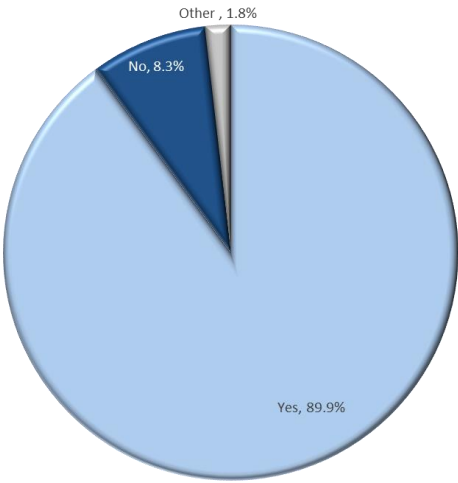


Figure A6.18

Do you have access to find healthy and affordable food?  
n= 2,022



Do you have access to a dentist or dental services?  
n= 2,018



The questions administered via the Community Member Survey instrument are below:

**1. What is your ZIP code?**

*Please write 5-digit ZIP code.* \_\_\_\_\_

**2. Do you think of yourself as:**

*Please select one.*

- ☐ Male
- ☐ Female
- ☐ Transgender man
- ☐ Transgender woman
- ☐ Gender queer/gender nonconforming, i.e., neither exclusively male nor female
- ☐ Other/Additional gender category (*please specify*): \_\_\_\_\_
- ☐ Prefer not to answer

**3. What is your age group (years)?**

*Please select one.*

- ☐ 18-29
- ☐ 30-39
- ☐ 40-49
- ☐ 50-64
- ☐ 65-74
- ☐ 75+
- ☐ Prefer not to answer

**4. Which one of the following describes your race?**

*Please select all that apply.*

- ☐ Black or African American
- ☐ White
- ☐ Asian
- ☐ Native Hawaiian or Pacific Islander
- ☐ American Indian or Alaska Native
- ☐ Other/more than one race (*please specify*): \_\_\_\_\_
- ☐ Prefer not to answer

**5. Which one of the following is your ethnicity?**

*Please select one.*

- ☐ Hispanic or Latino/a
- ☐ Non-Hispanic or Non-Latino/a
- ☐ Prefer not to answer

**7. On how many days during the past 30 days was your mental health not good?** Mental health includes stress, depression, and problems with emotions.

*Please write the number of days.*

\_\_\_\_\_ days

☐ Zero days

☐ Prefer not to answer

**8. How frequently do you see your primary care provider (Medical Doctor, Nurse Practitioner)?**

*Please select one.*

☐ 1 time per year

☐ 2-3 times per year

☐ 4 or more times per year

☐ I cannot get timely access to my primary care provider

☐ I do not have a primary care provider

☐ I use another medical provider option (emergency department, urgent care, GYN provider etc.)

**9. Do you have health insurance?**

*Please select one.*

☐ Yes

☐ No

☐ Prefer not to answer

**10. What are the five most important health problems that affect the health of your community?**

*Please select up to five.*

☐ Alcohol/drug addiction

☐ Alzheimer's disease and other dementias

☐ Mental health (depression/anxiety)

☐ Cancer

☐ Diabetes/high blood sugar

☐ Heart disease/high blood pressure

☐ HIV/AIDS

☐ Infant death

☐ Lung disease/asthma/COPD

☐ Stroke

☐ Smoking/tobacco use

☐ Overweight/obesity

☐ Other (*please specify*): \_\_\_\_\_

☐ Prefer not to answer

**11. What are the five most important social/environmental problems that affect the health of your community?***Please select up to five*

- ☐ Availability/access to doctor's office
- ☐ Availability/access to insurance
- ☐ Child abuse/neglect
- ☐ Discrimination (*Please specify type: age, gender, race, ability, etc.*): \_\_\_\_\_
- ☐ Domestic violence
- ☐ Housing/homelessness
- ☐ Lack of affordable childcare
- ☐ Lack of job opportunities
- ☐ Limited access to healthy foods
- ☐ Limited places to exercise
- ☐ Neighborhood safety/violence
- ☐ Limited opportunities for social connection
- ☐ Poverty
- ☐ School dropout/poor schools
- ☐ Transportation problems
- ☐ Other (*please specify*): \_\_\_\_\_
- ☐ Prefer not to answer

**12. What are the three most important reasons people in your community do not get health care?***Please select up to three.*

- ☐ Cost – too expensive/can't pay
- ☐ Wait is too long
- ☐ No insurance
- ☐ No doctor nearby
- ☐ Lack of transportation
- ☐ Insurance not accepted
- ☐ Language barrier
- ☐ Cultural/religious beliefs
- ☐ Other (*please specify*): \_\_\_\_\_
- ☐ Prefer not to answer

**13. Do you have the ability to find healthy *and* affordable foods around where you live?***Please select one.*

- ☐ Yes
- ☐ Sometimes
- ☐ No
- ☐ Other (*please specify*): \_\_\_\_\_
- ☐ Prefer not to answer

**14. Do you have access to a dentist or dental services?**

*Please select one.*

- ☐ Yes
- ☐ No
- ☐ Other (*please specify*): \_\_\_\_\_
- ☐ Prefer not to answer

**15. What ideas or suggestions do you have to improve health in your community?**

---

**Thank you for completing the survey!**

## APPENDIX 7 | PRIMARY DATA SUMMARY

Primary data findings are summarized in full by the table below.

|   | Priority Area                      | Community | Key Leaders | Focus Groups* |
|---|------------------------------------|-----------|-------------|---------------|
| ★ | Access to Care                     | ✓         | ✓           | ✓             |
| ★ | Transportation                     | ✓         | ✓           | ✓             |
|   | Food Insecurity                    | ✓         | ✓           | ✓             |
| ★ | Chronic Diseases                   | ✓         | ✓           |               |
| ★ | Health Literacy                    | ✓         | ✓           |               |
| ★ | Behavioral Health/Mental Health    | ✓         | ✓           |               |
| ★ | Substance Use                      | ✓         | ✓           |               |
|   | Housing and Homelessness           | ✓         | ✓           |               |
| ★ | Income and Employment              |           | ✓           |               |
|   | Overweight/Obesity                 | ✓         |             |               |
|   | Education                          |           |             | ✓             |
| ★ | Violence and Safety                |           | ✓           | ✓             |
|   | Family, Community & Social Support |           |             | ✓             |

★ Top priority area from secondary data

\*Focus group results are limited to the highest priority needs.

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| <b>SUBJECT: UMMS Financial Assistance Policy</b>                                                                                                                        |                                    |                                      |

**KEY WORDS:**

Financial Assistance, Financial Hardship, Financial Clearance, Medical Assistance

**OBJECTIVE/BACKGROUND:**

The purpose of the following policy statement is to describe the financial assistance application process, how applications are reviewed and determinations of eligibility are made, eligibility criteria for financial assistance programs (including presumptive eligibility and financial hardship assistance), financial clearance of patients with medically unique or humanitarian needs, how UMMS notifies patients of the availability financial assistance availability, the appeal process, and extraordinary collection actions.

**APPLICABILITY:**

This policy applies to all team members, vendors, and agents [volunteers, medical team members] of any of the following University of Maryland Medical System member organizations:

|                                                   |                                       |
|---------------------------------------------------|---------------------------------------|
| University of Maryland Medical Center (UMMC)      | UM Upper Chesapeake Health (UCHS)     |
| UM Midtown Campus (MTC)                           | UM Capital Region Health (UMCRH)      |
| UM Rehabilitation & Orthopaedic Institute (UMROI) | UM Physician Networks (UMPN)          |
| UM St. Joseph Medical Center (UMSJM)              | UMMS Outpatient Rx Weinberg           |
| UM Baltimore Washington Medical Center (UMBWMC)   | UMMC Pharmacy at Redwood              |
| UM Shore Regional Health (UMSRH)                  | UMMS Pharmacy Services                |
| UM Shore Medical Center at Dorchester (UMSMCD)    | UMMC Mid-Town Campus Pharmacy         |
| UM Shore Medical Center at Easton (UMSME)         | UMMC Pharmacy at Capital Region       |
| UM Charles Regional Medical Center (UMCRM)        | UMMC Pharmacy at Baltimore Washington |

**DEFINITIONS:**

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Federal Poverty Level   | A measure of income issued every year by the Department of Health and Human Services (HHS). Federal poverty levels are used to determine eligibility for certain programs and benefits.                                                                                                                                                                                                                                                                               |
| Financial Hardship      | Instances in which member organization charges incurred at UMMS member organizations for medically necessary treatment by a family household over a twelve (12) month period that exceeds 25% of that family's annual income.                                                                                                                                                                                                                                         |
| MDH Limits              | Refers to the income eligibility limits for reduced cost care, set by Maryland Department of Health (MDH) office of Medical Assistance Planning. The State of Maryland accepted the Federal Medicaid expansion on January 1, 2014 vs the Federal Poverty Levels, under the Affordable Care Act, which expanded the eligible income limits for Maryland Medicaid. UMMS adopted these new limits for the reduced cost care sliding scale, as set forth in Attachment A. |
| Medical Debt            | Out-of-pocket expenses, including co-payments, coinsurance, and deductibles, incurred at UMMS member organizations for medically necessary treatment.                                                                                                                                                                                                                                                                                                                 |
| Presumptive Eligibility | Instances in which information provided by the patient or through other sources provides sufficient evidence that the patient is eligible for financial assistance, but there is no financial assistance form on file.                                                                                                                                                                                                                                                |

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## **POLICY:**

The University of Maryland Medical System (“UMMS”) is committed to providing financial assistance to persons who have health care needs and are uninsured, underinsured, ineligible for a government program, or otherwise unable to pay, for emergent and medically necessary care based on their individual financial situation.

It is the policy of the University of Maryland Medical System (“UMMS”) member organizations to provide financial assistance which meets or exceeds the requirements set forth by the State of Maryland for patients who meet specified financial criteria and request such assistance.

- I. Free Care** - Those with income up to 200% of the income eligibility limits established by the Maryland Department of Health are eligible for free care.
- II. Reduced Cost Care** - Those between 200% and 300% of the income eligibility limits established by the Maryland Department of Health are eligible for discounts on a sliding scale, as set forth in Attachment A.
- III. Financial Hardship** - Those who otherwise do not qualify for financial assistance under the primary guidelines of this policy, but for whom their medical debt incurred at all UMMS member organizations exceeds 25% of the Family Annual Household Income, are eligible for financial hardship assistance.

Payment plans are also available to all patients. Plan terms may be modified at the request of the patient. Additional information on payment plans is available in the UMMS Payment Plan Policy. UMMS retains the right in its sole discretion to determine a patient’s ability to pay. All patients presenting for emergency services will be treated regardless of their ability to pay. For emergent/urgent services, financial assistance applications will be completed, received, and evaluated retrospectively and will not delay patients from receiving care.

## **PROCEDURE:**

### **I. How To Apply for Financial Assistance**

For any episode of care, the financial assistance application process will be open up to at least 240 days after the first post-discharge patient bill for the care is sent. Patients may voluntarily apply for financial assistance before or after receiving healthcare services, or they may be identified as potential candidates for financial assistance during the financial clearance process or a presumptive financial assistance eligibility screening.

Financial clearance is a process that determines a patient's ability and likelihood to pay. When possible effort will be made to provide financial clearance prior to date of service. During the financial clearance process, patients who indicate they are unemployed and have no insurance coverage will be required to submit a financial assistance application before receiving non-emergency medical care (unless they meet presumptive financial assistance eligibility criteria).

There will be one application process for all UMMS member organizations. UMMS will accept the Faculty Physicians, Inc.’s (FPI) completed financial assistance applications (and application requirements) in determining eligibility for the UMMS Financial Assistance program. Patients are required to provide a completed financial assistance application (with all required information and documentation), unless they meet the criteria for presumptive eligibility. To facilitate this process, each applicant must provide information about

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family size and income. Oral submission of needed information will be accepted, where appropriate. UMMS will provide the financial assistance application to all patients regardless of health insurance status to all patients, including uninsured patients, and the application will be readily available on the UMMS website and by request.

### **Supporting Documentation for Financial Assistance Applications**

To help applicants complete the process, required and suggested documentation will be clearly listed on the financial assistance application, including:

- A copy of their most recent Federal Income Tax Return (if married and filing separately, then also a copy spouse's tax return); proof of disability income (if applicable), proof of social security income (if applicable).
- If unemployed, reasonable proof of unemployment such as statement from the Office of Unemployment Insurance, a statement from current source of financial support, etc.
- A copy of their most recent pay stubs (if employed) or other evidence of income.
- A Medical Assistance Notice of Determination (if applicable).
- Copy of their Mortgage or Rent bill (if applicable), or written documentation of their current living/housing situation.
- If a patient submits both a copy of their most recent Federal Income Tax Return and a copy of their most recent pay stubs (or other evidence of income), and only one of the two documents indicates eligibility for financial assistance, the most recent document will dictate eligibility.

Financial assistance may not be denied based on the omission of information or documentation that is not specifically required in this policy or on the financial assistance application, and UMMS reserves the right to offer financial assistance to patients that have not provided all supporting documentation.

- If a patient submits a financial assistance application without the information or documentation required for a final determination of eligibility, a written request for the missing information or documentation will be sent to the patient.
- This written request will also contain the contact information (including telephone number and physical location) of the office or department that can provide information about financial assistance and assistance with the application process.
- The patient will have thirty (30) days from the date this written request is provided to submit the required information or documentation to be considered for eligibility. If no the information is not received within the 30 days, a letter will be sent notifying the patient that the case is now closed for lack of the required documentation.
- The patient may re-apply for financial assistance and initiate a new case by submitting the missing information or documentation

## **II. Reviewing and Determining Eligibility of Financial Assistance Applications**

There are designated team members who will be responsible for taking financial assistance applications. These team members can be financial counselors, patient financial receivable coordinators, customer service representatives, or third party agencies working as an extension of the central business office. To help applicants complete the process, UMMS will provide the financial assistance application that will let them know what paperwork is required for a final determination of eligibility. Where possible, designated team

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members will consult via phone or meet with patients who request financial assistance to determine if they meet preliminary criteria for assistance.

Preliminary data will be entered into a third party data exchange system which will allow the designated team member to track the application and determine eligibility for financial assistance. Designated team members will:

- Determine whether the patient has health insurance. Patients who have access to other medical coverage (e.g., primary and secondary insurance coverage or a required service provider, also known as a carve-out), must utilize and exhaust their network benefits before applying for financial assistance.
- If the patient qualifies for COBRA coverage, patient's financial ability to pay COBRA insurance premiums shall be reviewed by the designated team member and recommendations shall be made to Senior Leadership.
- Complete an eligibility check with the Medicaid program for Self Pay patients to verify whether the patient has current coverage. To facilitate this process each applicant must provide information about family size and income.
- Determine whether the patient is presumptively eligible for free or reduced-cost care.
- Determine whether uninsured patients are eligible for public or private health insurance. Individuals with the financial capacity to purchase health insurance shall be encouraged to do so, as a means of assuring access to health care services and for their overall personal health.

To the extent practicable, the designated team members will offer assistance to uninsured patients if the patient chooses to apply for public or private health insurance, determine whether the patient is eligible for other public programs that may assist with health care costs, and use information available to UMMS to determine whether the patient is qualified for free or reduced-cost care under the UMMS Financial Assistance policy.

Within two business days of receipt of a patient's request for financial assistance or an application for medical assistance, UMMS must make a determination of probable eligibility. The determination of probable eligibility is subject to change, based on the receipt of supporting documentation.

If the patient's financial assistance application is determined to be complete and appropriate, the designated team member will recommend the patient's level of eligibility and forward for a second and final approval. UMMS will provide final determination the patient's eligibility within 14 days after the patient submits a completed application for financial assistance and suspend any billing or collections actions while eligibility is being determined.

#### **If a Financial Assistance Application is Approved**

Once a patient is approved for financial assistance, financial assistance coverage is effective for the month of determination and a year prior to the determination.

- A letter of final determination will be submitted to each patient who has formally requested financial assistance, which includes (if applicable): the assistance for which the individual is eligible and the basis for the determination.
- UMMS may decide to extend the financial assistance eligibility period further into the past or the future on a case-by-case basis.

|                                                                                                                                                                         |                                    |                                      |
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- Financial assistance is generally applicable to all emergency and other medically necessary care provided by each UMMS member organization (See Exclusions for more information).
- If additional healthcare services are provided beyond the eligibility period, patients must reapply for financial assistance.
- If the patient is determined to be eligible for reduced-cost care, and has already received a statement for eligible healthcare services rendered during the financial assistance coverage period, the patient will also be provided with a billing statement that indicates the amount the patient owes for the care after financial assistance is applied.
- If a patient made payments for healthcare services prior to receiving approval for financial assistance, they may be eligible for a refund. Refund decisions are based on when the patient was determined unable to pay compared to when the patient payments were made. If the amount that the patient is determined able to pay is less than the amount of the patient payment, the resulting credit balance will be issued to the patient as a refund if the amount exceeds the patient's determined responsibility by \$5.00 or more. This includes determinations of eligibility for financial assistance within 240 days after the initial bill was provided.

If there are changes to the patient's income, assets, expenses or family status, the patient is expected to notify the Financial Assistance Department at 410-821-4140. To facilitate this process, and ensure that patients have the opportunity to be re-evaluated for eligibility for financial assistance within 240 days of the initial statement, UMMS will notify patients that if their income has changed, they should contact the Financial Assistance Program Department on each statement.

#### **If a Financial Assistance Application is Not Approved**

If a patient is determined to be ineligible for financial assistance prior to receiving a service (for that service), all efforts to collect co-pays, deductibles, or a percentage of the expected balance for the service will be made prior to the date of service or may be scheduled for collection on the date of service.

- If the patient is determined to be ineligible for financial assistance, and they applied in order to obtain financial clearance for non-emergent or non-urgent hospital based services, the designated team member will notify the clinical staff of the determination and the non-emergent/urgent hospital-based services will not be scheduled.
- A clinician may appeal this decision and request reconsideration by the Financial Clearance Executive Committee on a case-by case basis.
- For emergent or urgent services, financial assistance applications will be completed, received, and evaluated retrospectively and will not delay patients from receiving care.
- Patients who are ineligible for financial assistance will be required to pay any open balances and may be submitted to a bad debt service if the balance remains unpaid in the agreed upon time periods.
- The patient may appeal the decision, please see the Appeals section for more information.
- For any episode of care, the financial assistance application process will be open up to at least 240 days after the first post-discharge patient bill for the care is sent.

### **III. Eligibility Criteria**

UMMS will offer financial assistance when a review of a patient's individual financial circumstances has been conducted and documented. UMMS will not use a patient's citizenship or immigration status as an eligibility

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requirement for financial assistance; or withhold financial assistance or deny a patient's application for financial assistance on the basis of race, color, religion, ancestry or national origin, sex, age, marital status, sexual orientation, gender identity, genetic information, or on the basis of disability.

The following criteria will be applied in assessing a patient's eligibility for financial assistance, presumptive eligibility for financial assistance, and eligibility for financial hardship assistance.

### **Financial Assistance Eligibility**

UMMS will refer to the MDH household income thresholds to determine eligibility for financial assistance and the level of free or reduced cost care to award to eligible patients. UMMS will calculate a patient's family (household) income at time of service. To account for any changes in financial circumstance, UMMS will recalculate family (household) income within 240 days after the initial hospital bill is provided.

UMMS may consider household monetary assets in determining eligibility for free and reduced-cost care under the financial assistance policy in addition to income-based criteria. Monetary assets shall be adjusted annually for inflation in accordance with the Consumer Price Index. The following monetary assets that are convertible to cash shall be excluded:

- At a minimum, the first \$10,000 of monetary assets.
- A safe harbor equity of \$150,000 in a primary residence.
- Retirement assets that the Internal Revenue Service has granted preferential tax treatment as a retirement account, including deferred-compensation plans qualified under the Internal Revenue Code or nonqualified deferred-compensation plans.
- One motor vehicle used for the transportation needs of the patient or any family member of the patient;
- Any resources excluded in determining financial eligibility under the Medical Assistance Program under the Social Security Act.
- Prepaid higher education funds in a Maryland 529 Program account.

In determining the family income of a patient, UMMS shall apply a definition of household size that consists of the patient and, at a minimum, a spouse (regardless of whether the patient and spouse expect to file a joint federal or State tax return), biological children, adopted children, or stepchildren, and anyone for whom the patient claims a personal exemption in a federal or State tax return. For a patient who is a child, the household size shall consist of the child and biological parents, adopted parents, or stepparents or guardians, biological siblings, adopted siblings, or stepsiblings, and anyone for whom the patient's parents or guardians claim a personal exemption in a federal or State tax return.

Patients may be deemed ineligible for financial assistance:

- If they have insurance coverage (e.g., HMO, PPO, or Workers Compensation, Medicaid, or other insurance programs), that denies access to UMMS due to insurance plan restrictions/limits.
- If they refuse to be screened for other assistance programs prior to submitting an application for financial assistance.
- If they refuse to divulge information pertaining to a pending legal liability claim.

|                                                                                                                                                                         |                                    |                                      |
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Financial assistance generally applies to all emergency and other medically necessary care provided by each UMMS member organization; however, the following exclusions may apply:

- Services provided by healthcare providers not affiliated with UMMS member organizations (e.g., durable medical equipment, home health services).
- Services denied by a patient's insurance program or policy (e.g., HMO, PPO, or Workers Compensation). Exceptions may be made on a case by case basis considering medical and programmatic implications.
- Cosmetic or other non-medically necessary services.
- Patient convenience items, meals, and lodging.
- Supervised Living accommodations and meals while a patient is in the Day Program.
- Third Party Liability claims (Auto Accident, Workers Compensation, Bodily Injury, or other legal claim) until all means of payment are exhausted.

Financial assistance for professional charges awarded under this policy applies to the UM Physician Network (UMPN). Patients who wish to pursue financial assistance for non-UM Physician Network charges must contact the physician or provider group directly. A list of providers delivering medically necessary care in each UMMS hospital can be obtained on the website of each UMMS entity. This list specifies which such as providers do not participate in the UMMS Financial Assistance Policy.

#### **Presumptive Financial Assistance Eligibility**

In the event there is no evidence to support a patient's eligibility for financial assistance, UMMS reserves the right to determine presumptive financial assistance eligibility for all hospital accounts. To determine presumptive eligibility for financial assistance, UMMS may use outside agencies or information to estimate income which can be used to assess the patient's eligibility for financial assistance eligibility. Due to the inherent nature of presumptive circumstances, UMMS will award free care to patients deemed presumptively eligible for financial assistance. Presumptive eligibility for financial assistance shall only cover the patient's specific date of service. UM Physician Network provider groups will offer financial assistance on a physician balance based on a determination of eligibility on a hospital balance.

Presumptive eligibility may be determined on the basis of individual life circumstances that may include:

- a. Active Medical Assistance pharmacy coverage
- b. Specified Low Income Medicare (SLMB) coverage
- c. Primary Adult Care (PAC) coverage
- d. Homelessness
- e. Patient currently has Medical Assistance coverage
- f. Medical Assistance and Medicaid Managed Care patients for services provided in the ER beyond the coverage of these programs
- g. Medical Assistance spend down amounts
- h. Eligibility for other state or local assistance programs, such as:
  - i) Supplemental Nutrition Assistance Program
  - ii) State Energy Assistance Program
  - iii) Special Supplemental Food Program for Women, Infants, and Children
  - iv) Any other social service program as determined by MD DHMH and Health Services Cost Review Commission (HSCRC).

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- i. Patient is deceased with no known estate
- j. Patients that are determined to meet eligibility criteria established under former State Only Medical Assistance Program
- k. Non-US Citizens deemed non-compliant
- l. Non-Eligible Medical Assistance services for Medical Assistance eligible patients
- m. Patients that are determined to meet Medical Assistance eligibility criteria outside the timely claim filing and/or application period
- n. Patients that were determined to meet Medical Assistance eligibility criteria and in-between their new Non-Governmental Health Insurance coverage's activation waiting period
- o. Unidentified patients (Doe accounts that we have exhausted all efforts to locate and/or ID)
- p. Bankruptcy, by law, as mandated by the federal courts
- q. Eligibility in certain UMMS clinical programs (including: St. Clare Outreach Program, UMMS Maternity Program, UMSJMC Hernia Program).

Uninsured patients seen in the Emergency Department under Emergency Petition will not be considered for presumptive financial assistance until the Maryland Medicaid Psych program has been billed.

#### **Financial Hardship Assistance Eligibility**

Financial hardship assistance is available for patients who otherwise do not qualify for financial assistance under the primary guidelines of this policy, but for whom medical debt for medically necessary treatment over a twelve (12) month period exceeds 25% of that family's annual income.

- The amount of uninsured medical costs incurred at all UMMS member organizations will be considered in determining a patient's eligibility (including any accounts having gone to bad debt, except those accounts that have gone to lawsuit and a judgment has been obtained) and any projected medical expenses.
- For the patients who are eligible for reduced-cost care under the financial assistance criteria and also meet the criteria for financial hardship assistance criteria, UMMS will grant the total eligible reduction in charges.
- To calculate household income, UMMS will use the same criteria outlined in the Financial Assistance Eligibility section of this policy to calculate assets, household income, and family size.
- Once a patient is approved for financial hardship assistance, coverage will be effective for the month of the first qualifying date of service and a year prior to the determination. UMMS may decide to extend the financial hardship eligibility period further into the past or the future on a case-by-case basis.
- Financial hardship assistance will cover the patient and the eligible family members living in the household for the approved reduced cost and eligibility period for medically necessary care and will remain eligible for reduced-cost medically necessary care when seeking subsequent care at the same member organization during the 12-month period beginning on the date on which the reduced-cost medically necessary care was initially received. To avoid an unnecessary duplication of UMMS' determination of eligibility for free and reduced-cost care, the patient or eligible family members shall inform UMMS of the patient's or family member's eligibility for the reduced-cost medically necessary care.

All other eligibility, ineligibility, and procedures for primary financial assistance criteria apply to financial hardship assistance criteria, unless otherwise stated above.

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#### **IV. Appealing a Determination of Eligibility for Financial Assistance**

Patients whose financial assistance applications are denied have the option to appeal the decision. Appeals can be initiated verbally or written. Patients are encouraged to submit additional supporting documentation justifying why the denial should be overturned.

If a patient wishes to make an appeal, UMMS will:

- Notify the patient that the Health Education and Advocacy Unit is available to assist them or their authorized representative in filing and mediating a reconsideration request.
- Provide the address, phone number, facsimile number, e-mail address, mailing address, and website of the Health Education and Advocacy Unit: Office of the Attorney General, Health Education and Advocacy Unit | 200 St. Paul Place, 16th Floor, Baltimore, MD 21202 | Phone: (410) 528-1840 | Toll-free in Maryland 1-877-261-8807 | Fax: (410) 576-6571 | Email: [heau@oag.state.md.us](mailto:heau@oag.state.md.us)
- Document appeals within the third party data and workflow tool for review by the next level of management above the representative who denied the original application.
- Submit a letter of final determination to each patient who has formally submitted an appeal.

#### **Provider Driven Financial Clearance and Reconsideration**

Where there is a compelling educational, medical, and/or humanitarian benefit, UMMS clinical team members may request financial clearance of patients that are not otherwise able or likely to pay for their healthcare services. Clinical team members must submit appropriate justification in advance of the patient receiving services. UMMS Revenue Cycle central billing office will evaluate the patient's eligibility for Medical Assistance and financial assistance. A Financial Clearance Executive Committee at the member organization level, comprised of clinical and financial leadership, will request the information submitted by the requesting clinical and the central billing office and make the final determination on whether to grant financial clearance on a case-by-case basis.

If financially cleared, patients are still responsible to complete the financial assistance application process, and may be subject to presumptive eligibility screening, as outlined in this policy.

#### **V. Notice of Availability of Financial Assistance**

UMMS will advise patients, patient's families, and authorized representatives of the availability of financial assistance using posted notices and the Patient Billing and Financial Assistance Information Sheet. The Patient Billing and Financial Assistance Information Sheet notifies the patient of the availability of financial assistance and payment plans, includes a description of UMMS Financial Assistance Policy, explains how to apply for financial assistance, and includes a description of the patient's rights and obligations with regard to hospital billing and collection under the law.

- UMMS will post notices of financial assistance availability in each UMMS hospital's emergency room (if any), admissions areas, key patient access areas, and the hospital billing office. Notice of availability will also be sent to the patient with patient statements.

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- The Patient Billing and Financial Assistance Information Sheet will be provided at preadmission and before discharge for each hospital encounter, with each hospital statement, and it will be available to all patients upon request and without charge, both by mail and in the emergency room (if any) and admissions areas.
- The Financial Assistance Policy and the Financial Assistance Application will also be available to all patients upon request and without charge, both by mail and in the emergency room (if any) and admissions areas.
- The Financial Assistance Policy, the Patient Billing and Financial Assistance Information Sheet, and the Financial Assistance Application will also be conspicuously posted on the UMMS website ([www.umms.org](http://www.umms.org)).

#### **Patient Billing and Financial Assistance Information Sheet Content**

In addition to the content referenced above, the Patient Billing and Financial Assistance Information Sheet will include:

- The website and physical location(s) where patients can obtain copies of the financial assistance policy and financial assistance application form
- Instructions on how to obtain a free copy of the financial assistance policy and financial assistance application form by mail.
- A statement of the availability of translations of the financial assistance documents.
- Contact information for UMMS Hospital Billing Customer Service Department, which is available to assist the patient, the patient's family, or the patient's authorized representative understand their statement, understand the patient's rights and obligations regarding the statement, learn how to apply for free or reduced cost care, or learn how to apply for Maryland Medical Assistance, or any other programs that may help pay their medical bills.
- Contact information for the Maryland Medical Assistance Program.
- A notification that physician charges are not included in the hospital statement and are billed separately.
- A notification informing patients of the right to request and receive a written estimate of the total charges for hospital nonemergency services, procedures, and supplies that reasonably are expected to be provided for professional services by the hospital.
- A notification that a patients who are eligible for free or reduced care may not be charged more than AGB for emergency or other medically necessary care.
- A section that informs the patient of their ability to make a formal complaint with the HSCRC and the Office of the Attorney General of Maryland.
- A section for the patient to initial to indicate that they have been made aware of UMMS Financial Assistance Policy

The Patient Billing and Financial Assistance Information Sheet will be written in plain language, as specified by the Requirements for 501(c)(3) Hospitals Under the Affordable Care Act – Section 501(r), and will be made available in the patient's preferred language. It will also include a section that allows for patients to initial that they have been made aware of the financial assistance policy.

#### **VI. Extraordinary Collection Actions**

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Account balances that have not been paid may be transferred to Bad Debt (deemed uncompensated care) and referred to an outside collection agency or to UMMS's attorney for legal and/or collection activity. Third party agencies and/or attorneys are jointly and severally responsible for meeting the debt collection requirements listed in this policy, and in the UMMS Credits and Collections Policy. Collection activities taken on behalf of UMMS by a collection agency or UMMS' attorney may include the following Extraordinary Collection Actions (ECAs):

- Reporting adverse information about the individual to consumer credit reporting agencies or credit bureaus. UMMS will not report adverse information to a consumer reporting agency regarding a patient who was uninsured or eligible for free or reduced-cost care at the time of service. UMMS will not report to a consumer reporting agency until at least 180 days after the initial statement was provided. Prior to reporting to a consumer reporting agency, UMMS will determine whether the patient is eligible for free or reduced-cost care. UMMS will not report adverse information about a patient to a consumer reporting agency if UMMS was notified in accordance with federal law by the patient or an insurance carrier that an appeal or a review of a health insurance decision is pending within the immediately preceding 60 days, or if UMMS has completed a requested reconsideration of the denial of free or reduced-cost care that was appropriately completed by the patient within the immediately preceding 60 days.
- Commencing a civil action against the individual. UMMS will not hold a spouse or another individual liable for the debt owed on a hospital bill of an individual who is at least 18 years old. UMMS will not file a civil action to collect debt until at least 180 days after the initial bill was provided. Prior to filing the civil action, UMMS will determine whether the patient is eligible for free or reduced-cost care. UMMS will not file a civil action to collect debt if UMMS was notified in accordance with federal law by the patient or an insurance carrier that an appeal or a review of a health insurance decision is pending within the immediately preceding 60 days. UMMS will not file a civil action to collect debt if UMMS has completed a requested reconsideration of the denial of free or reduced-cost care that was appropriately completed by the patient within the immediately preceding 60 days.
- Attaching or seizing an individual's bank account or any other personal property.
- Garnishing an individual's wage. UMMS will not request a garnishment of wages or file an action that would result in an attachment of wages against a patient if the patient is eligible for free or reduced-cost care.

ECAs may be taken on accounts that have not been disputed or are not on a payment arrangement. ECAs will occur no earlier than 180 days from submission of first post-discharge bill to the patient and will be preceded by a written notice 45 days prior to commencement of the ECA. This written notice will be accompanied by an application for financial assistance (and instructions for completing the application) and a notice of availability of a payment plan to satisfy the medical debt, and the Patient Billing and Financial Assistance Information Sheet. The written notice will include the following information:

- Specified contact and procedural information.
  - The name and telephone number for UMMS,
  - The name and telephone number for the debt collector (if applicable)
  - The contact information for the UMMS Financial Assistance Department (or third party agency acting on behalf of UMMS), authorized to modify the terms of a payment plan (if applicable)
  - Telephone number and internet address of the Health Education Advocacy Unit in the Office of the Attorney General, available to assist patients experiencing medical debt.

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- The amount required to satisfy the debt (including any past due payments, penalties, or fees, if applicable)
- Identification of ECAs that UMMS (or its collection agency, attorney, or other authorized party) intends to utilize in order to obtain payment for the care, and state a deadline after which such ECAs may be initiated.
- A deadline after which such ECA(s) may be initiated that is no earlier than 45 days after the date that the written notice is provided.
- A statement recommending that the patient seek debt counseling services,
- An explanation of the UMMS Financial Assistance Policy, and a notification of availability of financial assistance for eligible individuals
- And any other information as prescribed by the HSCRC

Written notice and accompanying documentation will be sent to the patient by certified mail and first class mail, in the patient's preferred language, or another language, as specified. The written notice will be in simplified language of at least 10 point type.

In addition to the written notification, UMMS (and/or its collection agency or attorney) will make reasonable efforts to orally communicate the availability of financial assistance to the patient and tell the patient how he or she may obtain assistance with the application process. A presumptive eligibility review will occur prior to any ECA being taken. Finally, no ECA will be initiated until approval has been obtained from the UMMS Revenue Cycle Services leadership.

If a patient is determined to be eligible for financial assistance, UMMS (and/or its collection agency or attorney) will take all reasonably available measures to reverse any ECAs taken against the patient to obtain payment for care rendered during the financial assistance eligibility window. Such reasonably available measures will include measures to vacate any judgment against the patient, lift levies or liens on the patient's property, and remove from the patient's credit report any adverse information that was reported to a consumer reporting agency or credit bureau. All ECAs will cease once the patient is approved for financial assistance and all the patient responsible balances are paid.

UMMS will not engage in the following ECAs:

- Selling debt to another party.
- Charge interest on bills incurred by patients before a court judgement is obtained
- Requesting a lien against a patient's primary residence. In some cases, Local, State, or Federal judicial protocols may mandate that a lien is placed, but UMMS will not force the sale or foreclosure of a patient's primary residence.
- Request the issuance of or take action causing a court to issue a body attachment or an arrest warrant against a patient.
- Make a claim against the estate of a deceased patient if the deceased patient was known by UMMS to be eligible for free care or if the value of the estate after tax obligations are fulfilled is less than half of the debt owned. However, UMMS may offer the family of the deceased patient the ability to apply for financial assistance.
- Require payment of medical debt prior to providing medically necessary care.

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| <b>SUBJECT: UMMS Financial Assistance Policy</b>                                                                                                                        |                                    |                                      |

## ATTACHMENTS:

### ATTACHMENT A: Sliding Scale – Reduced Cost of Care

| 2024 Federal Poverty Limits (FPL) Annual Income Eligibility Limit Guidelines |          |          |          |          |          |          | See UMMS Charity Thresholds below |
|------------------------------------------------------------------------------|----------|----------|----------|----------|----------|----------|-----------------------------------|
| House-hold (HH) Size                                                         | 1        | 2        | 3        | 4        | 5        | 6        |                                   |
| Income Limit (up to Max)                                                     | \$15,060 | \$20,440 | \$25,820 | \$31,200 | \$36,580 | \$41,960 |                                   |

| 2024 Maryland Dept of Health (MDH) Annual Income Eligibility Limit Guidelines |          |          |          |          |          |          | See UMMS Charity Thresholds below |
|-------------------------------------------------------------------------------|----------|----------|----------|----------|----------|----------|-----------------------------------|
| House-hold (HH) Size                                                          | 1        | 2        | 3        | 4        | 5        | 6        |                                   |
| Income Limit (up to Max)                                                      | \$20,784 | \$28,224 | \$35,640 | \$43,056 | \$50,496 | \$57,912 |                                   |

| UMMS Financial Assistance Charity Income Thresholds              |          |          |           |           |           |           |                                                                        |
|------------------------------------------------------------------|----------|----------|-----------|-----------|-----------|-----------|------------------------------------------------------------------------|
| If your total annual household (HH) income level is at or below: |          |          |           |           |           |           | You are eligible for the following level of charity at UMMS:           |
| House-hold (HH) Size                                             | 1        | 2        | 3         | 4         | 5         | 6         |                                                                        |
| Income Limit (up to Max)                                         | \$41,568 | \$56,448 | \$71,280  | \$86,112  | \$100,992 | \$115,824 | <b>100% Charity</b><br>(Equals Up to 200% of MDH Annual Income limits) |
| Income Limit (up to Max)                                         | \$43,646 | \$59,270 | \$74,844  | \$90,418  | \$106,042 | \$121,615 | <b>90% Charity</b><br>(Equals Up to 210% of MDH Annual Income limits)  |
| Income Limit (up to Max)                                         | \$45,725 | \$62,093 | \$78,408  | \$94,723  | \$111,091 | \$127,406 | <b>80% Charity</b><br>(Equals Up to 220% of MDH Annual Income limits)  |
| Income Limit (up to Max)                                         | \$47,803 | \$64,915 | \$81,972  | \$99,029  | \$116,141 | \$133,198 | <b>70% Charity</b><br>(Equals Up to 230% of MDH Annual Income limits)  |
| Income Limit (up to Max)                                         | \$49,882 | \$67,738 | \$85,536  | \$103,334 | \$121,190 | \$138,989 | <b>60% Charity</b><br>(Equals Up to 240% of MDH Annual Income limits)  |
| Income Limit (up to Max)                                         | \$51,960 | \$70,560 | \$89,100  | \$107,640 | \$126,240 | \$144,780 | <b>50% Charity</b><br>(Equals Up to 250% of MDH Annual Income limits)  |
| Income Limit (up to Max)                                         | \$54,038 | \$73,382 | \$92,664  | \$111,946 | \$131,290 | \$150,571 | <b>40% Charity</b><br>(Equals Up to 260% of MDH Annual Income limits)  |
| Income Limit (up to Max)                                         | \$56,117 | \$76,205 | \$96,228  | \$116,251 | \$136,339 | \$156,362 | <b>30% Charity</b><br>(Equals Up to 270% of MDH Annual Income limits)  |
| Income Limit (up to Max)                                         | \$58,195 | \$79,027 | \$99,792  | \$120,557 | \$141,389 | \$162,154 | <b>20% Charity</b><br>(Equals Up to 280% of MDH Annual Income limits)  |
| Income Limit (up to Max)                                         | \$60,274 | \$81,850 | \$103,356 | \$124,862 | \$146,438 | \$167,945 | <b>10% Charity</b><br>(Equals Up to 290% of MDH Annual Income limits)  |

\*All discounts stated above shall be applied to the amount the patient is personally responsible for paying after insurance reimbursements.

\*Amounts billed to patients who qualify for Reduced-Cost of Care on a sliding scale (or for Financial Hardship Assistance) will be less than the amounts generally billed to those with insurance (AGB), which in Maryland is the charge established by the Health Services Cost Review Commission (HSCRC). UMMS determines AGB by using the amount Medicare would allow for the care (including the amount the beneficiary would be personally responsible for paying, which is the HSCRC amount; this is known as the “prospective Medicare method”.

**Effective 7/1/24**

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| <b>SUBJECT: UMMS Financial Assistance Policy</b>                                                                                                                        |                                    |                                      |

**RELATED POLICIES:**

UMMS Credit & Collections Policy  
UMMS Payment Plan Policy

**POLICY OWNER:**

UMMS Revenue Cycle Services

**APPROVED:**

Executive Compliance Committee Approved Initial Policy: 09/18/19

Executive Compliance Committee Approved Revisions: 10/19/2020, 11/07/22

Federal Poverty Level and Maryland Department of Health Annual Income Eligibility Limit Updated: 07/01/20, 07/01/21, 07/01/22, 07/01/23, 07/01/24

This policy was approved by the UMMS Executive Compliance Committee (ECC) Board on October 19, 2020.  
This policy was adopted for:

- UM St. Joseph Medical Center (UMSJMC) effective June 1, 2013.
- UM Midtown Campus (MTC) effective September 22, 2014.
- UM Baltimore Washington Medical Center (UMBWMC) effective July 1, 2016.
- UM Shore Regional Health (UMSRH) effective September 1, 2017.
- UM Charles Regional Medical Center (UMCRMC) effective December 2, 2018.
- UM Upper Chesapeake Health (UCHS) effective July 1, 2019
- UM Capital Region Health (UMCRH) effective September 18, 2019