

# Community Health Needs Assessment 2024



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# EXECUTIVE SUMMARY

## Background

In 2024, Chelsea Hospital, Trinity Health Ann Arbor and U-M Health convened to conduct a single Community Health Needs Assessment (CHNA) for the fourth time since 2016. This collaborative effort is known as UNITE, which stands for Unified Needs Assessment Implementation Plan Team Engagement. A CHNA is a systematic process involving the community to identify and prioritize community health needs. The CHNA uses quantitative and qualitative data to understand assets and the needs of a community. UNITE defines the community as the greater Washtenaw County, which includes Washtenaw County, Grass Lake, and Stockbridge.

## Identification and Prioritization of Needs

- Members of the UNITE group analyzed quantitative and qualitative data from both primary and secondary sources.
  - UNITE engaged the greater Washtenaw County throughout the CHNA process, including six focus groups, 11 stakeholder interviews, and 29 engagement sessions. No written comments were received from the last CHNA and Implementation Strategy.
- Based on the data collected and utilization of the expanded Hanlon method for prioritization of needs, UNITE has selected the following priorities for the 2024 CHNA:
  1. Mental Health
  2. Access to Services
  3. Housing
- The expanded Hanlon prioritization method took into consideration the number of people affected, seriousness of the issue, changeability of the issue, measurability of the issue, organizational capacity to address the problem, the impact on eliminating the existing health disparities and the effectiveness of available interventions.
- The report was submitted for review and approval by each hospital’s executive board in 2024:
  - Trinity Health Ann Arbor: April 24, 2024
  - Chelsea Hospital: April 23, 2024
  - U-M Health: June 06, 2024

# INTRODUCTION

The Patient Protection and Affordable Care Act of 2010 mandated IRS requirements for non-profit hospitals to: (i) conduct a Community Health Needs Assessment (CHNA) every three years and (ii) adopt an Implementation Plan to address community needs every three years. Both the assessment and plan must be reported in the hospital's Schedule H 990. The three non-profit hospitals in Washtenaw County (Chelsea Hospital, Trinity Health Ann Arbor and U-M Health) partnered to conduct a joint CHNA for the first time in 2016. This collaboration is known as UNITE, which stands for Unified Needs Assessment Implementation Plan Team Engagement. UNITE exists to promote health and improve the health equity of our community by developing a unified health assessment and improvement plan. UNITE does this by using a shared leadership structure and a process that continuously engages the community. The Washtenaw County Health Department also sits at the UNITE table as a critical partner in this work.

In 2024, for the fourth time, UNITE completed a joint CHNA for the combined service areas of the hospital that make up greater Washtenaw County. Though a CHNA process is required by federal mandate, caring for people, and valuing their experiences is at the core of each hospital's mission and values. Each hospital has worked to address the needs of the communities they serve and use timely and relevant data to improve community health and well-being.

For this assessment, UNITE engaged community residents and stakeholders to identify and prioritize health needs, and understand the root causes and local conditions contributing to poor health outcomes. Data from the 2021 CHNA highlighted inequities and social determinants of health that were exacerbated by the pandemic. Building on these previous findings, UNITE engaged community members across the service area to understand current experiences and needs. The hospitals also collected and reviewed quantitative data from primary and secondary sources. The resulting prioritized health needs will drive the implementation planning process for the UNITE hospitals over the next three years. The members of UNITE welcome partnerships and participation in response to the priorities identified in this assessment.

# COMMUNITY SERVED

## Community Description

Based on hospital discharge data and/or geographic proximity, UNITE defines “community” as greater Washtenaw County: Washtenaw County, Grass Lake, and Stockbridge. Greater Washtenaw County is in the southeast Michigan region and includes urban, suburban, and rural communities that are home to approximately 385,716 residents. Six cities, 24 townships and four villages are in greater Washtenaw County:

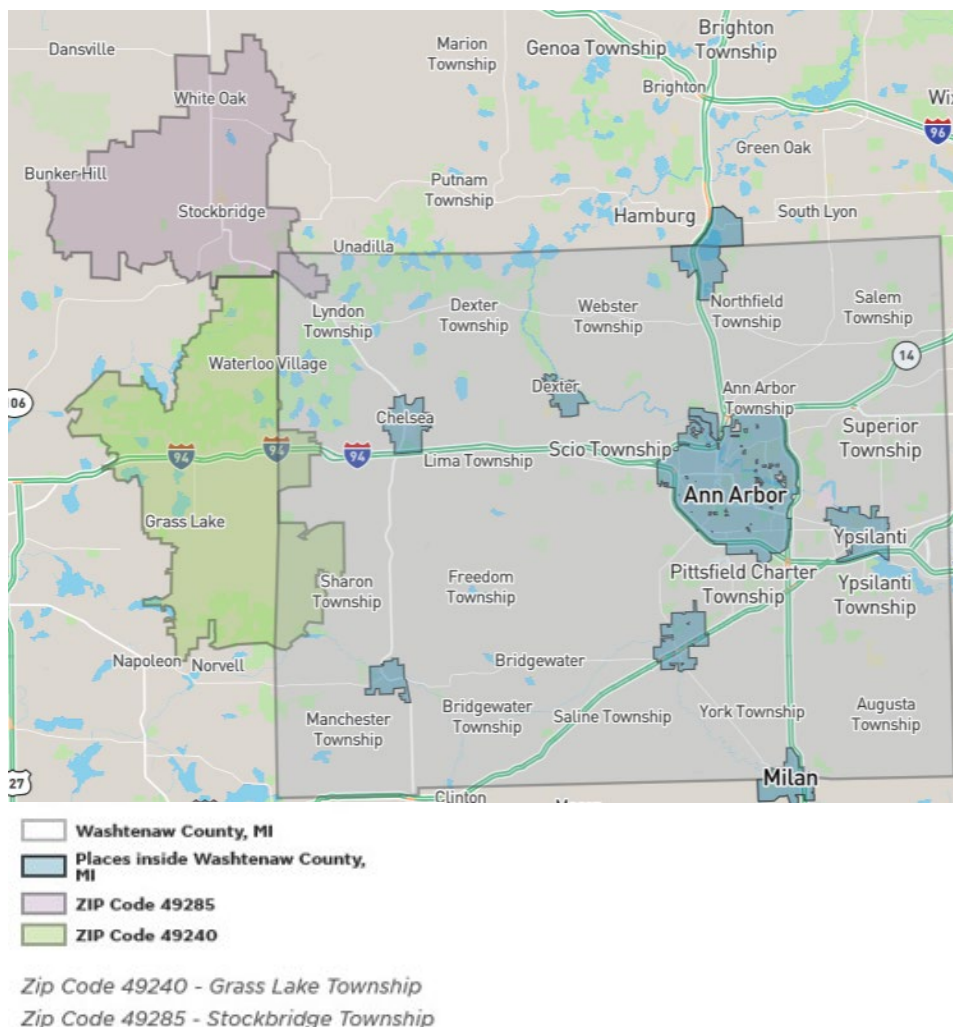
**Cities:** Ann Arbor, Chelsea, Dexter, Milan, Saline, Ypsilanti

**Townships:** Ann Arbor, Augusta, Bridgewater, Dexter, Freedom, Grass Lake\*, Henrietta\*, Lima, Lodi, Lyndon, Manchester, Northfield, Pittsfield, Salem, Saline, Scio, Sharon, Stockbridge\*, Superior, Sylvan, Unadilla\*, Webster, York, and Ypsilanti

**Villages:** Barton Hills, Manchester, Grass Lake\* (49240), Stockbridge\* (49285)

\*Townships and Villages located in Grass Lake and Stockbridge.

**Figure 1. Greater Washtenaw County Cities, Townships and Villages**



## Community Profile

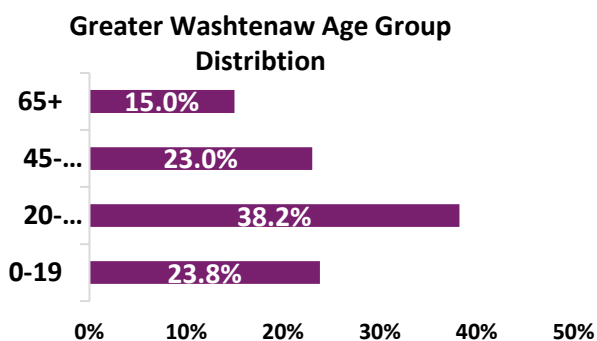
### Age and Sex

The greater Washtenaw County population is evenly split between males and females; approximately 50.1% of residents are male while the remaining 49.9% are female. In greater Washtenaw County, young adults between 20 and 44 are the largest age group (38.2%) followed by youth and children ages 0-19 (23.8%). Washtenaw County has a higher concentration of Generation Z residents while Stockbridge and Grass Lake have a higher concentration of Baby Boomers. (See Table 1.)

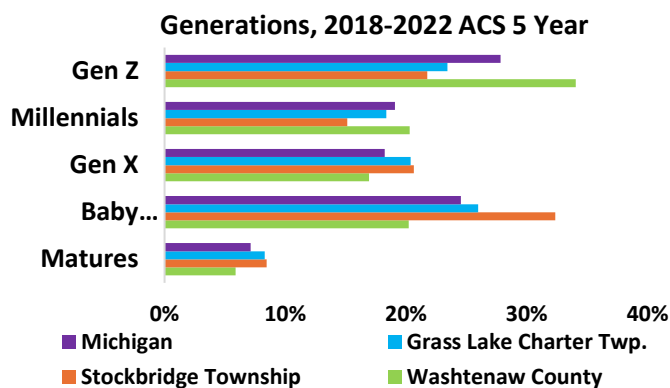
**Table 1.** Greater Washtenaw County and State of Michigan Population by Age and Sex

|                         | Washtenaw County <sup>i,ii</sup> | Grass Lake Charter Township (49240) <sup>iii,iv</sup> | Stockbridge Township (49285) <sup>v,vi</sup> | Greater Washtenaw (TOTAL) | State of Michigan <sup>vii, viii</sup> |
|-------------------------|----------------------------------|---|--|---------------------------|--|
| <b>Total Population</b> | 370,231                          | 9,379   | 6,106  | 385,716                   | 10,057,921                             |
| <b>Male</b>             | 185,097<br>(50.0%)               | 4,970<br>(53.0%)                                      | 3,311<br>(54.2%)                             | 193,378<br>(50.1%)        | 4,996,696<br>(49.6%)                   |
| <b>Female</b>           | 185,134<br>(50.0%)               | 4,409<br>(47.0%)                                      | 2,795<br>(45.8%)                             | 192,338<br>(49.9%)        | 5,064,225<br>(50.4%)                   |

**Figure 2.** Age Distribution



**Figure 3.** Generations



\*Source: U.S. Census American Community Survey 2018 - 2022 5-Year Est

## Race and Ethnicity

Residents of greater Washtenaw County identify as White (69.6%), Black/African American (11.0%), Asian (8.8%), American Indian and Alaska Native (0.2%), Native Hawaiian and other Pacific Islander (0.03%), and Hispanic or Latino (5.0%). The percentage of people who identify as a race other than the described options is 0.04%. The number of residents who identify as multi-racial (two or more races) is 4.5%. Below is the breakdown of race and ethnicity by Washtenaw County, Grass Lake, Stockbridge, and Michigan. (See Table 2.)

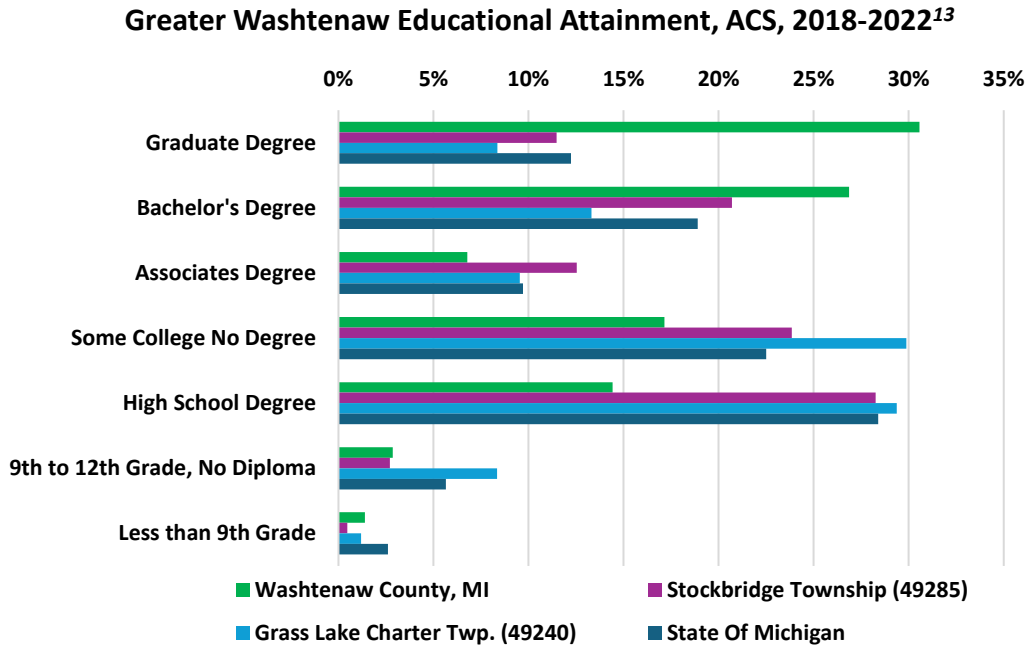
**Table 2.** Greater Washtenaw County Population by Race and Ethnicity

|  | Washtenaw County <sup>ix</sup> | Grass Lake Charter Township (49240) <sup>x</sup> | Stockbridge Township (49285) <sup>xi</sup> | Greater Washtenaw (TOTAL) | State of Michigan <sup>xii</sup> |
|--|--------------------------------|--|--|---------------------------|----------------------------------|
| <b>Total Population</b>                    | 370,231                        | 9,379  | 6,106                                      | 385,716                   | 10,057,921                       |
| White                                      | 254,046<br>(68.6%)             | 8,839<br>(94.2%)                                 | 5,734<br>(93.9%)                           | 268,619<br>(69.6%)        | 7,394,140<br>(73.5%)             |
| Black/African American                     | 42,224<br>(11.4%)              | 9<br>(0.1%)                                      | 41<br>(0.7%)                               | 42,274<br>(11.0%)         | 1,346,918<br>(13.4%)             |
| Asian                                      | 33,872<br>(9.1%)               | 34<br>(0.4%)                                     | 28<br>(0.5%)                               | 33,934<br>(8.8%)          | 325,464<br>(3.2%)                |
| Hispanic or Latino (of any race)           | 18,908<br>(5.1%)               | 239<br>(2.5%)                                    | 117<br>(1.9%)                              | 19,264<br>(5.0%)          | 550,427<br>(5.5%)                |
| American Indian and Alaska Native          | 664<br>(0.2%)                  | 6<br>(0.1%)                                      | 55<br>(0.9%)                               | 725<br>(0.2%)             | 35,080<br>(0.3%)                 |
| Native Hawaiian and other Pacific Islander | 121<br>(0.03%)                 | 0<br>(0.0%)                                      | 0<br>(0.0%)                                | 121<br>(0.03%)            | 2,472<br>(0.0%)                  |
| Two or More Races (Multiracial)            | 17,787<br>(5.1%)               | 252<br>(2.7%)                                    | 128<br>(2.1%)                              | 19,167<br>(4.5%)          | 369,637<br>(3.7%)                |
| Other Single Race                          | 1,609<br>(0.03%)               | 0<br>(0.0%)                                      | 3<br>(0.05%)                               | 1,612<br>(0.4%)           | 33,783<br>(0.3%)                 |

## Education and Income

Washtenaw County has a highly educated population with more than half of the population having earned at least a bachelor's degree. Grass Lake and Stockbridge have higher proportions of people who completed high school and had some college experience without obtaining a degree.<sup>xiii</sup>

**Figure 4. Greater Washtenaw Educational Attainment**



Educational attainment is highly correlated to income level. The median household income for Washtenaw County (\$84,245) is higher than the state of Michigan (\$68,505) and the United States (\$75,149).<sup>xiv</sup> Grass Lake’s median household income is greater compared to Washtenaw County at \$92,097, while the median household income for Stockbridge is lower at \$67,148.<sup>14</sup> While this data implies high rates of prosperity for residents across greater Washtenaw County, there remains populations that experience poverty. As is shown on the map below, census tracts in urban areas including Ann Arbor and Ypsilanti show higher concentrations of individuals with household incomes of less than 200% of the federal poverty level (FPL).<sup>xv</sup> Approximately 13.8% of Washtenaw County residents earn less than the FPL thresholds.<sup>xvi</sup> 3.7% and 6.6% of residents for Grass Lake and Stockbridge respectively earn less than the FPL thresholds.<sup>16</sup> In 2023, the FPL was \$14,580 for an individual and \$30,000 for a family of four.<sup>15</sup>

Households that earn more than the FPL but are unable to afford basic costs of living are part of the ALICE population, which stands for **A**sset **L**imited, **I**ncome **C**onstrained, **E**mployed. According to the 2021 ALICE Report from the United Way for Washtenaw County, 27% of households met this criterion.<sup>xvii</sup> Combined with those who live in poverty, it is estimated that approximately 40% of the population in greater Washtenaw County have unmet financial needs. These financial needs increase their risk of experiencing poor health outcomes.<sup>17</sup>



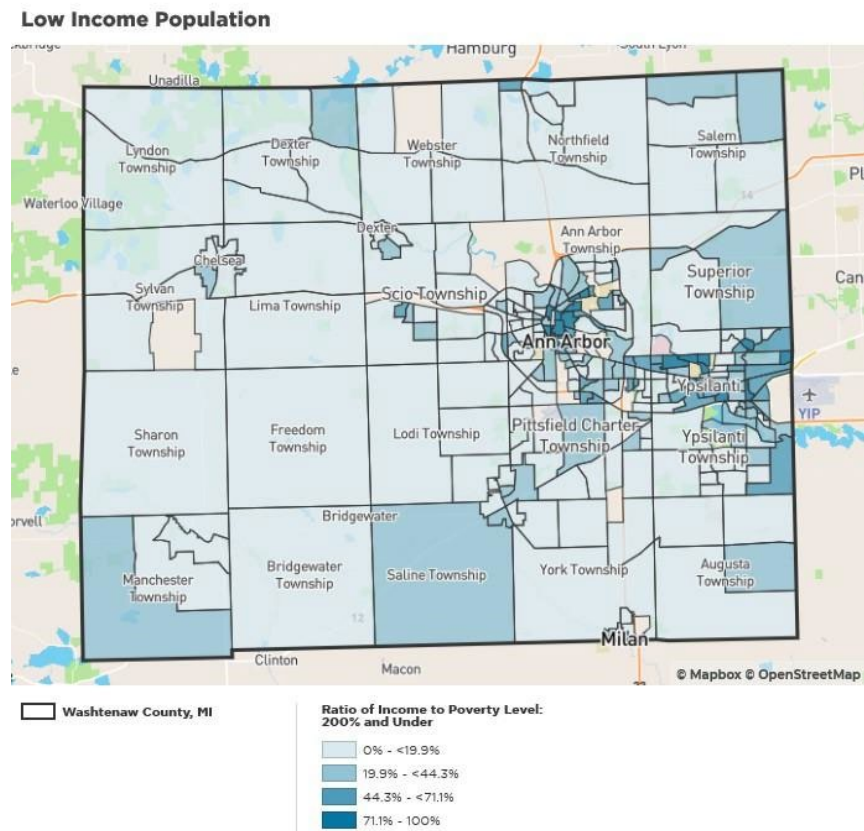
**Figure 5. Low-Income and Poverty Demographic Data for Greater Washtenaw County**



Sources: US Census Bureau ACS 5-year 2018-2022 Tables B17021 and C17002

The U.S. Census identifies individuals with a household income of up to 200% of the poverty level as low income. Around one in four people fit this criterion in Washtenaw County (25.7%); 14.6% and 22.3% met the low-income threshold for Grass Lake and Stockbridge respectively.<sup>16</sup>

**Figure 6: Percent of Population with Income 200% or Below FPL By Census Tract, Washtenaw County<sup>16</sup>**



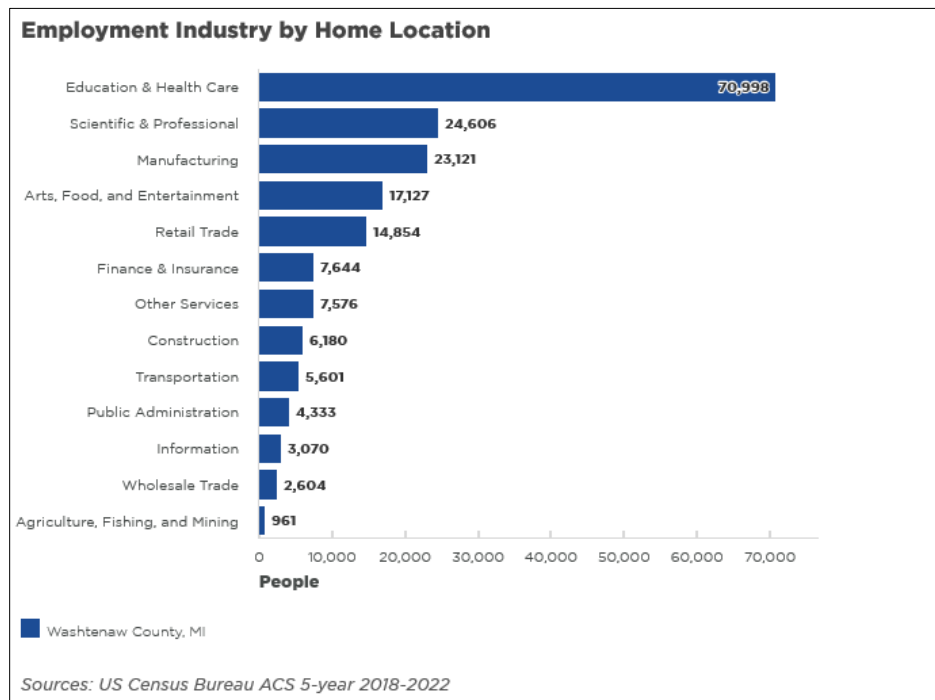
## Employment

Most adults between the ages of 18 – 64 are employed in greater Washtenaw County.<sup>xviii</sup> Education and health care are the main industries in the area, with employers including Chelsea Hospital, U-M Health, and Trinity Health Ann Arbor Hospital. Scientific and professional jobs are the next main industry.<sup>xix</sup> Rates of employment vary across greater Washtenaw County. Urban areas within the county have higher participation in the labor force than rural areas.

**Figure 7. Adults 18-64 Employment Ratio Greater Washtenaw<sup>18</sup>**



**Figure 8. Washtenaw Employment by Industry<sup>19</sup>**



# PROCESS AND METHODS USED

## Community Health Needs Assessment Definition

A Community Health Needs Assessment (CHNA) is a systematic process involving the community to identify and prioritize community health needs. The CHNA uses quantitative and qualitative data to understand community assets and the relative health and social needs of a community. Nonprofit hospitals are required to conduct a CHNA at least every three years.

## Process and Methods

The Association for Community Health Improvement’s community engagement model demonstrates the steps UNITE took in the 2024 CHNA process: Steps 1 through 6 reflect the CHNA cycle, and steps 7 through 9 relate to the CHNA Implementation Plan which will be developed in partnership with the community by November 2024.



UNITE launched the 15-month 2024 CHNA process in April 2023. UNITE reflected on the current cycle's accomplishments and challenges which laid the foundation for the 2024 CHNA strategy and planning sessions. Throughout the CHNA process, UNITE thoughtfully identified and engaged community members and community leaders within greater Washtenaw County (Washtenaw County, Grass Lake, and Stockbridge). The greater Washtenaw County community was defined based on hospital discharge data and/or geographic proximity.

The 2024 UNITE CHNA used pre-existing and newly collected population data to identify the top health and social-related priorities impacting greater Washtenaw County. The process began with each partner sharing available data and reports during two UNITE data retreats, which included data describing the utilization of hospital services, health conditions most frequently addressed by each hospital, publicly available community reports and social needs most frequently requested by community members. In addition, UNITE partnered with Southeastern Michigan Health Association (SEMHA) to compile a comprehensive list of population health data from sources including local, state, and federal level data. For a comprehensive list of sources, see Appendix G.

UNITE members hosted focus groups with community members, collected survey data and conducted interviews with community stakeholders to ensure lived experiences were considered along with the population health data (Appendix E). Each hospital reviewed population, patient and community feedback data and narrowed the initial 65 indicators to 32 before beginning the prioritization process. The indicators included social determinants of health domains (i.e., access to quality health care, economic stability, social support, and community context) and other health categories, including maternal, fetal, and infant health, behavioral and mental health, substance use, health behaviors and overall health outcomes. Initial health and social indicators for consideration in the prioritization process were selected based on the following criteria for greater Washtenaw County:

1. Needs identified in UNITE's two data retreats including patient screenings
2. The data highlighted a disparity between population groups
3. The data showed performance below state or national level
4. The data was reflected in focus groups, interviews and surveys
5. The data shows a worsening trend over time
6. The current data does not meet Healthy People 2030 goals

Priorities were selected using the Hanlon Method, which is a public health tool that assists stakeholders in identifying priorities from the many health challenges facing communities. The Hanlon Method allows stakeholders to consider the size of the problem, the seriousness of the problem and the effectiveness of the solution in setting priorities. The proposed method was expanded to account for health disparities and impact. UNITE and the Washtenaw County Health Department scored the 32 indicators ([Appendix D](#)) based on:

1. Number of people affected
2. Seriousness of the issue
3. Changeability of the issue
4. Measurability of the issue
5. Organizational capacity to address the problem
6. Impact on eliminating the existing health disparities
7. Effectiveness of available interventions

Each organization’s scores were averaged to identify the top health issues and those issues were discussed collectively to choose priorities. The top 10 items with the highest average scores were utilized to develop the final three CHNA priorities: mental health, access to services, and housing. (See Table 3.)

**Table 3.** Top Ten Identified Needs Using Hanlon Method

| Health Domain                      | Health Indicator           | Specific Measure  |
|------------------------------------|----------------------------|---|
| Behavioral and Mental Health       | Poor Mental Health         | Adult reported at least 14 days in a month of poor mental health  |
| Economic Stability                 | Food Insecurity - Poverty  | Number of persons in households with incomes below the Federal Poverty Level experiencing food insecurity |
| Health Outcomes                    | Poor Physical Health       | Adult reported at least 14 days in a month of poor physical health  |
| Health Outcomes                    | Cancer                     | Number of women not receiving timely breast cancer screening  |
| Behavioral and Mental Health       | Poor Mental Health - Youth | Youth (teens) reported at least 14 days month of poor mental health                                       |
| Social Support & Community Context | Safe Housing               | Number of households with at least 1 severe health hazard   |
| Health Outcomes                    | Chronic Disease            | Number of adults with High Blood Pressure and not on medication   |
| Maternal Fetal and Infant Health   | Infant Mortality           | Rate of infants dying before first birthday   |
| Economic Stability                 | Affordable Housing         | Number of people spending more than 30 % of income on housing   |
| Health Outcomes                    | Chronic Disease            | Number of seniors who have ever been told they have High Blood Pressure                                   |

# COMMUNITY DATA & INPUT

The Community Health Needs Assessment (CHNA) process was built on the successful community engagement efforts from the previous CHNA cycle and incorporated existing efforts from many community partners, including the Washtenaw County Health Department (WCHD). Through these collaborative efforts, UNITE received community input via surveys, forums, focus groups, and interviews. The results of these efforts may be found below:

- Greater Washtenaw County had a substantial amount of community assets including the strong sense of belonging and availability of agencies and resources to address challenges.
- Common challenges faced by the greater Washtenaw community include:
  - Access to health care (e.g., mental health and substance treatment services, primary health care)
  - Access to affordable, stable housing and other basic needs (e.g., food)
- Responses to surveys, focus groups, and interview questions demonstrate that residents recognize the connections between social conditions and health outcomes.

Recommendations from community input sessions heavily influenced the 2024 CHNA priorities. Additionally, UNITE plans to reconvene members for input on the implementation strategies. No written comments were received from the last CHNA and Implementation Strategy. Information on how to provide written comments or obtain a written copy of the assessment is posted on each hospital's website.

## Data

### Patient Data

Previously, the three hospitals solely relied on community data for their Community Health Needs Assessment, which had consistently provided robust and informative insights. However, recognizing the need for a more comprehensive approach to data processing, the co-chairs of the UNITE collaborative convened to determine the patient data relevant to current priority areas and beyond.

Subsequently, each chair engaged their respective quality data department to procure relevant information. This encompassed a wide range of metrics including mental health indicators, substance use diagnoses, body mass index exceeding 30, elevated A1C levels (>6), blood pressure readings, cardiovascular diseases (encompassing heart and stroke), diabetes, gestational diabetes, infant mortality rates, birth weight statistics, maternal mortality rates, and social needs screenings. Additionally, demographic data such as race, gender, age, and payer information were aggregated by zip code.

Given the zip code-level granularity of the data, Trinity Health and U-M Health entered into a data agreement to collaboratively utilize this information. At the second data retreat, the hospitals collectively examined the overarching patient data landscape, facilitating thorough inquiries to ensure the accuracy of the narrative depicted by the patient data. Analysis revealed that mental health remained a significant need within Washtenaw County.

### **Washtenaw County Health Department Survey Data (N=993)**

Washtenaw County Health Department conducted their own Community Health Assessment (CHA) during the same timeframe as UNITE and as part of their process administered a 20-question survey to residents, “*2023 Washtenaw Community Survey*,” which focused on lived experiences and overall community needs. Surveys were shared online via social media platforms and on paper across diverse communities in greater Washtenaw County from March to June 2023.

In an effort to reduce community survey burden and duplication of greater Washtenaw County residents, UNITE decided to utilize the “*2023 Washtenaw Community Survey*,” instead of developing their own survey. WCHD graciously shared their aggregated data with UNITE which informed our priorities and allowed for better alignment and coordination of efforts.

The top three community barriers included affordable housing, public transportation, and mental health. When asked about how current conditions compare with conditions prior to the COVID-19 public health emergency, nearly 70% of respondents answered that access to affordable housing is worse than before COVID-19, while nearly 60% expressed that access to affordable, healthy food is worse than before. There is likely a connection to the overall changes in the broader economy (e.g., inflation), which is reflected in more than 60% of responses expressing that the ability to pay bills, such as rent and utilities, is worse than before COVID-19. For more information about the *2023 Washtenaw Community Survey*, visit [Health For All Washtenaw](#).

### **Future Public Health Leadership Program (FPHLP) Survey Results (N = 171, Eastern Washtenaw County)**

During the summer 2023, in collaboration with U of M School of Public Health, undergraduate level interns (FPHLP) conducted in-person surveys to find out about needs in Ypsilanti, Ypsilanti Township, and Superior Township. 171 in-person surveys were conducted. Mental Health was the highest specific health need noted on the survey. Respondents said that diabetes, cancer, and obesity rank as high importance issues for their families. The majority felt they were safe and that walking in their neighborhood was a safe option.

## ***Community Forums and Focus Groups***

### **Washtenaw Health Initiative Community Forum (N = 56)**

In September 2023, UNITE hosted a community stakeholder forum in partnership with the Washtenaw Health Initiative (WHI) to gather input on the existing community strengths and areas for opportunity to improve health across greater Washtenaw County. There were 56 participants, 31 of whom attended in-person and 25 virtually. Participants represented various health and social needs organizations. (See Table 4.)

When asked about the strengths of greater Washtenaw County, stakeholders highlighted the major health systems, universities, and other social and health services that support the community and offer resources. Stakeholders were also proud of the diversity and inclusivity among community members and how community members and leaders are invested and motivated to decrease health disparities and inequities.

Like responses received through the Washtenaw County Health Department community surveys, affordable and accessible housing, mental health and substance use disorder services were discussed as prominent needs. Likewise, affordable, and accessible primary care and better care coordination was included as a need. While stakeholders shared their pride for living in a diverse and inclusive community, they also expressed the need to build more trust with community members, particularly those who are experiencing poverty, those with different family structures (e.g., single parent families), and those who have experienced trauma. Increasing resources for older adults, education to support health literacy, public grant and funding opportunities and support for Community Health Workers (CHWs) were also expressed as needs.



**Table 4.**

| <b>Organizations in Attendance at WHI Stakeholder Meeting</b>                |   |
|--|---|
| Aid in Milan   | National Alliance on Mental Illness (NAMI)<br>Washtenaw County        |
| Ann Arbor Area Transportation Authority (AATA)                               | Ozone House   |
| Blue Cross Blue Shield of Michigan   | Packard Health  |
| Blue Cross Complete of Michigan  | REGROUP   |
| CareSource   | Shelter Association of Washtenaw County<br>(Delonis Center Ann Arbor) |
| Center for Health & Research Transformation<br>(CHRT)                        | Southeastern Michigan Health Association<br>(SEMHA)                   |
| Center for Independent Living  | The Student Advocacy Center of Michigan                               |
| Chelsea Hospital   | The Women's Center of Southeastern Michigan                           |
| Community Mental Health Partnership of SE<br>Michigan                        | Trinity Health Ann Arbor  |
| Community Resource Center  | UnitedHealthcare Community Plan                                       |
| Corner Health Center   | University Of Michigan  |
| Food Gatherers   | U-M Health  |
| Fresh Start Clubhouse  | University of Michigan School of Nursing                              |
| Habitat for Humanity Huron Valley  | VA Ann Arbor Healthcare System  |
| Huron Valley Ambulance   | Washtenaw Area Council for Children                                   |
| Huron Valley Ambulance/Emergent Health<br>Partners                           | Washtenaw County Community Mental Health                              |
| Jewish Family Services of Washtenaw County                                   | Washtenaw County Health Department                                    |
| Michigan Community Health Worker Alliance<br>(MiCHWA)                        | Washtenaw Health Project  |
| Michigan Department of Health and Human<br>Services (MDHHS) Washtenaw County | Washtenaw Success by 6 Great Start<br>Collaborative                   |
| Michigan Prison Doula Initiative   | Ypsilanti Meals on Wheels   |

### **Eastern Washtenaw County Key Stakeholder Interviews (N = 11)**

Eleven key community stakeholders were interviewed for the assessment. Key stakeholders described health and well-being as having basic needs met including, food, shelter, and safety. They expressed pride in having a lot of resources available to serve community members. When discussing further examples of community strengths and resources, participants highlighted the presence of low-cost and free health care, accessible transportation options, and a plethora of non-profit organizations dedicated to bridging gaps in services.

The responses from stakeholders also reflected that housing and mental health services are still high priority needs despite having a community that has many resources. Stakeholders also mentioned the need for educational programming (i.e., reading and literacy programs) and financial literacy. A few stakeholders highlighted economic segregation and the need to address structural racism in the community. (See Table 5.)

**Table 5. Stakeholder Interviewees and Organization**

| <b>Community Stakeholder Name</b> | <b>Organization</b>                                  |
|-----------------------------------|--|
| Justin Hodge                      | Washtenaw County Commissioner                        |
| Jyoti Gupta and Marnie Leavitt    | Women’s Center of Southeastern Michigan              |
| Dr. Carlos Lopez                  | Ypsilanti Community Schools                          |
| Shannon Gilroy and Alexa Jackson  | Shelter Association of Washtenaw County              |
| Robert Jansen                     | Lincoln Consolidated Schools                         |
| Mia Lanier                        | Parkridge Community Center                           |
| Rhonda Weathers                   | SOS Community Services                               |
| Shannon Etcheverry                | Geriatrics Community Programs University of Michigan |
| Caroline Sanders                  | Washtenaw County Commissioner                        |

Several factors were cited to explain the existing needs in the community, such as insufficient incentives and funding for mixed housing development, limited availability of agencies providing mental health services for Medicaid and Medicare beneficiaries, and the presence of systemic racism.

To address these needs, stakeholders offered ideas including building affordable housing, creating a childhood center that would connect with families to provide wraparound resources for children up to three years old, and providing an open Request for Proposals (RFP) to support multiple initiatives.

Finally, the stakeholders recommended hospitals/health systems to provide lower cost health care, support 24-hour childcare and grow partnerships with community organizations so that they can be more present in the communities served. There was also the call for hospitals/health systems to evolve and take a lead role to help develop solutions to addressing barriers to accessing health care and transportation.

Based on the responses from community residents and key stakeholders, there are some overlapping themes, including housing availability and affordability and mental health services. However, there seems to be a disconnect and divergence in perspective between these two groups regarding availability and accessibility to resources. While residents stated transportation as a major barrier to health and well-being, key community stakeholders expressed satisfaction with the transportation system. (See Table 6.)

### **Western Washtenaw, Grass Lake, and Stockbridge Engagement Sessions (N = 378)**

**Table 6.** Organizations Participating in the CHNA Discussions with Chelsea Hospital

| <b>Organization</b>                                       | <b>Number of Participants</b> |
|---|-------------------------------|
| Catholic Social Services of Washtenaw                     | 1                             |
| Chamber of Commerce - Stockbridge                         | 6                             |
| Chelsea Hospital Patient Experience Advisory Council      | 6                             |
| Chelsea Kiwanis Club                                      | 12                            |
| Chelsea Ministerial Association                           | 8                             |
| Chelsea Rotary Club                                       | 20                            |
| Chelsea School District Parent Teacher Organization (PTO) | 18                            |
| Chelsea Senior Center Board                               | 12                            |
| Copper Nail Board   | 5                             |
| Dexter Forum  | 31                            |
| Dexter Senior Center Board                                | 11                            |
| Dexter Rotary Club  | 15                            |
| Dexter Wellness Coalition                                 | 13                            |
| Grass Lake "5th Quarter" High School Event                | 31                            |
| Grass Lake Library  | 11                            |
| Grass Lake Senior Center                                  | 28                            |
| Grass Lake VFW meeting                                    | 8                             |
| Grass Lake Wellness Coalition                             | 14                            |
| Manchester Community Resource Center Board                | 9                             |
| Manchester Lions Club                                     | 8                             |
| Manchester Ministerial Association                        | 3                             |
| Manchester Wellness Coalition                             | 8                             |
| SRSLY youth coalitions in Chelsea, Dexter                 | 29                            |
| St. Louis Center  | 1                             |
| Stockbridge Area Senior Center                            | 25                            |
| Stockbridge Community Outreach Board                      | 28                            |

|   |    |
|---|----|
| Stockbridge Ministerial Association               | 6  |
| Western Washtenaw Area Value Express (WAVE) Board | 11 |

Chelsea Hospital led community engagement sessions in western Washtenaw County, Grass Lake, and Stockbridge from September through November 2023. In total, 378 residents participated in these sessions at 29 meetings in Chelsea, Dexter, Grass Lake, Manchester, and Stockbridge. The following community sectors were represented in these meetings: teens, adults, seniors, faith community leaders, transportation providers, food pantries, business owners, municipal leaders, hospital patients, those with chronic diseases, and people with disabilities.

Each group was asked “what is the best part of your community,” and “what are the needs you see in your community.” Participants reported that safety, good schools and sense of connection and community are all key community assets. The most reported needs included affordable housing, transportation, food access, social isolation, dependent care, mental health and access to mental health care, access to primary care, financial hardship, and vaping and marijuana use among teens. When asked which are the most important needs, housing rose to the top, followed by mental health and access to mental health care.

**Eastern Washtenaw County Focus Groups (N = 25)**

To further engage the community, residents were invited to participate in six focus groups held in eastern Washtenaw County in November 2023. Feedback from 25 participants, many of whom were from populations that have routinely experienced barriers to achieving optimal health. Focus group participants’ ages ranged from 18 to 65+ years of age, however 90% were over 55 years old. Eighty-five percent of participants were white, and most were female. A summary of the responses is included below. We would like to thank our partners Delonis Center, Parkridge Community Center, and Disability Network Washtenaw, Monroe, Livingston for hosting space for the focus groups.

## **Community Strengths, Assets and Needs: Engagement Sessions and Focus Groups**

### **Community Strengths and Assets**

When asked about the assets and strengths of the community, participants highlighted their appreciation for the access to quality educational opportunities in their communities, including the public library. There was also a high regard for access to quality health care services through the local hospitals. These key themes encompass the most frequent responses to this question and are categorized under the Healthy People 2030 Education Access and Quality and Health Care Access and Quality Social Determinants of Health Domains.

Additional themes included the friendliness of people in the community and the diversity among community members. There was also appreciation for the ability for people who live in more rural communities to have proximity to a metropolitan area.

### **Community Needs**

When discussing the community's needs, participants overwhelmingly highlighted the need for affordable housing in the community. Other basic needs were mentioned, including food. Participants shared the need for grocery stores to be closer to their homes, and for the food to be equitably accessible for all. For example, respondents mentioned the provision of canned or frozen foods to people who were unhoused, which likely does not meet their specific needs for food access. Attention to this is important. Likewise, there is a need for provision of foods in shelters that address health needs for people with chronic health conditions (e.g., diabetes), which is important for equitable food access.

Participants also emphasized that transportation and road infrastructure present challenges for residents to get where they need to go. Further, there was discussion regarding safety and trust. Participants mentioned the need to identify safe places for unhoused people who own vehicles to park their cars and for shelters to be more secure. Lack of trust stems from lack of feeling safe and from the perception of stigma felt when trying to access needs throughout the community. Participants shared the need to know where they can go to receive support for their needs and be heard and respected (e.g., counseling, therapy services). Social isolation is a product of these issues.

Housing rose to the top of the list as the most popular response when participants were asked to prioritize the needs in their community. Access to mental health services and improved transportation infrastructure followed on the top of the list as contenders. There was a call for youth involvement when addressing challenges at a systemic level. Examples included developing youth mentorship programs (e.g., Big Brother Big Sister programs) and the involvement of schools in coordinating needs for students and families, along with inviting seniors to help their peers with what they need. Finally, residents emphasized the importance of nonprofit organizations working more collaboratively to improve efficiency.

When asked how they would address the problem if they had a blank check, some people said they would invest in homeownership for themselves and community members. Other participants mentioned helping people get basic needs met while being able to save money to achieve economic stability.

Finally, residents emphasized the need for hospitals/health systems to expand availability of mental health and social work services. Specifically, participants called out the need for hospital beds for those experiencing a mental health crisis and the need for hospitals to use a more comprehensive approach to health care that addresses the full spectrum of a patient's needs. Residents also recommended the inclusion of community residents on hospital boards and for hospitals to incorporate community health workers into their staff.

## PRIORITY HEALTH NEEDS AND METHODOLOGY

After considering the input of the community and examining population and patient data for greater Washtenaw County, the UNITE team selected three health-related needs to prioritize for the next three years:

1. Mental Health

2. Access to Services

3. Housing

Each priority was strongly expressed as a need by community members and stakeholders and was evident when examining population data. The UNITE team was thoughtful when selecting the health priorities and made sure to choose priorities that would allow for each partner to address health outcomes and to continue collaborative work that addresses the social determinants and root causes of health outcomes.

### **Priority 1: Mental Health**

Mental Health and Substance Use Disorders were a priority in the 2021 CHNA. These areas of health continue to be a priority for residents of greater Washtenaw County, especially in the aftermath of the COVID-19 pandemic. Key data points related to mental health in greater Washtenaw County include:

## **Behavioral Health Data**

- Over 20% (22.5) of adults in Washtenaw County have been diagnosed with depression.<sup>xx</sup>
- In 2022, 41% of U-M Health patients residing in greater Washtenaw County had a diagnosed behavioral health issue and had at least one visit with a provider that year.<sup>xxi</sup>
- Anxiety and depression were among the top 10 most common diagnoses in 2022 among Trinity Health Ann Arbor and Chelsea Hospital patients.<sup>xxii</sup>
- A third (31.5 %) of high school students reported experiencing depression in the past year.<sup>xxiii</sup>

## **Substance Use**

- Since the onset of the COVID-19 pandemic, drug (opioid and non-opioid) overdose deaths have increased in Washtenaw County. In 2020, there were 82 overdose deaths. The number increased in 2021 to 102 and increased again in 2022 to 109 total deaths from drug overdose.<sup>xxiv</sup>
- Fentanyl, mixed drugs, and alcohol were the top three causes of overdose deaths. Many of these overdose deaths occurred in urban areas (i.e., Ypsilanti and Ann Arbor).<sup>xxv</sup>
- Adults who binge drink were up from 17.4% (2018-2020)<sup>xxvi</sup> to 20.5% in (2020-2022).<sup>xxvii</sup>
- 17.4% of high school students in Washtenaw County reported having used alcohol in the past 30 days, and 10.9% reported having used marijuana in the past 30 days.<sup>xxviii</sup>

## **Social Isolation**

- Residents expressed concerns about social isolation and its connection to mental health during the Washtenaw Health Initiative community stakeholder forum. Nearly 15.7%<sup>xxix</sup> of residents live alone in Washtenaw County, and 27.3%<sup>xxx</sup> of people over age 65 live alone. Other health outcomes including high blood pressure and obesity have been linked to social isolation as well.<sup>xxxi</sup>
- In 2022, at U-M Health, patients who filled out the annual Partners in Care Questionnaire revealed that among those who screened positive for a social need, 15.7% identified social isolation as their primary need.<sup>xxxii</sup>
- Since 2021, Trinity Health Ann Arbor, Chelsea Hospital and the Trinity Health IHA Medical Group have screened 272,167 patients and 28.02% of those patients screened positive for social needs. Of the 28.02%, 12.06% of patients screened high or medium for social isolation.<sup>xxxiii</sup>
- Women were two-thirds (66%) of those who screened positive for social isolation among Trinity Health patients in 2022.<sup>xxxiv</sup>
- Adults under the age of 65 were disproportionately likely to report social isolation in 2022, among Trinity Health patients; while this age group made up 48% of patients screened for social care needs, adults ages 18-64 made up 72% of the patients who reported social isolation in the Chelsea Hospital service area. Similarly in the Trinity Health Ann Arbor service area, adults ages 18-64 made up 55% of the patient population screened, but comprised 79% of the patients who indicated social isolation.<sup>xxxv</sup>

### **Adverse Childhood Experiences (ACEs)**

- Adverse Childhood Experiences (ACEs) are potentially traumatic events experienced in the lives of people younger than 18 years of age. More than two-thirds of adults living in Washtenaw County have experienced at least one ACE. The most common ACE experienced among residents was verbal abuse.<sup>xxxvi</sup>
- The more ACEs experienced by an individual, the more likely one is to partake in risky health behaviors and more likely to experience a mental health condition like depression. Approximately 26% of Washtenaw County residents who have experienced at least one ACE have been diagnosed with depression compared with just 12% of residents who have not experienced any ACEs.<sup>30</sup>

### **Suicide**

- In 2021, there were 47 deaths by suicide in Washtenaw County and 45 in 2022.<sup>xxxvii</sup>
- 19.1% of high school students in Washtenaw County seriously considered suicide in the past 12 months. 7.8% attempted suicide in the past year.<sup>21</sup>

### **Priority 2: Access to Services**

Access to services is a key component to achieving health equity. Essential services including health care, public health, social services, and public transportation all play a key role in the health and well-being of any community. Key data points related to access to services for Washtenaw County residents include:

#### **Primary Health Care**

- The greater Washtenaw County area has three Primary Care Medically Underserved Areas (MUAs), which are designated by the Health Resources and Services Administration. MUAs are geographic areas, populations or facilities that have too few health providers to serve the area or population. These areas include Stockbridge and Ypsilanti Township.<sup>xxxviii</sup>
- In 2021, approximately 20% of ambulatory care sensitive hospitalizations were due to diabetes in Washtenaw County.<sup>xxxix</sup>
- In 2021-2022, 23.1% of the community reported high blood pressure.<sup>20</sup> Of those, 24.9% reported they were not on medication for it.<sup>xl</sup> Also, 8.7% of the community was diagnosed with diabetes.<sup>20</sup> These conditions can be managed with routine primary care visits. Diabetes, hypertension, heart disease and stroke were among the top 10 leading causes of death in 2021.<sup>xli</sup>
- The proportion of women over age 40 who did not receive timely breast cancer screening increased since the previous survey from 22.2% (2018-2020)<sup>24</sup> to 31.4% (2020-2022).<sup>25</sup>
- The proportion of adults in Washtenaw County who reported experiencing poor physical health at least 14 days out of the month, increased from 8.9% to 10.2% since the previous survey.<sup>20</sup>
- The number of older adults who have ever been told that they have high blood pressure grew to approximately 56% (31,202) from 44% since the last survey.<sup>xlii</sup>



### **Virtual Care**

- Virtual Care was listed as a social need in patient screenings (12.4%) for U-M Health patients that screened positive in greater Washtenaw County.<sup>xliii</sup>

### **Maternal and Infant Health Care**

- In 2021, 60.4% of Latina women, 61.5% of Black women, and 66.4% of Asian and Pacific Islander women received adequate prenatal care compared to 72.1% of White women.<sup>xliv</sup>
- Black women had the highest proportions of children born at very low or low birth weights compared to other racial categories. Nearly 17% (16.3) of babies born to Black mothers were very low or low birth weight compared to 7.1% of babies born to White mothers.<sup>xlv</sup>
- Black infants have more than double the infant mortality rate (14.1) of White infants (3.3) and the overall population.<sup>xlvi</sup>

### **Digital Divide**

- Access to high-speed, broadband internet services plays a crucial role in accessing needed services. Approximately 8% of households in Washtenaw County only have access to cellular internet services. However, people living in partially rural communities like Stockbridge (18%) and Grass Lake (14.9%) have a higher proportion of residents who only have access to the internet through cellular devices.<sup>xlvii</sup>
- Households in more rural parts of the greater Washtenaw area have no internet access at all. Particularly, 8.6% of households in Grass Lake and 7.1% of households in Stockbridge have no internet access compared to 4.8% of Washtenaw County households.<sup>xlviii</sup>

### **Food Insecurity**

- In Washtenaw County, 6.8% (4,760) of children were food insecure. This is important because there are links showing that food insecurity affects children in terms of toxic stress that can have lasting effects on overall health and chronic disease.<sup>xlix</sup>
- Food insecurity rates for Black and Hispanic adults are almost 1.5-2 times greater than that of their white counterparts.<sup>l</sup>
- The percentage of individuals facing food insecurity in households with incomes below the Federal Poverty Level (FPL) saw an increase from 60.3% in 2019 to 62.0% in 2021.<sup>43</sup>
- African American patients were 32% of those who screened positive for food insecurity among Trinity Health patients in 2022, while African Americans made up only 12% of the total patient population during the same time period.<sup>li</sup>

### **Transportation**

- As of 2015, 63.2% of Washtenaw County residents were within walking distance of a fixed route transit stop and 67.7% of jobs were within walking distance of transit.<sup>lii</sup>
- Washtenaw County's Environmental Protection Agency Walkability Index Score was 10.2 in 2019, which is within the average for scores in urban areas. However, walkability scores were 4.7 and 4.2 respectively for zip codes 49240 and 49285, which covers

Grass Lake and Stockbridge. Walkability Index Scores range from 0 to 20 with 20 describing the most walkable communities.<sup>liii</sup>

- Based on U.S. census data, 7.8% of Washtenaw County households do not have a vehicle.<sup>liv</sup> For Stockbridge, nearly 2% of households (1.91) were without access to a vehicle.<sup>lv</sup> Households with one car in Grass Lake accounted for 13.9% of the population while two-car households accounted for 39.2%, which are below the national average.<sup>lvi</sup>
- African American patients were 33% of those who screened positive for transportation needs among Trinity Health patients in 2022, while African Americans made up only 12% of the total patient population during the same time period.<sup>lvii</sup>

### **Multiple Needs**

- In 2022, patients with Medicaid were disproportionately represented among Trinity Health patients who screened positive for food insecurity, transportation, housing, environmental safety, dependent care, and health literacy.<sup>lviii</sup>

### **Priority 3: Housing**

Quality affordable housing is out of reach for many in greater Washtenaw County. Key data points related to housing include:

#### **Poverty**

- Approximately 13% of households in Washtenaw County earn below the Federal Poverty Level and another 27% are part of the **Asset Limited, Income Constrained, Employed (ALICE)** population who earn more than the FPL, but less than the basic cost of living for their county of residence.<sup>16, 17</sup>
- The number of ALICE households increased significantly between 2019 and 2021 in Washtenaw County from 26,622 to 39,730.<sup>17</sup>
- Nearly 60% of Black households in Washtenaw County are either part of the ALICE population or living in poverty.<sup>17</sup>
- Many ALICE households have children present and are headed by single females (71%) or by single males (46%).<sup>17</sup>

#### **Housing Costs**

- Approximately 45,289 households in Washtenaw County are burdened with the cost of housing, meaning they are spending at least 30% of their household incomes on housing costs. Nearly 30% of households are spending 30% or more of their incomes on housing.<sup>lix</sup>
- The median renter household income in Washtenaw County is \$47,208 and the median gross rent as a percentage of income is 31.9%.<sup>lx</sup>
- A review of the FindHelp.org platform, which is utilized by UNITE partners, found that 30% of the most searched terms on their website included, “help paying for housing, help finding housing, help paying for utilities and temporary shelter” between July 2021 and June 2023.<sup>lxi</sup>

UNITE is confident that each priority can be positively impacted with strategic collaboration across and within each organization and in partnership with the community. These important data points will be used as a guide during the implementation planning where community members will be invited to help identify practical and feasible strategies, tactics, and actions to impact the health of the community.

## DOCUMENTING AND COMMUNICATING RESULTS

The CHNA report will be available on the websites of all UNITE members (Chelsea Hospital, Trinity Health Ann Arbor Hospital, and U-M Health). A paper copy will be made available at all hospital facilities upon request. Results have been communicated to numerous community groups and agencies. UNITE plans to share results to greater Washtenaw County through a series of community conversations in the summer of 2024. For comments or questions, contact the following locations:

### **Chelsea Hospital**

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### **U-M Health**

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## CONCLUSION

The UNITE members are grateful for all partners, stakeholders, and community members who contributed their time, thoughts, and talents to identifying the top health and social needs for greater Washtenaw County. UNITE looks forward to creating a comprehensive implementation plan that includes measurable strategies to address each priority and generating pathways to help everyone in greater Washtenaw County achieve optimal health and well-being.

## Appendix A – Contributors

### UNITE MEMBERS

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## Appendix B – Hospital Descriptions

**Chelsea Hospital** is a 103-bed community hospital located on 115 wooded acres in Chelsea, Michigan. It is a joint venture hospital between Trinity Health and U-M Health. For information on hospital services, please call (734) 593-6000, or visit the website, [www.trinityhealthmichigan.org/location/chelsea-hospital](http://www.trinityhealthmichigan.org/location/chelsea-hospital). The Chelsea Hospital primary service area is defined as the geographic area encompassing the zip codes of Chelsea, Dexter, Grass Lake, Manchester and Stockbridge, Michigan. This includes sections of four counties (western Washtenaw, southeastern Ingham, southwestern Livingston and eastern Jackson) and all or part of the following cities, villages, and townships: Bridgewater Township, City of Chelsea, Dexter Township, Freedom Township, Grass Lake Township, Lima Township, Lyndon Township, Manchester Township, Scio Township, Sharon Township, Stockbridge Township, Sylvan Township, Unadilla Township, Webster Township, City of Dexter, Village of Grass Lake, Village of Manchester, and Village of Stockbridge. The Chelsea Hospital service area was determined by the proximity of these communities to the hospital, which is located at 775 S. Main St, Chelsea, Michigan.

Chelsea Hospital shares the Trinity Health mission to “serve together in the spirit of the Gospel as a compassionate and transforming healing presence within our communities.”

**Trinity Health Ann Arbor (THAA)** is a 537 licensed bed academic teaching hospital and tertiary care center. The hospital is located at 5301 McAuley Dr., Ypsilanti, Michigan, situated on a 341-acre campus. Its staff of physicians, nurses and health care professionals have extensive training in a variety of specialty or tertiary care programs, including cardiology, oncology, obstetrics, orthopedics, surgery, Level I trauma, physical medicine and rehabilitation, women and children's health, and senior health services. THAA provides medical residency training programs in internal medicine, transitional, surgery, OB/GYN, emergency medicine, and lifestyle medicine for over 100 residents. THAA has been a leading health care provider for more than 100 years. As part of the Trinity Health Michigan region and Trinity Health Corporation, THAA has received numerous local and national awards in recognition of leadership, quality outcomes, and clinical excellence.

THAA shares the Trinity Health mission to "serve together in the spirit of the Gospel as a compassionate and transforming healing presence within our communities," with core values of reverence, commitment to those who are experiencing poverty, justice, stewardship, safety, and integrity.

**U-M Health** is home to one of the largest health care complexes in the world. The University Hospital is the health system's hospital for adult patients. The 11-story, 550-bed hospital first opened its doors in 1986. Today, 70% of the hospital's patients are admitted

from communities or regional hospitals outside the Ann Arbor area. In its 1,796,262 square feet, the hospital houses diagnostic equipment, clinical laboratories, operating rooms, and inpatient and intensive care units. The University Hospital is located at 1500 E. Medical Center Dr. Ann Arbor, Michigan, 48109. The main campus consists of the A. Alfred Taubman Health Care Center, C.S. Mott Children's Hospital, Frankel Cardiovascular Center, Med Inn, Rogel Cancer Center, University Hospital South, and Von Voigtlander Women's Hospital. The health system has numerous primary care sites within Washtenaw County as well as several satellite locations in the surrounding area. Specialty Care Centers are primarily located in Ann Arbor but with satellite locations throughout Southeast Michigan.

The mission of U-M Health is "To advance health to serve Michigan and the world." We take our core values of Caring, Innovation, Inclusion, Integrity, and Teamwork into the community in order to build bridges and connect communities.

# Appendix C – Retrospective 2021-2023 Implementation Strategy

Below is a non-exhaustive summary of activities and outcomes achieved across health systems.

## **Priority #1: Mental Health and Substance Use Disorders**

**Goal:** Reduce the prevalence and negative impacts of substance use and mental illness in greater Washtenaw County.

### **Joint Hospital Actions to Address Mental Health and Substance Use Disorder:**

**Activity 1:** Participate in local coalitions (i.e., Washtenaw Health Initiative Mental Health & Substance Use Disorder workgroup, Washtenaw County Community Mental Health Board, One Big Thing, etc.) and activities related to increasing behavioral health access and addressing root causes.

- **Outcome:** Since 2010, Trinity Health Ann Arbor (THAA) and U-M Health have been founding members and financial partners of the Washtenaw Health Initiative (WHI). WHI leads the Opioid Project which addresses gaps within the community to combat Opioid Use Disorder. A THAA representative continues to hold a seat on the Washtenaw Community Mental Health Board to support the important work of providing high quality, integrated behavioral health services to adults and youth within Washtenaw County. Chelsea Hospital and U-M Health are members of the One Big Thing coalition serving western Washtenaw County, Grass Lake, and Stockbridge.

**Activity 2:** Support and continue work through the Michigan Opioid Collaborative including seeking extension/expansion of grant funding for Medication Assisted Treatment and advocacy for Opioid Task Force legislation.

- **Outcome:** Health system leadership continues to invest through time and committee support into the Washtenaw Health Initiative Opioid Taskforce.

**Activity 3:** Advocate for policies that reduce barriers to training and employment in the field of social work and mental health care providers.

- **Outcome:** Trinity Health Michigan’s advocacy team advocated for numerous legislations and budget line items over the past three years. Below are notable successful efforts:
  - In February 2022, a supplemental budget was adopted that directed \$300 million to health care providers for recruitment, retention, and training purposes. 75% of these funds were specifically directed towards acute care and behavioral health hospitals.
  - The Michigan Legislature passed a Supplemental Budget in February 2023 that included \$75 million in workforce dollars to address the ongoing staffing crisis in hospitals, including social work and mental health providers.
  - The FY 23-24 MDHHS budget included \$2.5 million of Coronavirus State Fiscal Recovery Funds for behavioral health recruitment and retention programs. These dollars also provided grants to individuals who agreed to enter an accelerated social work degree



- program followed by working for at least two years within the public behavioral health sector after completion of their degree.
- The FY '23-'24 MDHHS budget includes \$32 million for Inpatient Psychiatric services for hospitals.

**Activity 4:** Increase rates of screening and referral to cessation services for patients using tobacco.

- **Outcome:** THAA counseled tobacco and nicotine users towards cessation through a quit call line, once the patient had demonstrated interest, they would work with patients for six months. The program included a typical counseling plan / treatment plan. The patients graduated after 30 days of being tobacco free. Further, THAA put on a “Living Well” event and a revamp of workflows in 2023, then affected the number of potential patients reached. In total, 49 people quit using tobacco from 2021-2023.

**Activity 5:** Expand the presence of Faith Community Nursing staff throughout the community to provide mental health and substance use disorder education support through faith communities.

- **Outcome:** THAA and Chelsea Hospital’s Faith Community Nurse Liaisons hosted quarterly meetings and shared Healthy Spirit Bulletin articles focused on mental health, food security and maternal and infant health. The liaisons distribute resources and information to local churches every month via email, including information on naloxone training.

**Activity 6:** Utilize Community Resource Directory to help support mental health and substance use disorder initiatives.

- **Outcome:** THAA, Chelsea Hospital and U-M Health contract with FindHelp to make it easy for patients and community members to access free or reduced-cost health and social care resources. The findhelp.org platform is embedded in the electronic medical records of both health systems, patients’ online health portal, and publicly available online.

**Activity 7:** Partner with local law enforcement and Washtenaw County to promote safe disposal of unused medications.

- **Outcome:** Safe medication disposal sites maintained by local law enforcement in the five towns in the Chelsea Hospital primary service area, and inside the main entrance at Chelsea Hospital and Trinity Health Ann Arbor.

### **Chelsea Hospital Actions to Address Mental Health and Substance Use Disorder:**

**Activity 1:** Support SRSLY coalitions to prevent youth substance abuse.

- **Outcome:** SRSLY coalitions operate in Chelsea, Dexter, Manchester, and Stockbridge, with youth leaders and involvement from 12 key community sectors in each town. Some of the SRSLY coalitions are now also addressing youth mental health. Chelsea Hospital employs SRSLY staff and provides significant in-kind support to the coalitions, including grant-writing support. These communities have seen the following improvements in youth substance use rates, as measured by the Michigan Profile for Healthy Youth survey.
  - Alcohol: Chelsea High School (HS) students reported a 30% decrease in lifetime use, 42% decrease in recent use and 52% decrease in binge drinking (5+ drinks) from 2008 to 2022. Stockbridge HS students reported recent alcohol use had decreased by 59%, and lifetime alcohol use decreased by 34%. Dexter 11th grade students reported 36% less regular alcohol use from 2010 to 2022, and 7th grade students reported a 48% reduction in regular alcohol use.

- Marijuana: Chelsea HS students reported a 23% decrease in lifetime use, compared to a 17% increase statewide. Dexter 11th grade students reported a 34% decrease in regular marijuana use from 2010 to 2022. In Chelsea, recent use remained unchanged, while it increased by 32% across the state over the same period.
- Prescription drug misuse: Chelsea HS students reported a 58% decrease in recent use without a prescription among high school students from 2008-2022.
- Tobacco: Chelsea HS students reported a 34% decrease in tobacco use among high school students from 2020-2022.
- Vaping: Chelsea HS students reported a 31% decrease among high school students from 2020-2022.

**Activity 2:** Partner in “One Big Thing” initiative to address mental health.

- **Outcome:** Chelsea Hospital participates in the community coalition known as “One Big Thing,” which is working to address the root causes of poor mental health. Each of the three action teams within One Big Thing are co-facilitated by Chelsea Hospital staff. The action teams are working on social isolation and sense of purpose, access to services, and preventing substance abuse. More than 45 community-based organizations and individuals participate in One Big Thing.

**Activity 3:** Implement the Project SUCCESS program in local middle and high schools.

- **Outcome:** Project SUCCESS is a school-based youth substance abuse prevention program. The counselor conducts screening, facilitates small group work, provides brief individual interventions, and makes referrals to community mental health providers when needed. The counselor also conducts educational sessions for students and parents on drugs and alcohol, including vaping, or e-cigarette use. Chelsea Hospital secured grant funding from the Community Mental Health Partnership of Southeast Michigan to bring a Project SUCCESS Counselor to three local school districts. This program served more than 650 students in Manchester, Lincoln, and Chelsea students in the 2022-2023 school year.

**Activity 4:** Continue and expand support groups in the service area.

- **Outcome:** The Behavioral Health Navigators facilitate support groups for multiple mental health and substance use issues. The Chelsea Hospital Diabetes Share Group met monthly to provide education and support to residents living with diabetes. The group heard presentations from medical professionals and community partners, including the local wellness center and farmers markets.

**Activity 5:** Collaborate with schools and other community partners to address mental health needs of youth through education, skill-building, and stigma reduction.

- **Outcome:** In 2021, Chelsea Hospital applied for and received a Mental Health Awareness and Training (MHAT) grant from the Substance Abuse Mental Health Services Administration (SAMHSA). This five-year grant provides funding for our communities to build capacity to recognize and respond to a youth experiencing a mental health crisis. Under this grant, Chelsea Hospital has trained facilitators in the Mental Health First Aid program for adults, youth and teens peer-to-peer, as well as Question, Persuade, Refer. These programs complement each other, and are offered free to the community through this grant. In the first two years of the grant, Chelsea Hospital held 21 trainings in partnership with 27 organizations in six towns. In total, 310 people have been trained. The grant also provides funding for youth-led anti-stigma campaigns. High school students have created apparel campaigns including “moms for mental

health,” and “dads for mental health,” and banners that read “All emotions are okay” and “There is so much strength in asking for help.” Local business owner Amy Busch participated in a campaign called “Why I’m trained,” stating: “I’m trained because I want to feel more confident to reach out with hope and with resources if I talk to someone who is in crisis. I don’t want anyone to feel alone.”

**Activity 6:** Facilitate access to care through the Behavioral Health Navigators.

- **Outcome:** The Behavioral Health Navigator role was expanded to two people (.6 FTE total). They are deployed in the five communities that make up the Chelsea Hospital primary service area, to help people access needed mental health services. The Behavioral Health Navigators work with safety net providers, schools, primary care physicians, and others who can refer individuals or families in need of support. The Navigators served 315 people in 2023.

**Activity 7:** Participate in local coalitions and activities related to increasing social support, improving mental health, and reducing substance use.

- **Outcome:** Chelsea Hospital colleagues participate in the five local wellness coalitions. Each coalition is tasked to develop a comprehensive wellness plan to encourage residents to move more, eat better, avoid unhealthy substances, and connect with others in healthy ways. The hospital is also represented by the Chelsea Faith and Wellbeing Alliance, the Stockbridge Faith and Other Community Leaders group, and the Health Ministry in Action Team through the 5 Healthy Towns Foundation.

### **Trinity Health Ann Arbor Actions to Address Mental Health and Substance Use Disorder:**

**Activity 1:** Increase mental health providers/services within Washtenaw County.

- **Outcome:** Trinity Health IHA Medical Group has hired several new psychiatrists to improve access to services. In addition, Trinity Health Michigan launched a Regional Behavioral Health Service Line to examine training practices with therapists. Next, Trinity Health Ann Arbor created a workforce development program aimed at recruiting undergraduates and graduates into therapy roles with supervision. To increase our number of providers, Trinity Health Ann Arbor has expanded our job postings to include master level disciplines other than social workers.

Since 2021, THAA Investing in Our Communities grant program and charitable contributions funded multiple organizations totaling over \$670,000 to address behavioral health programming and access. The organizations included Hope Clinic, Ozone House, Alpha House, Student Advocacy Center of Michigan, and Women’s Center of Southeast Michigan.

**Activity 2:** Connect patients and community members to peer recovery coaches, Sexual Assault Nurse Examiners, and community health workers to address mental health and substance use disorder.

- **Outcome:** In 2022, THAA launched the Community Health Worker (CHW) Program focused on mental health, substance use, and food insecurity. The CHW Program has impacted more than 200 clients in the last three years. In addition, THAA partnered with Home of New Vision to integrate a Home of New Vision peer recovery coach within the THAA Emergency Department. In 2023, the Peer Recovery Coach had provided support and resources to more than 150 patients both through the Emergency Department and on the Medical Units.
  - The Sexual Assault Nurse Examiners (SANE) program provides medical and forensic exams to victims of sexual assault (14 years and older) outside of the emergency room. A

trained THAA sexual assault nurse performs these exams. The SANE program is a partnership between THAA and SafeHouse of Washtenaw County. For the past three years, SANE averaged 80 exams per fiscal year.

**Activity 3:** Partner with Hope Clinic to better integrate Behavioral Health within the safety net care model at the point of care and proactively call patients to obtain Behavioral Health Services.

- **Outcome:** THAA supported Hope Clinic’s Behavioral Health care model by purchasing 145 mental health workbooks for clients, purchasing transportation vouchers to assist 354 clients obtain services, covering the cost of five mental health training courses, and contributing to the financial operations of the program.

**Activity 4:** Support and promote drug take-back events within Washtenaw County medication disposal network, specifically 48197/48198.

- **Outcome:** THAA partnered with Chelsea Hospital and University of Michigan Health to advertise the take-back initiative. Since 2021, Trinity Health Ann Arbor received over 1,300 pounds of drugs returned within the two containers located in the hospital.

**Activity 5:** Raise awareness around mental health and reduce stigma among our communities.

- **Outcome:** In May 2023, the Trinity Health Vs. Stigma campaign was launched as part of Mental Health Awareness Month. The focus was to present the myths vs. the facts of mental health. As part of our campaign, we partnered with Everybody Vs. Stigma and purchased the TH Vs Stigma shirts to raffle them off. We gave away over 500 t-shirts during this campaign to educate and raise awareness.

#### **U-M Health Actions to Address Mental Health and Substance Use Disorder:**

**Activity 1:** Provide health information to the Deaf, Deaf/Blind, and Hard of Hearing through Speakers series using American Sign language in the community.

- **Outcome:** During FY22 & FY23, virtual deaf talks were held. Two mental health talks were provided with 979 views and two talks on substance use disorder were held with 1,700 views. Sessions were recorded and can be accessed via Facebook and YouTube.

**Activity 2:** Provide screenings and interventions in the community to youth experiencing mental illnesses or suicidal ideation.

- **Outcome(s):** In FY22, The Regional Alliance for Healthy Schools (RAHS) continued care during the pandemic for mental health visits through providing secure virtual visits. RAHS provided 560 in-person visits and 1,853 virtual visits within Washtenaw County for a total of 2,413 visits.

In FY23, RAHS continued providing behavioral health visits through providing patients and families with the option for in-person or secure virtual visits. RAHS provided care for 560 unique patients over 4,641 in-person visits and treated 51 unique patients through 437 virtual visits within Washtenaw County for a total of 5,078 behavioral health care appointments. In these appointments, RAHS conducted 1,440 risk assessments at eight school-based health centers in Washtenaw County.

**Activity 3:** Provide mental health support sessions for families in the community that have a child with mental illness.

- **Outcome(s):** In FY23, RAHS provided mental health services through 424 family sessions and 101 group sessions for youth and their families.

**Activity 4:** Provide translated materials to social service agencies and provide mental health screenings in American Sign Language through U-M Health Interpreter Services and Family Medicine.

**Outcome:** Continued to provide services as needed to support mental health screenings.

- **Activity 5:** Through U-M Health's grants program, support community organizations, programs, and advocacy that contributes to delivery and access to mental health and substance abuse programs and services to adults and youth regardless of insurance status.

**Activity 5a:** Supported the U-M Health Program for Multicultural Health Empower U Program in continuing its pilot program into the next phase of development.

- **Outcomes:** Empower U integrated the U-M Health Career Awareness & Readiness Equal Success (C.A.R.E.S.) initiative to one of the sites of the Empower U curriculum. This enabled four career speakers to present at this site and one other community site.

During Phase 2, 1,070 (128 unduplicated) youth participated in 102 workshops across four sites. They increased knowledge and skills to enhance self-awareness, self-management and positive decision-making.

The Empower U program received additional grant funding through the Ann Arbor Community Foundation. This helped expand the program to another school in the area and enabled it to support increasing food security among the youth at one site for them to receive dinner weekly. By the end of the continuation funding the Empower U program has built support for them to continue their funding. They were institutionalized as a program to help build the Healthcare Anchor Network workforce development strategy with U-M Health.

**Activity 5b:** Hope Clinic continued their Mental Health program which included a new case management/patient advocacy and behavioral health consultant pilot program and continued to remove barriers to care for low-income and uninsured families and individuals.

- **Outcomes:** 5,169 additional services were provided related to social determinants of health including services such as: transportation coordination (443 patients), vital records and photo IDs, housing resource referrals, and basic needs resource applications and coordination.

Hope Clinic's Behavioral Health Department served 1,839 unique patients and completed 1,125 mental health and substance use screenings, of which those who screened positive, 100% of them were offered services and/or referrals. They also provided 909 behavioral health sessions and 42 on-site psychiatry visits.

**Activity 5c:** Community Family Life Center received funding to launch a pilot program for mental health based on the idea project that was completed in the previous grant and Community Health Needs Assessment cycle. This project supported:

- Promoting Healthy Families program to support the mental health and well-being of youth and their families.
- Provided support groups for mothers and grandmothers to increase their mental health awareness and equip them with knowledge and tools for prevention.
- Provided youth behavioral workshops and mentoring to enhance youth's skillsets.

- **Outcomes:** The Promoting Healthy Families program served approximately 50 people, including adults, youth, and family systems, offering individual and group therapy, wraparound services, and crisis interventions.

There was an average of six attendees per group who received education on PTSD and symptoms, physiological responses in the body, good and bad stress, organizational and familial stress, and the adverse impact on the parent-child relationship.

The behavioral health workshops are ongoing and occur twice a month. The mentorship program session has on average six youth per session and covers areas such as: PTSD and symptoms, community violence and trauma, enhancing future safety, conflict resolution and coping skills.

**Activity 5d:** Packard Health continued its Medication-Assisted Treatment program to reduce overdose deaths, lower risk of relapse, and decrease incarceration among individuals with opioid addiction.

- **Outcomes:** Packard Health assessed 187 Medication-Assisted Treatment (MAT) patients and treated 349 patients through the MAT program over 1,922 visits. The number of patient visits has increased from an average of 2.5 visits per patient from the first year of the program up to over 5 visits per patient in the past year. 140 patients received transportation in the MAT program, and 24 who were referred received wrap-around services such as insurance enrollment, transportation, food assistance, and housing information.

**Activity 5e:** Jewish Family Services received a U-M Health CHS grant to fund a continuation of their pilot program to help give Caregiver support program. They were able to provide additional hours of respite care for Caregivers, provide wrap-around services, and offer specialty counseling programs and a phone tree program.

- **Outcomes:** Provided 68 caregivers with over 500 hours (about three weeks) of respite care. Out of 26 caregivers assessed, 88% reported CARES services resulted in decreased levels of stress, 81% reported CARES improved mental health, and 38% reported that CARES services resulted in improved physical health.

Caregiver Consultations provided 91 counseling sessions to caregivers, 11 caregivers participated in the Caregiver Phone Tree program, and 176 caregivers attended caregiver support groups.

Clients received technical assistance training such as learning how to get on zoom, order food, or access their health portal. 25 clients received assistance with food and/or transportation.

**Activity 5f:** U-M School of Public Health through pilot program funding from U-M Health, launched Alianza Washtenaw in coordination with the Washtenaw Health Project to help increase access to services and health equity for members of Washtenaw County's Latinx community. Building upon existing partnerships and developing new relationships with other coalitions to improve coordination across their agencies.

- **Outcomes:** Created a Latinx-friendly agency self-assessment tool to help staff, agencies, and organizations identify how Latinx-friendly their services are, measure areas of improvement for Latinx community members and help to standardize the quality of services.

Built upon existing partnerships and developed new relationships with other Latinx coalitions to establish the Alianza Washtenaw Coalition with 12 member organizations (businesses, schools, community clinics, and several social service agencies). The coalition will work towards improving coordination across their agencies and decreasing barriers for Latinx residents.

**Activity 5g:** Ozone House continued to expand their community outreach to ensure successful service linkages for youth in crisis.

- **Outcome:** During the extension period from July 1, 2021-December 31, 2021, 1,042 youth participated in community engagement presentations and drop-in services, and 801 people utilized the crisis line. There were 98 screenings conducted, and 45 youth engaged in a brief intervention or linkage to services.

Ozone House engaged in community partnerships with Neutral Zone and Corner Health Center to develop a youth screening tool to be administered across organizations to ensure that needs are met by the appropriate organization.

**Activity 5h:** Student Advocacy Center's Check and Connect program helped disadvantaged students thrive in their academics by providing social support and linkages to services. It provided mentorship to students who are court-involved, have a disability, and homeless, or lack supportive adults at home.

- **Outcome:** From July 1, 2021, to December 31, 2021, there were four mentors and 83 students served. 100% of youth decreased or maintained an excellent disciplinary record of one or no suspensions, 63% of youth increased overall grade average or maintained passing grades, and 62% of youth increased or maintained school attendance for at least one semester within 3 percentage points.

**Activity 5i:** Our House provided mentoring and supportive services to help participants thrive independently and academically. They provided supportive housing services and financial support to youth aging out of foster care.

- **Outcome:** From July 1, 2021, to December 31, 2021, of the six participants enrolled in post-secondary education, 83% passed all their credits and averaged 14.1 hours of paid employment per week. Moreover, during the last year of funding, of the 12 participants who pay rent, 75% of participants paid their rent on time over 85% of the time.

From July 1, 2021, to December 31, 2021, there were no incidents of homelessness among participants (n=18) compared to an average of 17.25 days (about 2.5 weeks) of homelessness prior to entering the program. In other words, 100% of participants maintained or increased their housing stability.

**Activity 5j:** Corner Health Center continued their Integrated Behavioral Health Services Program for youth.

- **Outcome:** At the end of 2021, Corner Health completed 2,630 behavioral health visits. From January 1, 2022, to June 30, 2022, Corner Health Center provided 412 unduplicated patients with 1,017 visits and held 20 group therapy sessions for 40 patients.

**Activity 5k:** Eastern Michigan University (EMU) continued its Supportive Housing, Family Empowerment Program to reduce mental health stigma and increase mental health services for individuals and families. And provided stress reduction workshops and activities.

- **Outcome:** From July 1, 2021, to December 31, 2021, EMU provided 58 mental health screenings. EMU provided 30 mental health screenings, 12 of whom have completed mental health plans. Hosted five activities such as providing free food distribution, haircuts, coats, and mental health education and hosting a meet and greet with first responders.

**Activity 5l:** U-M Health Housing Bureau for Seniors (HBS) continued to expand their reach throughout Washtenaw County to support seniors in achieving housing stability. Also, HBS supported seniors facing housing insecurity and immediate basic needs with funds from the Basic Needs Fund.

- **Outcome:** From July 1, 2021, to December 31, 2021, HBS supported 137 seniors throughout Washtenaw County to maintain secure housing. HBS helped nine clients with monies from the Basic Needs Fund, five individuals with rental assistance, two with property taxes, one with temporary housing, and one with mortgage assistance.

**Activity 5m:** Community Health Action Initiative (CHAI), a project of Resilience and Resistance Collective at the University of Michigan School of Public Health, continued its work to improve access to mental health and substance use services for sexual and gender minority adolescents and emerging adults.

- **Outcomes:** In collaboration with students and faculty at the University of Michigan School of Information, CHAI published a new searchable resource directory website “LGBTQIA Midwest” in October 2021 that provides 125 videos, websites, brochures, and provider lists for LGBTQIA+ adolescents to access inclusive and affirming health information.

From July 1, 2021, to December 31, 2021, CHAI provided monthly training for primary care providers (N= 53) to better understand and support LGBTQIA+ youth’s mental health.

**Activity 6:** Provide professional development opportunities to train professionals on the prevention of Elder Abuse, mental health and substance use presentations through the Housing Bureau for Seniors program.

- **Outcomes:** Held four presentations on mental health and substance use disorder and had approximately 91 attendees receiving continuing education. Held three presentations on elder abuse with approximately 325 attendees receiving continuing education.

**Activity 7:** In Straight Talk-Youth Fire Setting Prevention program, utilize cognitive-behavioral therapy and motivational interviewing to promote behavior change among youth who have set a fire(s).

- **Outcomes:** Held Straight Talk in person at U-M Health in FY23 (N=22) and FY24 (N=14). Held Youth High Risk Behaviors and Fire Setting Intervention FY22 (N=91 families), FY23 (N=37 families), FY24 (N=15).<sup>1</sup>

MHealthy programming included tobacco treatment services as well as behavior change interventions for mild to moderate alcohol problems. Web resources developed and included multiple community awareness campaigns and promotional ads. Person served: 1,500.



## **Priority #2: Obesity and Related Illnesses**

**Goal:** Promote healthy lifestyle choices and reduce chronic disease prevalence and risk in greater Washtenaw County.

### **Joint Hospital Actions to Address Obesity and Related Illnesses:**

**Activity:** Provide diabetes prevention, education, and share group programming.

- **Outcome:** Diabetes Prevention Program (DPP) is offered throughout Trinity Health Michigan facilitated by trained DPP Lifestyle Coaches. Of the participants in 2023, more than half lost more than 7% of their body weight, and one-third met the goal of 5% weight loss.

**Activity:** Expand the presence of Faith Community Nursing staff throughout the community to provide obesity and related illnesses education support through faith communities.

- **Outcome:** THAA and Chelsea Hospital's Faith Community Nurse Liaisons hosted quarterly meetings and shared Healthy Spirit Bulletin articles focused on mental health, food security and maternal and infant health. The liaisons distribute resources and information to local churches every month via email, including information on healthy eating. Chelsea Hospital's Faith Community Nurse Liaison led educational and screening events in the five communities of our primary service area with more than 450 people in attendance from 2022-2023.

**Activity:** Utilize Community Resource Directory to help support obesity and related illnesses initiatives.

- **Outcome:** THAA, Chelsea Hospital and U-M Health contract with FindHelp to make it easy for patients and community members to access free or reduced-cost health and social care resources. The findhelp.org platform is embedded in the electronic medical records of both health systems, patients' online health portals, and publicly available online.

**Activity:** Maintain the health system and community-supported programs and policies that reduce chronic disease and increase healthy eating and physical activity.

- **Outcome:** U-M Health partnered with Trinity Health's The Farm in Ann Arbor to do a pilot program and a continuation program with patients who screened yes for food security issues, had A1Cs that were high, and wanted assistance with their needs. Persons who participated in this program came to The Farm once per week for the summer months and received a Community Supported Agricultural box. There was also a group that met weekly on Wednesday to teach how to incorporate various parts of the box into meals.
- **Outcome:** In FY22, 50 patients were served; and in FY23, 74 unique patients were served with a Community Supported Agricultural box.

### **Chelsea Hospital Actions to Address Obesity and Related Illnesses:**

**Activity 1:** Continue to promote walking and running for all ages through activities and events.

- **Outcome:** These events were paused during COVID. They have not been restarted due to lack of demand from community members. There are many walking and running events in the area, and key stakeholders felt there was not a need for another event or program facilitated by the hospital.

**Activity 2:** Increase availability and connectivity of walking paths on the hospital campus.

- **Outcome:** Chelsea Hospital created a comprehensive plan to connect and improve walking paths through the hospital campus, which are regularly utilized by community members walking for exercise, and children walking to and from school. Work began in 2020 on the highest priority section of the paths along the southern end of the Chelsea Hospital campus.

**Activity 3:** Support the Chelsea Farmers Market and Farmers Market Food Assistance programs throughout the service area.

- **Outcome:** The Community Health Worker at Chelsea Hospital helped 50 households get enrolled in the SNAP program in 2023.
- **Outcome:** Chelsea Hospital serves as the fiscal agent and employs the Market Manager at the Chelsea Farmers Markets. The markets run twice per week, May through October, and once per week in November and December. There are 55 unique vendors at the two markets, with an average weekly attendance of 960 customers. Chelsea Farmers Market participates in the Prescription for Health Program with Washtenaw County Health Department. Chelsea Hospital also made financial contributions to local farmers market food assistance programs through community food pantries. Total food assistance sales at the Chelsea Farmers Markets for 2022 and 2023 was \$40,748, with 28 participating vendors. Some of the comments from participants in the food assistance program include:

"It is hard being food insecure and the Senior Market Bucks help a lot."

"Opportunity to stretch my budget and support local business."

"It motivates me to buy fruits."

"It encourages healthy eating."

"That it helped many members of our community."

"It brings vendors and customers together, builds community."

**Activity 4:** Provide nutrition education and technical assistance to individuals and organizations in the service area.

- **Outcome:** Chelsea Hospital provides 10 hours per week for a Community Nutritionist (a registered dietitian) to provide education and technical assistance on nutrition. The Community Nutritionist works with local senior centers, wellness coalitions, schools, churches, and businesses to increase healthy eating through system and policy changes, education, skill-building, and support.
- **Outcome:** Diabetes Prevention Program is offered throughout the region, with five to 10 new cohorts every year, facilitated by four trained Chelsea Hospital DPP Lifestyle Coaches. Of the participants in 2023, more than half lost more than 7% of their body weight, and one-third met the goal of 5% weight loss.

**Activity 5:** Support the development and expansion of area trail networks.

- **Outcome:** Chelsea Hospital participates in the Huron Waterloo Pathways Initiative.

### **Trinity Health Ann Arbor Actions to Address Obesity and Related Illnesses:**

**Activity 1:** Expand food security support and nutrition education through The Farm at Trinity Health initiatives, Nutrition Buddies, Prescription for Health, Healthy Families, and Community Health Workers to reduce chronic disease.

- **Outcome:** The Farm at Trinity Health donated 15,554 pounds of food to 22,339 patients and providers in 2021-2022. In FY 22-24, The Farm expanded the Farm Share Assistance Program,

where produce boxes are given to families, to a 36-week period. With this expansion, the Farm partnered with the Ypsilanti Family Empowerment Program to deliver 50 Farm Share boxes a week to residents in Ypsilanti in low-income housing complexes.

The Farm also established a food pantry. Beginning in January 2023, the Farm hosted culinary classes for free to community members, to learn how to prepare a plant-based diet. In 2023, over 250 people attended per class and 90% of participants reported an increase in culinary confidence. The Farm programs include field trips, summer camps, and farmers markets. The Farm has a dedicated Community Health Workers to support their efforts. The CHW Program has impacted over 200 clients in the last three years.

In 2022-2023, the Nutrition Buddies program paired 27 food insecure youth with medical residents to educate participants on how food grows, develop cooking skills and gain confidence in the kitchen. In FY2021-2022, THAA funded the Washtenaw Prescription for Health program through the Washtenaw County Health Department to connect patients with fresh fruits and vegetables at local farmers markets. Formerly ShapeDown, the THAA Healthy Families program pairs children and teens with a registered dietitian, exercise and behavioral specialist to learn how healthy eating, an active lifestyle and effective communication promotes healthy weight and family well-being.

**Activity 2:** Advocate for policy change on food systems infrastructure through participation in Washtenaw Food Policy Council and other emerging policy efforts with a focus on food disparity.

- **Outcome:** Trinity Health Michigan wrote a letter to Chairman Hertel, a member of the Senate Health Policy committee, for the state of Michigan. Within this letter, Trinity Health Michigan supported House Bill 4608 that would offer a pathway for the licensure of dietitians to provide medical nutrition therapy in the state of Michigan.

**Activity 3:** Increase efforts to improve the safety and availability of fitness infrastructure options in the community, specifically 48197/48198.

- **Outcome:** In 2023, THAA created a plan to adapt its 66 acres of natural areas into spaces for patients, workers, and community members alike to exercise and experience nature, known as the Natural Areas Project. The creation of these spaces was heavily influenced by community input and preferences. To continue the maintenance of these spaces, THAA applied for the Southeast Michigan Resilience Fund Grant that funds programs aiming to improve habitat quality, connectivity and enhance public spaces.

**Activity 4:** Implement community-based walking and exercise groups.

- **Outcome:** Re-established virtual and in-person Trinity Health Michigan Senior Fit Program, which offered nearly 100 seniors physical fitness, healthy lifestyle tips, and memory games.

**Activity 5:** Explore and apply programs and concepts of Lifestyle Medicine and the Blue Zone philosophy within Washtenaw County to improve overall health and reduce chronic disease.

- **Outcome:** THAA implemented the Grocery Store Tour program which offered a free Grocery Store Tour for patients in cancer survivorship, which focuses on providing guidance to eating a whole food, plant-based diet. This program supported five patients. Closely related, the Pancreatic Cancer Support Group received a presentation on lifestyle medicine and its application to survivorship. Ten people were given this presentation. THAA presented, with IHA, Wellness Wednesday's where culinary demonstrations showed viewers how to add healthier foods to their diets. Over 1,000 people watched the webinar and just under 500 people went to

the live streamed version. A series of short, educational videos, known as Senior Videos, focused on promoting evidence-based information in the six pillars of lifestyle medicine to older adults, and will be published soon. Through the 2023 Lifestyle Medicine Tabling event, 716 people were spoken to and given healthier lifestyle tips. Similarly, the Farm Share Distribution Engagement Tables, created in 2023, reached over 400 people to deliver lifestyle education through food demonstrations to farm share participants.

### **U-M Health Actions to Address Obesity and Related Illnesses:**

**Activity 1:** Support, maintain and explore programs that target nutrition education/counseling:

#### **Activity 1a:** Regional Alliance for Healthy Schools (RAHS)

- **Outcome:** RAHS continued to offer secure virtual visits with the Registered Dietitian (RD) as well as 1:1 and small group in-person educational counseling to those in Washtenaw County. The RD conducted presentations to classes on healthy, balanced eating and portion size as well as eliminating excess sugar from their diet. In 2023, 55 RAHS patients from Lincoln Consolidated Schools, Scarlett Middle School, and Ypsilanti Community Schools were referred to Prescription for Health. 29 patients picked up their enrollment packets and attended at least one (1) Farmers Market to improve their healthy lifestyle choices by increasing the amount of fruits and vegetables they ate daily.

#### **Activity 1b:** MHealthy

- **Outcome:** MHealthy hosts a Community Nutrition program that is available to U-M Staff, faculty, partners, and community members. This programming included recipes, classes on cooking, label reading, and other topics, referrals to Farmers Market, website recipes. Each fiscal year MHealthy serves at least 3,000 individuals.

#### **Activity 1c:** Project Healthy Schools (PHS)

- **Outcome:** PHS is a program that provides health and wellness education to middle school students within Washtenaw County and beyond. It serves to reduce obesity and its long-term risks. 5,000 persons were targeted. During the 2021-2022 school year, the program expanded to six new schools, and maintained our relationship with our 2020-2021 first-year schools and transitioned them into our Year 2 program. Students that participated in their first year of PHS saw the following improvements in their health knowledge and behaviors:
  - 50% reported eating more fruits and vegetables
  - 57% reported being more physically active
  - 28% reported reduced screen time
  - 27% chose food and drinks with less sugar
  - 47% can identify and interpret added sugars on nutrition labels
  - 59% know that a balanced meal should have half of their plate filled with fruits and vegetables

**Activity 2:** Support programs and policies that screen for food insecurity, provide referrals to reduce food insecurity, and/or directly provide food to reduce food insecurity:

**Activity 2a:** Continue service and support of clients through the U-M Health Ann Arbor Meals on Wheels program (AAMOW).

- **Outcome:** AAMOW served 665 unduplicated persons, with a total of 399 new clients, total meals served 310,511. Averages for: Percentage of persons who say they eat healthier because of the program is 95%; and percentage of those who the program allows them to remain in their home and live independently is 98%.

**Activity 2b:** Food and resource drives for Food Gatherers.

- **Outcome:** Each year, U-M Health hosts a food drive to support Food Gatherers and the continuing challenges with food security in Washtenaw County. This has transformed into the Million Meal Mission. U-M Health has donated 440,560 towards the one million meal mission.
- **Outcome:** Yearly, MHealthy provides a regular Active U campaign to staff, faculty, and their partners to maintain activity every day for both a Winter and Fall campaign. Also, MHealthy has provided virtual classes and has started providing classes onsite to help folks maintain their physical activity levels.

**Activity 3c:** Regional Alliance for Healthy Schools (RAHS)

- **Outcome:** RAHS continued to support programming and policies for encouraging more physical activity by screening students with a risk assessment prior to each health center appointment. Students that were found through the assessment to need more physical activity were encouraged in their appointment to increase their movement by small amounts each day to make it easier for youth to accomplish and maintain physical activity.

**Activity 4:** Through U-M Health Community Health Services grants program, support community organizations, programs, and advocacy that promote healthy weight and reduce chronic disease risk among youth and adults. The following outlines several projects that were part of this goal. Supported through CHS grant dollars, the Patient Food and Nutrition Services provided meals to Ypsilanti Meals on Wheels (YMOW) to work together and decrease food insecurity among homebound older adults via food service delivery to individuals' homes.

- **Outcome:** Expanded access to healthy and nutritious meals by providing two high quality nutritious meals per day to individuals in YMOW service delivery area, some of which are considered food deserts. In 2022, YMOW provided 104,234 hot, cold, and holiday meals to 376 unduplicated clients. In 2023, YMOW provided 111,213 hot, cold, and holiday meals to 399 unduplicated clients. Between July 1, 2023, and June 30, 2024, YMOW provided 48,559 hot, cold, and holiday meals to 340 unduplicated clients.

### **Priority #3: Preconceptual and Perinatal Health**

**Goal:** Increase positive outcomes for pre-conceptual and perinatal health. Improve the health and well-being of women, infants, children, and families in greater Washtenaw County.

#### **Joint Hospital Systems Actions to Address Preconceptual and Perinatal Health:**

**Activity:** Partner with local Maternal and Infant Health Coalitions to advance the work.

- **Outcome:** THAA participates in the Region 9 Perinatal Quality Collaborative and Washtenaw Area Council for Children. The Washtenaw Area Council for Children's Office is located within a THAA facility where we provide space for the organization at a subsidized rate.

**Activity:** Utilize Community Resource Directory to help support maternal and infant health initiatives.

- **Outcome:** Trinity Health Michigan contracts with FindHelp to make it easy for patients and community members to access free or reduced-cost health and social care resources. The findhelp.org platform is embedded in Trinity Health electronic medical record, patients' online health portals, and publicly available online.

**Activity:** Expand the presence of Faith Community Nursing staff throughout the community to provide maternal and infant health education support through faith communities.

- **Outcome:** THAA's Faith Community Nurse Liaison hosted quarterly meetings and shared Healthy Spirit Bulletin articles focused on mental health, food security and maternal and infant health. The liaison distributes resources and information to local churches every month via email, including information on perinatal loss.

### **Chelsea Hospital Actions to Address Preconceptual and Perinatal Health:**

**Activity 1:** Collect data on local needs related to prenatal care and education among expectant mothers in the service area.

- **Outcome:** In response to the need for local skill-building opportunities for expectant and new mothers, Chelsea Hospital began offering free breastfeeding classes in our primary service area. These classes were first offered virtually during the COVID-19 pandemic but transitioned to in-person when it was safe.

**Activity 2:** Provide opportunities for learning, skill-building and social support for women and children.

- **Outcome:** Chelsea Hospital offered a virtual new moms' support group, facilitated by one of the Behavioral Health Navigators, and a Psychiatrist. The group was not well-attended, and was suspended after the six-month pilot.

### **Trinity Health Ann Arbor Actions to Address Preconceptual and Perinatal Health:**

**Activity 1:** Launch THAA Perinatal Wellness Center which offers a safe, inclusive, and nonjudgmental space where women seek social, emotional, and physical support to help with their transition through pregnancy and the postpartum period.

- **Outcome:** The THAA Perinatal Wellness Center offers social, emotional, and physical support for women through pregnancy and the postpartum period. In 2021- 2023, the Perinatal Wellness Center completed 5,056 behavioral health and breastfeeding medicine appointments.

**Activity 2:** Train and educate providers and staff on implicit bias.

- **Outcome:** THAA and a consulting partner developed the Respectful Care Series with the vision of every patient, colleague, and partner who interacts with the Women and Children's Services (WCS) Division has a respectful and transformative care experience— where dignity is preserved, safety prioritized, and identities are honored. In 2022, Phase 1 included surveying over 200 WCS colleagues and conducting six colleague listening sessions to inquire about discrimination, harassment, and cultural competencies. The colleague data was then compared with patient experience data to provide community perspective. In 2023, Phase 2 involved developing training and education for all Women and Children's Services Division based on the survey and patient experience data. In 2024, THAA began to train all WCS

colleagues through coursework and simulation labs to address bullying behaviors and building skills to recognize and interrupt harm in the form of microaggressions related to racial identity, cultural insensitivity, gender expression and gender identity.

**Activity 3:** Provide counseling and support groups for both mothers and fathers, specifically within 48197/48198.

- **Outcome:** During 2022 and 2023, THAA offered free and reduced rates for childbirth and breastfeeding classes to families within the 48197/48198 communities. More than 350 lives were impacted through this subsidy. In addition, THAA currently offers a Baby and Me support group for families, once a month. Counseling is offered to women identified with postpartum depression and anxiety, through a validated measuring tool, in the Perinatal Wellness Clinic. Furthermore, THAA has a pregnancy centering program that is supported through the Trinity Health Academic Obstetrics and Gynecology Clinic. It is a resident run program where women are invited to participate in group education and individual appointments through a one-day program.

Through the Investing in Our Communities grant program, THAA partnered with the Michigan Prison Doula Initiative by funding doula and support services to over a dozen incarcerated mothers in the last three years.

**Activity 4:** Advocate for the provision of breastfeeding and prenatal education and support classes for free or greatly reduced rates for families in our community.

- **Outcome:** Trinity Health Michigan advocated for the Michigan Department of Health and Human Services to include Healthy Moms, Healthy Babies funding to remove the five-year waiting period for lawfully residing children and pregnant women. Included in this funding is \$10 million to strengthen hospital maternal health incentives and \$5 million to support Perinatal Quality Collaboratives and provide grants to Centering Pregnancy Sites.

**Activity 5:** Launch a Diversity, Inclusion & Equity Committee within the Women's and Children Hospital Division to better collaborate, communicate, and support families and advance this work.

- **Outcome:** The Women's and Children Hospital Division of THAA hosts bi-monthly Diversity, Inclusion & Equity committee to raise issues, share resources, provide updates on initiatives related to addressing maternal and infant health.

#### **U-M Health Actions to Address Pre-conceptual and Perinatal Health:**

**Activity 1:** Train and educate providers, staff, and parents on safe sleep practices.

- **Outcome:** Provided safe sleep education virtually through the Pediatric Trauma department recorded webinar to interested families. In FY22, they served 140 families. U-M Health also has representation on the countywide safe sleep committee so that they help in understanding where safe sleep issues have occurred and help to tailor the education and prevention strategies accordingly.

**Activity 2:** Continue the Maternal and Infant Health Program (MIHP) for pregnant women and infants up to one year of age.

- **Outcome:** The MIHP has continued to provide services to women and infants in their homes, via telehealth (video) and or telephone visits. In FY23, staff completed a total of 1,498 visits. The majority of women served (57%) were minority mothers, and the number of minority infants served was 68%. As part of the MIHP, social workers provide coordination between Housing

Access for Washtenaw County and mothers to make sure that a case was created and that they know whom they can contact to find out if they are on the waitlist and potentially when they will receive a voucher or other type of housing.

**Activity 3:** Invest in community organizations, programs and advocacy that support mothers, infants, children, adolescents, and families to improve health.

**Activity 4:** Program for Multicultural Health will serve on the Region 9 - Perinatal Quality Collaborative (R9-PQC).

- **Outcome:** Serving on the R9-PQC has led to: publications informing of choosing pregnancy care that is right for that person; holding focus groups pregnant persons or women who have given birth and diagnosed with mental or substance use symptoms or disorders; connected R9-PQC leadership with funders resulting in new programs to train 27 doulas and matching 13 minority trainees with mentors; advisory role to increase Medicaid reimbursement rates for doulas; development of interactive e-learning, CEU-eligible provider courses focused on improving equity of care for the minority population of women.

**Activity 5:** Regional Alliance for Healthy Schools (RAHS) will provide pre-conception and sexual activity risk reduction counseling and offer confidential adolescent testing and treatment for sexually transmitted infection.

- **Outcome:** RAHS continues to provide pre-conception and sexual activity risk reduction education and counseling. RAHS also continues to offer confidential adolescent testing and treatment for sexually transmitted infections (STI). In FY23, RAHS conducted 1,460 STI tests, and of the 65 positive test results, 39 were treated onsite while 26 were referred to their Primary Care Provider. For more information on metrics please contact U-M Health Community Health Services.

**Activity 6:** RAHS will offer expectant parents' referrals to OBGYN, prescriptions for prenatal vitamins, referrals to local agencies for parenting and resource support, and vaccinations, including COVID vaccines.

- **Outcome:** RAHS continues to offer expectant parents referrals to OBGYN care, prescriptions for prenatal vitamins, referrals to local agencies for parenting and resource support, and vaccinations, including COVID vaccines. In FY23, RAHS conducted 96 pregnancy tests and prescribed prenatal vitamins and referred the eight expectant patients to OBGYN care and local agencies for parenting and resource support.

**Activity 8:** Through U-M Health's grants program, support community organizations, programs, and advocacy to increase positive outcomes for pre-conceptual and perinatal health, including the decrease of infant and maternal mortality rates. Improve the health and well-being of women, infants, children, and families.

**Activity 8a:** Partnered with Region 9-Perinatal Quality Collaborative to enhance their Michigan Health Endowment grant training efforts within the region, specifically training culturally responsive doulas to serve the Washtenaw County region in hopes of improving health outcomes for minority mothers and infants.

- **Outcome:** Thirteen individuals from minority backgrounds received comprehensive doula training. All doulas received a yearlong mentorship from 10 experienced doulas on how to set-up a business and begin building their client base. The newly trained doulas are also receiving continuous education via monthly workshops.



**Activity 8b:** Completed support of the evidence-informed project through U-M Health Department of Psychiatry Mom Power project.

- **Outcome:** In the final year of their programming, they facilitated two lunch and learns, and started two additional Mom Power support groups which served 19 women. These additional women allowed the program to exceed their goal of 60 families to serve 75 families. Overall, they were able to reduce anxiety scores and depression scores of families participating in these groups. They also provided 24 reflective supervision sessions and three technical assistance sessions during FY22.

**Activity 8c:** Invested in the pilot project, Our Village support group, is supporting minority mothers in their parenting journey.

- **Outcome:** Our Village is providing both social support through regular monthly meetings and providing tangible support to mothers when requested and/or observed by group leaders.

**Activity 8d:** Invested in evidence informed project, U-M Health Department of Psychiatry Perinatal Dialectical Behavior Therapy to support mothers in their parent needs.

- **Outcome:** In September 2023, this project piloted the updated materials with 21 attendees. The majority of participants felt prepared to utilize the materials in their practice. Community partner sites have been identified for the next steps in the project. Revised materials to have less participant burden but still access necessary information.

**Activity 8e:** The Michigan Advocacy Program conducted five training courses on the Medical-Legal Partnership model and identifying civic legal needs, in which a total of 260 health care providers and case managers completed. They also trained 40-45 CareNet members about eviction law.

- **Outcome:** Completed 361 cases impacting 585 low-income Washtenaw County residents including 243 children. These cases helped increase access to housing, food, health care, and other public and social benefits. Prevented evictions for at least 12 clients and their families. Helped 10 clients either maintain or increase their Medicaid benefits.

## **Priority #4: Social Isolation**

**Goal:** Increase social support and reduce the negative impacts of social isolation in greater Washtenaw County.

### **Joint Hospital Systems Actions to Address Social Isolation:**

**Activity 1:** Screen patients for social needs at regular intervals. Refer those who screen positive to local resources or programs.

- **Outcome:** Since 2021, Trinity Health Ann Arbor, Chelsea Hospital and the Trinity Health IHA Medical Group have screened 272,167 patients and 28.02% of patients screened positive for social needs. Of the 28.02%, 12.06% of patients screened high or medium for social isolation. U-M Health screened 33,563 patients and 8,095 expressed social isolation in FY21 and FY22.

**Activity 2:** Review data collected and analyzed by the U-M School of Public Health in 2018 and 2019. Identify additional data collection needs.

- **Outcome:** Previous data was reviewed. It was found that much of the data was outdated because of all that has transpired during COVID.

**Activity 3:** Develop, implement, and evaluate a signature project to address social support over the next three years.

- **Outcome:** Trinity Health Michigan and U-M Health contract with FindHelp to make it easy for patients and community members to access free or reduced-cost health and social care resources. The Findhelp.org platform is embedded in both the Trinity Health and U-M Health electronic medical record, patients' online health portals, and publicly available online. UNITE partnered together with FindHelp to increase resources on the platform including resources related to social isolation. UNITE meets every other month with FindHelp.org to discuss strategies on awareness building for the community and providers within our respective locations. Trinity Health, U-M Health, and FindHelp hosted webinar sessions to educate organizations on FindHelp.org, share tools, and encourage organizations to claim their programs on the website.
- **Outcome:** Chelsea Hospital and U-M Health have been working and/or participating in the committees that are part of the One Big Thing initiative in Western Washtenaw County, Grass Lake, and Stockbridge. The One Big Thing initiative has three workgroups: 1) Social Isolation and sense of purpose, 2) Access to resources and 3) Substance Use Disorder Prevention. UNITE members participate in all three action teams.

**Activity:** Support and grow Community Health Worker infrastructure in the area.

- **Outcome:** In 2022, THAA co-founded the Washtenaw/Livingston Community Health Worker Coalition to create a stronger social care infrastructure to better address the needs of the community and sustain CHW programs. Community Health Workers help community members navigate the health and social resources, including behavioral health. Chelsea Hospital has added a CHW position to the Community Health Improvement Department, and secured grant funding to add an additional 1.0 FTE CHW position in 2024.

### **Chelsea Hospital Actions to Address Other Social Determinants of Health:**

**Activity 1:** Provide support to partner organizations working to address social determinants of health for poor and vulnerable populations living in the Chelsea Hospital service area.

- **Outcome:** From 2021-2023, Chelsea Hospital donated \$472,982 to non-profit organizations in the communities to address the priority needs and social determinants of health, including housing, food access, social isolation, education, and transportation.

**Activity 2:** Increase rates of low-income residents with health insurance.

- **Outcome:** Two Chelsea Hospital staff members are trained to help people enroll in health insurance through the marketplace exchanges, or Medicaid expansion. More than 100 local residents were able to enroll in health insurance through Medicare, Medicaid, the Health Insurance Exchange, or McAuley Support with the help of these hospital staff. The Chelsea Hospital CHW enrolled 130 people in health insurance in 2022-2023.

**Activity3:** Increase access to transportation for low-income residents.

- **Outcome:** Chelsea Hospital provided vouchers to patients who cannot afford transportation to and from health care appointments. The hospital also provided in-kind and financial assistance to the Washtenaw Area Value Express bus, which services Chelsea and the surrounding communities. The hospital provided funding to sustain the free shuttle between Manchester, Stockbridge, and Chelsea. This shuttle increases access to food, health care, education, and employment opportunities for residents of these communities.

### **Trinity Health Ann Arbor Actions to Address Other Social Determinants of Health:**

**Activity:** Continue to offer free or subsidized rent to community-based organizations.

- **Outcome:** THAA offers free or subsidized rent to the following organizations: Washtenaw Housing Alliance, Alpha House, Washtenaw Area Council for Children, Dress for Success, and House N2 Home. These organizations address several social determinants of health including economic stability (housing and employment) and health care access and quality (pregnancy and childbirth).

**Activity:** Continue to provide charitable contributions to community-based organizations to address poverty and other social determinants of health.

- **Outcomes:** Annually, THAA provides over \$1.3M in charitable contributions to community-based organizations through the Trinity Health Ann Arbor and Livingston Investing in Our Communities Grant program and supporting long-standing community partnerships. The grant program promotes optimal health for those populations who are experiencing poverty and other vulnerabilities based on the Community Health Needs Assessment top priorities.

**Activity:** Partner with the Washtenaw Sheriff's Department to explore collaboration opportunities.

- **Outcome:** THAA partnered with the Washtenaw Sheriff's Department on a violence prevention and intervention model called WeLIVE (Washtenaw embraces Life Is Valuable Everyday). The purpose of this initiative is to end the cycle of violence by engaging young adults in the hospital after an acute trauma injury and offering crisis intervention and retaliation prevention.

**Activity:** Support the Washtenaw Health Project (WHP) to ensure health coverage for individuals who are ineligible for Medicaid.

- **Outcome:** THAA is a proud financial and in-kind supporter of the WHP. THAA partners with WHP to increase insurance coverage and access to health care for over 6,500 residents living in Washtenaw County.

### **U-M Health Actions to Address Other Social Determinants of Health:**

U-M Health continued community-based funding related to health equity and social determinants of health, including the below:

#### **Housing/Homelessness:**

**Activity:** Did a one-year pilot program with the Shelter Association of Washtenaw County to fund the Recuperative Care Center (RCC) program. Three RCC beds and one hotel bed were reserved for use by U-M Health patients.

- **Outcomes:** Of the 20 program participants, 78% met their health goals, and 84% of participants exited out of the program with positive housing situations. A positive housing situation is going to a place that is inhabitable for humans and not jail/prison.

Over half of recuperative care patients had less overall utilization of the emergency department and inpatient encounters.

## Poverty:

**Activity:** Engage in Healthcare Anchor Network activities to develop strategies for improving local hiring practices.

- **Outcome:** As an anchor institution, we have a deep-seated commitment to combating poverty by leveraging our role as a major employer. Our initiatives are multifaceted, focusing not only on providing a wide array of job opportunities but also on ensuring long-term career success for our community members.

Central to our approach is the organization of community hiring events, specifically designed to connect local residents with the diverse career options available within our institution. These events serve as a vital bridge, linking community talent to fulfilling and stable employment opportunities, enriching the local economy.

We have also launched the U-M Health CARES program, which extends our commitment to career development. This program is a cornerstone in providing career awareness, aimed at illuminating the various career pathways for school aged youth. Through U-M Health CARES, we offer workshops and a guest speaker series, allowing individuals to gain insights into various roles, understand the skills required, and envision their future career path.

Partner with, support, and or advocate for anti-poverty efforts.

Lastly, we are developing a dynamic on-the-job training and upskilling framework, designed to align with the changing job market. This framework will offer practical, relevant learning opportunities integrated into our employees' daily work. Moreover, we will extend these opportunities beyond our organization, inviting the broader community to participate in and benefit from our specialized training programs. This approach not only enhances professional skills in real-world settings for our staff but also empowers community members, preparing them for current and future career challenges.

## Climate Change:

**Activity:** U-M Health continues to participate in efforts that align with the University of Michigan's climate action plan.

- **Outcomes:** The University of Michigan has committed to the following:
  - Eliminate **Scope 1 emissions** (resulting from direct, on-campus sources) by 2040. Scope 1 remains on target by 2040, 10 years earlier than Intergovernmental Panel on Climate Change global guidance, despite a 14% increase in building space.
  - Achieve carbon neutrality for **Scope 2 emissions** (resulting from purchased electricity) by 2025. Since 2010 and through FY23 the decrease in greenhouse gas emissions is at 28%. (0% reduction seen in FY23, holding steady) and remains on target for net zero by 2025.
  - Establish net-zero goals for **Scope 3 emissions** categories (resulting from indirect sources like commuting, food procurement, and university-sponsored travel) by 2025. U-M carbon accounting experts have identified categories for establishing quantitative goals – commuting, solid waste, wastewater, and upstream emissions of purchased fuels.
  - For more information about these commitments, please see <http://sustainability.umich.edu/carbonneutrality#scope-1-emissions-initial-reduction-strategies>

**Activity:** Support of programs that reduce the impact of toxins/environmental injustice.

- **Outcome:** Continue to collaborate with the City of Ann Arbor and public sector organizations in Washtenaw County. AAMOW continues to discuss with the A2Zero initiative to find ways to reduce emissions and waste associated with delivery of Meals on Wheels.

**Medical Debt:**

**Activity:** U-M Health will continue to provide Financial Assistance through the MSupport program.

- **Outcome:** MSupport has provided \$10.6M of support thus far for Washtenaw County residents during FY22-FY23.

**Activity:** Support the Washtenaw Health Plan (WHP) to ensure health coverage for individuals who are ineligible for Medicaid.

- **Outcome:** U-M Health has given approximately \$250,000 to the WHP in order to support coverage of those who are ineligible for government and/or private insurance. Also, U-M Health physicians take the WHP insurance to help increase access to care.

## Appendix D – Prioritization Indicators Used

| Data Measures and Indicators - 2024 UNITE CHNA Prioritization |   |   |
|---|---|---|
| Domain  | Category                                    | Measure/Indicator Description   |
| Access to Care  | Disability - 18+ Pop.                       | % of 18+Pop persons reporting a disability (hearing, seeing, tasks alone, driving)      |
| Access to Care  | No Healthcare Visit - Cost                  | % reported did not see PCP due to cost  |
| Access to Care  | No Health Insurance                         | % 18 Pop persons 18-64 without health insurance   |
| Access to Care  | PCP - No Annual Visit                       | % reported no annual check up   |
| Access to Care -  | Transportation HH - No vehicle              | # of % of Total occupied HH with No Vehicle Available                                   |
| Access to Care  | Immunizations – Children Not Vaccinated     | % and # of Children 19-35 mos without recommended Vaccines (43133142 coverage) (R)      |
| Access to Care  | Access to Internet                          | # of Total Households without internet access   |
| Behavioral and Mental Health                                  | Poor Mental Health Days - Adult             | % reported Poor Mental Health 14 days in last 30 days                                   |
| Behavioral and Mental Health                                  | Poor Mental Health Days - Teen              | % reported feeling sad or hopeless 14 days  |
| Behavioral and Mental Health                                  | Suicide - Adult                             | Suicide - 5 yr Avg Age Adjusted Rate per 100/K Pop                                      |
| Behavioral and Mental Health                                  | Suicide - Teen Seriously Considered         | % of HS Students who seriously considered suicide                                       |
| Economic Stability  | Low Income/Food Insecurity Persons          | % of identified food insecure persons in HH with income below poverty                   |
| Economic Stability  | ALICE Households                            | % of # HH Considered ALICE /Below Poverty   |
| Economic Stability  | Education Attainment - No HS Diploma        | # and % No HS Diploma 25+Pop  |
| Economic Stability  | Affordable Housing                          | Total # and % of Cost Burdened Occupied HH. (>30% of Income)                            |
| Health Behaviors  | Physical Activity - Adult Limited by Health | # of 18+Pop reporting activity limited by Health Problem                                |
| Health Behaviors  | Physical Activity - Not Adequate Adult      | % of 18+pop reporting 150+ min. moderate/week to 75+mins min vigorous exercise/week (R) |
| Health Outcomes   | Poor Physical Health Days                   | % reported Poor Physical Health 14 days in last 30 days                                 |
| Health Outcomes   | High BP - Senior                            | % of Medicare patients with HTN (High BP)   |
| Health Outcomes   | High BP- Medication (Pop. = Ever Told)      | % of Pop. Ever told and taking HP Meds.   |
| Health Outcomes   | Diabetes - Adult Ever told                  | % of 18+ pop ever told they had Diabetes  |
| Health Outcomes   | Cancer- Breast - No Screening               | % of Mammogram  |

| <b>Domain</b>                              | <b>Category</b>                    | <b>Measure/Indicator Description</b>  |
|--|------------------------------------|---|
| Health Outcomes                            | Weight - Obese Adult               | % of 18+ Pop who are considered Obese BMI > 30                                |
| Maternal Fetal and Infant Health           | Prenatal Care - Kessner Inadequate | % of Live Births with inadequate PNC (3,347 LB) Kessner Index                 |
| Maternal Fetal and Infant Health           | Infant Mortality Rate              | Infant Mortality Rate per 1000 live births 3-year average                     |
| Social Support & Community Context         | Isolation Adults                   | % of Total 18+ pop who live alone.  |
| Social Support & Community Context         | Violence - Dating Teen             | % of HS students hurt by someone they are dating                              |
| Social Support & Community Context         | Safe Housing                       | # and % Occupied Housing Units with One or More Severe Substandard Conditions |
| Substance Use - Tobacco, Alcohol and Drugs | Vaping - Teen                      | % of HS Students who vape in last 30 days                                     |
| Substance Use - Tobacco, Alcohol and Drugs | Alcohol-Adult Binge Drinking       | Adults who Binge Drink (5+ Drinks Male 4+ Female)                             |
| Substance Use - Tobacco, Alcohol and Drugs | Marijuana - Teen                   | % of HS Students who used Marijuana in last 30 days                           |
| Substance Use - Tobacco, Alcohol and Drugs | Overdose Deaths                    | # of Opioid and Non-Opioid Overdose Deaths                                    |

## Appendix E – Interview and Focus Group Questions

1. What is the best part of your community? What are strengths or assets you see in your community?
2. What are some needs you have seen in your community?
3. Why do you think these are needs in our community?
4. How would you prioritize these needs?
5. If you had a blank check to address a need in your community, what would it be?
  - Why?
  - How?
6. What role should the hospitals/health systems play in addressing the community needs?



# Appendix F – List of Data Report Sources: Data Retreats

## Data Reports Reviewed at UNITE Data Retreat 1: June, 2023

1. 5 Healthy Towns Foundation. (2021). Promoting Active Communities Survey. Contact: Lori@5healthytowns.org
2. Food Gatherers. (2022). 2022 Food Insecurity Map. [MMG 2022 Tableau | Tableau Public](#)
3. Michigan Department of Labor and Economic Opportunity. Poverty Task Force. (2022). 2022 Poverty Task Force Report. <https://www.michigan.gov/leo/initiatives/poverty-task-force>
4. Michigan League for Public Policy. (2022). Michigan Kids Count Data. [2022 Kids Count in Michigan Data Profiles – MLPP](#)
5. Michigan Profile for Healthy Youth - Washtenaw County (2021-2022). [County Reports - School Health Survey System \(state.mi.us\)](#)
6. Trinity Health. (2023). TrinityHealthSystemFullAssessmentReport\_CHNA. [Community Health Needs Assessments | Trinity Health Michigan](#)
7. Trinity Health, Trinity Health Cares Data: [Trinity Health \(trinityhealthdatahub.org\)](#)
8. United for ALICE (2021). 2021 Alice in Michigan: A financial hardship study. [https://unitedforalice.org/Attachments/AllReports/2021ALICEReport\\_MI\\_FINAL.pdf](https://unitedforalice.org/Attachments/AllReports/2021ALICEReport_MI_FINAL.pdf)
9. University of Michigan-Michigan Metro Area Communities Study (MIMACS). (2022). MIMACS 1 Ypsilanti. <https://drive.google.com/file/d/1QGxKN8TsYuDRyoT6xAz3JsQCl6PpxcX5/view>
10. Washtenaw Alliance for Children and Youth (WACY). (2020). WACY Report Card 2020. <https://www.wacywashtenaw.org/data>
11. Washtenaw County, Washtenaw County Top Search Results Pie Chart
12. Washtenaw County, Washtenaw County Top Search Results Line Graph
13. Washtenaw County Health Department, WCHD COVID-19 report, 2023 [Washtenaw County COVID-19 Data | Washtenaw County, MI](#)
14. Washtenaw County Health Department. (2023). Washtenaw: Rapid Response Initiative in Latinx community. Copyright (C) 2021 by Washtenaw. [https://www.healthforallwashtenaw.org/tiles/index/display?alias=RapidResponseInitiative\\_Latinx](https://www.healthforallwashtenaw.org/tiles/index/display?alias=RapidResponseInitiative_Latinx)
15. Washtenaw County Health Department. (2021). Annual Report. <https://www.washtenaw.org/ArchiveCenter/ViewFile/Item/1191>
16. Washtenaw County Health Department. (n.d.). Washtenaw : Indicators : Food Insecurity Dashboard. <https://www.healthforallwashtenaw.org/index.php?module=indicators&controller=index&action=dashboard&alias=FoodInsecurity>

17. Washtenaw County Michigan. (2022). Washtenaw Urban County 2022 Action Plan. <https://www.washtenaw.org/DocumentCenter/View/24760/Washtenaw-County-Urban-County-2022-Annual-Action-Plan-DRAFT-032822>
18. Washtenaw County Michigan (2022). Washtenaw Urban County Consolidated Annual Performance and Evaluation Report (CAPER). <https://www.washtenaw.org/DocumentCenter/View/27492>
19. Washtenaw County Office of Community and Economic Development. (2021). Housing Affordability and Economic Equity Analysis.
20. Washtenaw County, Office of Community & Economic Development. (2022). Barrier Busters 3<sup>rd</sup> Quarter Report July 1<sup>st</sup> -September 30<sup>th</sup>. [Response Reports | Washtenaw County, MI](#)
21. Washtenaw Housing Alliance. (2019). 2019 Year in Review. [Homelessness Facts — Washtenaw Housing Alliance \(whalliance.org\)](#)

## Appendix G – 2024 UNITE CHNA Summarization Process

| 2024 UNITE CHNA Summarization Process |   |  |
|---------------------------------------|---|--|
| Measure Category                      | Measure/Indicator Description   | Data source and year   |
| Access to Care                        | % of 18+ Pop persons reporting a disability (hearing, seeing, tasks alone, driving) | 2019-2021 (MiBRFS) LHD Tables  |
| Access to Care                        | % of 18+ Pop No Dental visit in last year   | 2018-2020 (MiBRFS) LHD Tables  |
| Access to Care                        | % reported did not see PCP due to cost  | 2019-2021 (MiBRFS) LHD Tables  |
| Access to Care                        | % 18 Pop persons 18-64 without health insurance                                     | 2019-2021 (MiBRFS) LHD Tables<br>US - CHR 2020 Small area census     |
| Access to Care                        | % reported no annual check up   | 2019-2021 (MiBRFS) LHD Tables  |
| Access to Care                        | Primary Care Providers, # of Providers by gender and Ratio Person to 1 Provider     | NPI 2022 POP Census 5 YR 2017-2021                                   |
| Access to Care                        | # of % of Total occupied HH with No Vehicle Available                               | MYS 2017-2021 ACS Census Data Table B08205                           |
| Access to Care                        | % and # of Children 19-35 mos without recommended Vaccines (43133142 coverage)      | Quarterly MCIR Report June 2023                                      |
| Access to Care                        | # of Total Households without internet access                                       | Census: ACS 2017-2021 5 yr. est. and 2022 1 Yr. Estimates            |
| Access to Care                        | Dentists, # of Providers by gender and Ratio Person to 1 Provider                   | NPI 2022 POP Census 5 YR 2017-2021                                   |
| Access to Care                        | Telehealth - # of MM patients identified needs with Virtual care                    | Trinity - EHR (2022)   |
| <b>Behavioral and Mental Health</b>   | % reported Poor Mental Health 14 days in last 30 days 2019-2021                     | MiBRFS 2019-2021 Tables  |
| Behavioral and Mental Health          | % reported feeling sad or hopeless 14 days  | MiPHY 2021-2022 Violence -HS Report                                  |
| Behavioral and Mental Health          | % Ever diagnosed with Depression  | Mi-BRFS 2019-2021, US- (CDC Places 2021)                             |
| Behavioral and Mental Health          | Suicide - 5 yr. Avg Age Adjusted Rate per 100/K Pop 2017-2021                       | MDHHS Vital Stats 2017-2021/US - CDC Wonder 2021                     |
| Behavioral and Mental Health          | Suicide -Gun Violence   | WC Website Washtenaw County Gun Death Report 2011-2022 (August 2023) |
| Behavioral and Mental Health          | % of HS Students who seriously considered suicide                                   | MiPHY 2021-2022 Violence -HS Report                                  |

| <b>Measure Category</b>      | <b>Measure/Indicator Description</b>   | <b>Data source and year</b>                                |
|------------------------------|--|--|
| Behavioral and Mental Health | % of HS Students who attempted suicide 1 or more times last 12 months                                    | MiPHY 2021-2022 Violence -HS Report                        |
| Behavioral and Mental Health | Mental Health, # of Persons to 1 Provider  | (NPPES NPI 2022)   |
| <b>Economic Stability</b>    | Food Insecurity Rate- % and # of Pop. that experienced food insecurity at some point in the year         | Feeding America, Map the Gap-2021                          |
| Economic Stability           | Child - Food Insecurity Rate- % and # of Pop. that experienced food insecurity at some point in the year | Feeding America Map the Gap-2021                           |
| Economic Stability           | % of identified food insecure persons in HH with income below poverty                                    | Feeding America Map the Gap-2021                           |
| Economic Stability           | % of identified Food Insecure children in HH with income below <185 PL                                   | Feeding America Map the Gap-2021                           |
| Economic Stability           | % of # HH Considered ALICE /Below Poverty  | County ALICE Report, 2021                                  |
| Economic Stability           | Cost and % FT minimum wage income goes to FT Childcare 2019-2023   | Kids Count Reports 2019-2023                               |
| Economic Stability           | # and % No HS Diploma 25+Pop   | (2017-2021 ACS Census)                                     |
| Economic Stability           | # and % bachelor's degree or higher, 25+POP  | (2017-2021 ACS Census)                                     |
| Economic Stability           | Total # and % of Cost Burdened Occupied HH. (>30% of Income)   | TH Cares - 2017-2021 ACS Census Data                       |
| <b>Health Behaviors</b>      | # of 18+Pop reporting activity limited by Health Problem   | 2019-2021 (MiBRFS) LHD Tables                              |
| Health Behaviors             | % of 18+pop reporting 150+ min. moderate/week to 75+mins min vigorous exercise/week                      | 2019-2021 (MiBRFS) LHD Tables CDC Places 2021              |
| Health Behaviors             | % of 18+ Pop reporting no leisure time activity  | 2019-2021 (MiBRFS) LHD Tables, (CDC Places 2021)           |
| Health Behaviors             | % of Students who were physically active 60+ min/day for 5 days  | MiPhY 2021-2022 Physical Activity and Nutrition -HS Report |
| <b>Health Outcomes</b>       | % reported Poor Physical Health 14 days in last 30 days 2019-2021  | 2019-2021 (MiBRFS) LHD Tables, (CDC Places 2021)           |
| Health Outcomes              | % of Medicare patients with HTN (High BP)  | WCHD Health for All Dashboard (CMS)                        |
| Health Outcomes              | % of 18+ Pop ever told High Blood Pressure, 2019-2021  | 2019-2021 (MiBRFS) LHD Tables US- (CDC Places 2021)        |

| <b>Measure Category</b>                       | <b>Measure/Indicator Description</b>   | <b>Data source and year</b>   |
|---|--|---|
| Health Outcomes                               | % of Pop. Ever told and taking HP Meds.  | 2021 CDC BRFSS Places, 2021   |
| Health Outcomes                               | % of 18+ Pop Ever told they had CAD  | WCHD Health for All Dashboard CDC Places, 2021                                      |
| Health Outcomes                               | % of 18+ pop ever told they had Diabetes   | 2019-2021 (MiBRFS) LHD Tables, US- (CDC Places 2021)                                |
| Health Outcomes                               | % of Medicare patients diagnosed with Diabetes 2021                              | WCHD Health for All Dashboard (CMS)   |
| Health Outcomes                               | % of Mammogram   | 2019-2021 (MiBRFS) LHD Tables /US (CDC Places 2021)                                 |
| Health Outcomes                               | Breast Cancer Age Adjusted Death Rate per 100K Females                           | MDHHS Cancer Trends 2021- and 5-year average 2017-2022. US NCI 2016-2020            |
| Health Outcomes                               | All cancers age adjusted death rate 1 and 5 year per 100K Pop                    | MDHHS Cancer Trends 2021- and 5-year average 2017-2022.                             |
| Health Outcomes                               | # of Medicare Pt's treated for Cancer  | WCHD Health for All Dashboard (CMS) 2021  |
| Health Outcomes                               | % of 18+ Pop who are considered Obese BMI > 30                                   | 2019-2021 (MiBRFS) LHD Tables /US (CDC Places 2021)                                 |
| Health Outcomes                               | % of students who are considered obese by BMI                                    | MiPhY 2021-2022 Weight and Nutrition -HS Report                                     |
| Health Outcomes                               | % of students who described themselves as very or slightly overweight            | MiPhY 2021-2022 Weight and Nutrition -HS Report                                     |
| Health Outcomes                               | % of students who were told they have Asthma                                     | MiPhY 2021-2022 Weight and Nutrition -HS Report                                     |
| <b>Maternal Fetal and Infant Health</b>       | % of Live Births with inadequate prenatal care (3,347 live births) Kessner Index | <u>MDHHS Tables 2021</u>  |
| Maternal Fetal and Infant Health              | % of Births with prenatal care First trimester                                   | MDHHS Natality Tables, 2021/ US - WCHD Health for All Dashboard (CDC)               |
| Maternal Fetal and Infant Health              | % of babies weighing less than 2500 grams (5lbs, 8oz), 2021                      | MDHHS Natality Tables, 2021,  |
| Maternal Fetal and Infant Health              | Infant Mortality Rate per 1000 live births 3-year average 2019-2021              | WCHD Health for All Dashboard (MDHHS 3 Year AVG Trend) 2019-2021 US - CDC 2018-2020 |
| Maternal Fetal and Infant Health              | OB/GYN, # of Providers by gender and Ratio Person to 1 Provider                  | NPI 2022 POP Census 5 YR 2017-2020  |
| <b>Social Support &amp; Community Context</b> | % of Total 18+ pop who live alone. 2021  | Census 2017-2022  |
| Social Support & Community Context            | % of Pop >65 who live alone  | Census 2017-2021  |
| Social Support & Community Context            | % of HS students hurt by someone they are dating                                 | 2021-2022 Washtenaw HS - Violence MiPHY   |

| <b>Measure Category</b>                           | <b>Measure/Indicator Description</b>  | <b>Data source and year</b>   |
|---|---|---|
| Social Support & Community Context                | % of HS student forced to sexual acts by someone they are dating              | 2021-2022 Washtenaw HS - Violence MiPHY   |
| Social Support & Community Context                | % of Gun deaths that are Homicides  | WC Website Washtenaw County Gun Death Report 2011-2022 (August 2023)                              |
| Social Support & Community Context                | # and % Occupied Housing Units with One or More Severe Substandard Conditions | CHAS - HUD Database 2016-2020 Data  |
| <b>Substance Use - Tobacco, Alcohol and Drugs</b> | % of HS Students who vape in last 30 days                                     | 2021-2022 Washtenaw HS - Tobacco MiPHY  |
| Substance Use - Tobacco, Alcohol and Drugs        | % of adults who smoke cigarettes every day                                    | 2019-2021 (MiBRFS) LHD Tables US- (CDC Places 2021)   |
| Substance Use - Tobacco, Alcohol and Drugs        | Adults who Binge Drink (5+ Drinks Male 4+ Female)                             | 2019-2021 (MiBRFS) LHD Tables US- (CDC Places 2021)   |
| Substance Use - Tobacco, Alcohol and Drugs        | % HS students who Binge Drink   | MiPHY 2021-2022 D & A -HS Report  |
| Substance Use - Tobacco, Alcohol and Drugs        | % of HS Students who used Marijuana in last 30 days                           | 2021-2022 Washtenaw HS D & A MiPHY  |
| Substance Use - Tobacco, Alcohol and Drugs        | Age Adjusted Rate Opioid involved Deaths/100K Pop                             | Age Adjusted Drug Poisoning Rate per 100K POP 2021 MDHHS Mi Tracking Data US-CDC Places 2018-2020 |
| Substance Use - Tobacco, Alcohol and Drugs        | # of Opioid and Non-Opioid Deaths   | WCHD Opioid Report September 2023 (2022) (Washtenaw County Medical Examiner)                      |
| Substance Use - Tobacco, Alcohol and Drugs        | Substance Use Providers, # and Rate per 100,000 Population                    | TH Cares - CMS-NPI, July 2023, 2020 Census POP  |

# Appendix H – Patient Social Needs Screening

## Trinity Health Ann Arbor and Chelsea Hospital

Trinity Health screens patients for social care needs at primary care annual wellness visits, new diabetes patients, new obstetrics patients, and some inpatients. The screening tool is embedded in the electronic medical record, and can be completed by patients in the MyChart application on a mobile device. The screening tool includes the following questions:

1. Within the past 12 months we worried whether your food would run out before we got money to buy more. Response choices: Never true, Sometimes true, Often true, Prefer not to answer, Not asked.
2. Within the past 12 months the food we bought just didn't last and we didn't have money to get more. Response choices: Never true, Sometimes true, Often true, Prefer not to answer, Not asked.
3. How hard is it for you to pay for the very basics like food, housing, medical care and heating? Response choices: Very hard, hard, somewhat hard, Not very hard, prefer not to answer, not asked.
4. Are you worried that in the next 2 months you may not have stable housing? Response choices: Yes, no, prefer not to answer, not asked.
5. I can get a variety of food, including fruits and vegetables. Response choices: Yes, no, prefer not to answer, not asked.
6. Within the last 3 months, how many times did you visit the emergency department for your medical care? Responses choices: None, Fewer than 3, 3 or more, Prefer not to answer
7. Has the lack of transportation kept you from meetings, work or from getting things needed for daily living? Response choices: Yes, no, prefer not to answer, not asked.
8. Has the lack of transportation kept you from medical appointments or from getting medications? Response choices: Yes, no, prefer not to answer, not asked.
9. How often do you feel lonely or isolated from those around you? Response choices: Never, rarely, sometimes, often, always, prefer not to answer, not asked.
10. How often do you need to have someone help you when you read instructions, pamphlets, or other written material from your doctor or pharmacy? Response choices: Never, rarely, sometimes, often, always, prefer not to answer, not asked.
11. Do you think completing more education or training, like finishing a GED, going to college, or learning a trade, would be helpful for you? Response choices: Yes, no, prefer not to answer, not asked.
12. Do you need help finding or paying for care for your loved ones? For example, childcare or elderly care for an older adult? Response choices: Yes, no, prefer not to answer, not asked.
13. Are you afraid that you might be hurt by violence in your neighborhood? Response choices: Yes, no, prefer not to answer, not asked.
14. Are you afraid that you might be hurt by violence in your apartment or home? Response choices: Yes, no, prefer not to answer, not asked.
15. If you checked YES to any boxes above, would you like to receive assistance with any of these needs? Response choices: Yes, no, prefer not to answer.
16. Are any of your needs urgent? For example, I don't have food for tonight, I don't have a place to sleep tonight. Response choices: Yes, no, prefer not to answer.

## Summary of Patient Social Needs Screening Data: Trinity Health Ann Arbor and Chelsea Hospital

- Of the 96,025 patients included in this data set in 2022, 31,895 patients (33%) had documented social needs screening questions in their EHR.
- Of those 31,895 patients screened, the following percentages reflect how many screened positive for each need (note: one patient can screen positive for multiple needs):
  1. Education: 6%
  2. Food Access: 4%
  3. Financial Risk: 4%
  4. Social Isolation: 4%
  5. Transportation – Work: 2%
  6. Health Literacy: 2%
  7. Transportation – Medical Care: 2%
  8. Housing: 2%
  9. Dependent Care: 1%
  10. Food Insecurity – Run Out: 1%
  11. Food Insecurity – Not Last: 1%
  12. Environmental Safety: <1%
  13. Personal Safety: <1%

### U-M Health

U-M Health screens patients once a year utilizing the Partners in Care Questionnaire for many social needs. The sites that this is currently administered is at U-M Health primary Care sites, Obstetrics, Neurosciences, Domino Farms Pre-Operation, MEND, Podiatry, and most of Children's and Women's hospital.

1. **Food:** Within the past 12 months, you worried that your food would run out before you got money to buy more.
2. **Food:** Within the past 12 months, the food you bought just didn't last and you didn't have money to get more.
3. **Transportation:** In the past 12 months, has lack of transportation kept you from medical appointments or from getting medication.
4. **Transportation:** In the past 12 months, has lack of transportation kept you from meeting, work, or getting things needed for daily living?
5. **Healthcare financial strain:** In the last 12 months, has the lack of transportation kept you from meetings, work or getting needed for daily living.
6. **Utilities:** In the last 12 months, did you not see a doctor when you needed to or skip medications to save money?
7. **Housing:** In the next 12 months, has the utility company shut off your service for not paying your bills?
8. **Table**
9. **Elder/Child care:** In the last 4 weeks, did getting elder care or child care make it difficult to work or study?
10. **Social:** How often do you feel isolated from others?
11. **Relationships:** Within the last year, have you been afraid of someone close to you?



12. **Relationships:** Within the last year, have you been humiliated or emotionally abused in other ways by someone close to you?
13. **Relationships:** Within the last year, have you been kicked, hit, slapped or otherwise physically hurt by someone close to you?
14. **Relationships:** Within the last year, have you been raped or forced to have any kind of sexual activity by someone close to you?

Summary of Patient Social Needs Screening Data: U-M Health

- Of the 50,283 patients expected to have a questionnaire included in their record in 2022, patients 38,436(76%) had documented social needs screening questions in their EHR.
- Of those 38,436 patients screened, the following percentages reflect how many screened positive for each need (note: one patient can screen positive for multiple needs):

|                              |       |
|------------------------------|-------|
| 1. Child or Elder Care       | 2.3%  |
| 2. Financial Medical Care    | 2.2%  |
| 3. Financial Prescription    | 1.2%  |
| 4. Food Insecurity           | 3.2%  |
| 5. Housing & Utilities       | 1.6%  |
| 6. Intimate Partner Violence | 1.5%  |
| 7. Social Isolation          | 15.7% |
| 8. Job Training              | 1.5%  |
| 9. Transportation            | 1.7%  |
| 10. Virtual Care             | 12.4% |

## Endnotes

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- <sup>i</sup> U.S. Census Bureau. "Total Population." American Community Survey, ACS 5-Year Estimates Detailed Tables, Table B01003, 2022, <https://data.census.gov/table/ACSDT5Y2022.B01003?t=Population Total&g=050XX00US26161>. Accessed on March 18, 2024
- <sup>ii</sup> U.S. Census Bureau. "Age and Sex." American Community Survey, ACS 5-Year Estimates Subject Tables, Table S0101, 2022, <https://data.census.gov/table/ACSST5Y2022.S0101?t=Age and Sex&g=050XX00US26161&moe=false>. Accessed on March 18, 2024
- <sup>iii</sup> U.S. Census Bureau. "Total Population." American Community Survey, ACS 5-Year Estimates Detailed Tables, Table B01003, 2022, <https://data.census.gov/table/ACSDT5Y2022.B01003?t=Population Total&g=860XX00US49240>. Accessed on March 18, 2024
- <sup>iv</sup> U.S. Census Bureau. "Age and Sex." American Community Survey, ACS 5-Year Estimates Subject Tables, Table S0101, 2022, <https://data.census.gov/table/ACSST5Y2022.S0101?t=Age and Sex&g=860XX00US49240>. Accessed on March 18, 2024.
- <sup>v</sup> U.S. Census Bureau. "Total Population." American Community Survey, ACS 5-Year Estimates Detailed Tables, Table B01003, 2022, <https://data.census.gov/table/ACSDT5Y2022.B01003?t=Population Total&g=860XX00US49285>. Accessed on March 18, 2024
- <sup>vi</sup> U.S. Census Bureau. "Age and Sex." American Community Survey, ACS 5-Year Estimates Subject Tables, Table S0101, 2022, <https://data.census.gov/table/ACSST5Y2022.S0101?t=Age and Sex&g=860XX00US49285>. Accessed on March 18, 2024
- <sup>vii</sup> U.S. Census Bureau. "Total Population." *American Community Survey, ACS 5-Year Estimates Detailed Tables, Table B01003*, 2022, <https://data.census.gov/table/ACSDT5Y2022.B01003?t=Population Total&g=040XX00US26>. Accessed on March 27, 2024
- <sup>viii</sup> U.S. Census Bureau. "Age and Sex." American Community Survey, ACS 5-Year Estimates Subject Tables, Table S0101, 2022, <https://data.census.gov/table/ACSST5Y2022.S0101?t=Age and Sex&g=040XX00US26>. Accessed on March 27, 2024.
- <sup>ix</sup> County U.S. Census Bureau. "Hispanic or Latino Origin by Race." American Community Survey, ACS 5-Year Estimates Detailed Tables, Table B03002, 2022, <https://data.census.gov/table/ACSDT5Y2022.B03002?q=b03002&g=050XX00US26161>. Accessed on March 28, 2024.
- <sup>x</sup> U.S. Census Bureau. "Hispanic or Latino Origin by Race." American Community Survey, ACS 5-Year Estimates Detailed Tables, Table B03002, 2022, <https://data.census.gov/table/ACSDT5Y2022.B03002?q=b03002&g=860XX00US49240>. Accessed on March 28, 2024
- <sup>xi</sup> U.S. Census Bureau. "Hispanic or Latino Origin by Race." American Community Survey, ACS 5-Year Estimates Detailed Tables, Table B03002, 2022, <https://data.census.gov/table/ACSDT5Y2022.B03002?q=b03002&g=860XX00US49285>. Accessed on March 28, 2024.
- <sup>xii</sup> U.S. Census Bureau. "Hispanic or Latino Origin by Race." American Community Survey, ACS 5-Year Estimates Detailed Tables, Table B03002, 2022, <https://data.census.gov/table/ACSDT5Y2022.B03002?q=b03002&g=040XX00US26>. Accessed on March 28, 2024
- <sup>xiii</sup> U.S. Census Bureau. "Educational Attainment for the Population 25 Years and Over." American Community Survey, ACS 5-Year Estimates Detailed Tables, Table B15003, 2022, [https://data.census.gov/table/ACSDT5Y2022.B15003?q=B15003: EDUCATIONAL ATTAINMENT FOR THE POPULATION 25 YEARS AND OVER&g=040XX00US26\\_050XX00US26161\\_860XX00US49240,49285&moe=false](https://data.census.gov/table/ACSDT5Y2022.B15003?q=B15003: EDUCATIONAL ATTAINMENT FOR THE POPULATION 25 YEARS AND OVER&g=040XX00US26_050XX00US26161_860XX00US49240,49285&moe=false). Accessed on March 27, 2024.
- <sup>xiv</sup> U.S. Census Bureau. "Median Household Income in the Past 12 Months (in 2022 Inflation-Adjusted Dollars)." American Community Survey, ACS 5-Year Estimates Detailed Tables, Table B19013, 2022, <https://data.census.gov/table/ACSDT5Y2022.B19013?q=B19013: Median Household Income in the Past 12>

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Months (in 2022 Inflation-Adjusted Dollars)&g=040XX00US26\_050XX00US26161\_860XX00US49240,49285&moe=false. Accessed on March 27, 2024

<sup>xv</sup>Federal Poverty Level: <https://www.healthcare.gov/glossary/federal-poverty-level-fpl/><https://www.healthcare.gov/glossary/federal-poverty-level-fpl/>

<sup>xvi</sup> U.S. Census Bureau. "Poverty Status of Individuals in the Past 12 Months by Living Arrangement." American Community Survey, ACS 5-Year Estimates Detailed Tables, Table B17021, 2022, [https://data.census.gov/table/ACSDT5Y2022.B17021?q=B17021&g=040XX00US26\\_050XX00US26161\\_860XX00US49240,49285&moe=false](https://data.census.gov/table/ACSDT5Y2022.B17021?q=B17021&g=040XX00US26_050XX00US26161_860XX00US49240,49285&moe=false). Accessed on March 27, 2024

<sup>xvii</sup> United Way – ALICE Report Washtenaw County, 2021 <https://www.unitedforalice.org/county-reports/michigan>.

<sup>xviii</sup> U.S. Census Bureau. "Employment Status by Disability Status." American Community Survey, ACS 5-Year Estimates Detailed Tables, Table C18120, 2022, [https://data.census.gov/table/ACSDT5Y2022.C18120?q=C18120&g=050XX00US26161\\_860XX00US49285,49420](https://data.census.gov/table/ACSDT5Y2022.C18120?q=C18120&g=050XX00US26161_860XX00US49285,49420). Accessed on March 27, 2024.

<sup>xix</sup> U.S. Census Bureau. "Industry by Occupation for the Civilian Employed Population 16 Years and Over." American Community Survey, ACS 5-Year Estimates Subject Tables, Table S2405, 2022, [https://data.census.gov/table/ACSST5Y2022.S2405?q=S2405: Industry by Occupation for the Civilian Employed Population 16 Years and Over&g=050XX00US26161\\_860XX00US49240,49285&moe=false](https://data.census.gov/table/ACSST5Y2022.S2405?q=S2405:Industry%20by%20Occupation%20for%20the%20Civilian%20Employed%20Population%2016%20Years%20and%20Over&g=050XX00US26161_860XX00US49240,49285&moe=false). Accessed on March 19, 2024.

<sup>xx</sup> Michigan Behavioral Risk Factor Surveillance System, LHD Tables 2019-2021 <https://www.michigan.gov/mdhhs/keep-mi-healthy/communicablediseases/epidemiology/chronicepi/bfrs/reglocal/michigan-bfrs-regional-and-local-health-department-tables>

<sup>xxi</sup> U-M Health. (2021-2022). [UNITE CHNA patient data] [unpublished raw data]. University of Michigan Michigan Medicine.

<sup>xxii</sup> Trinity Health. (2021-2022) UNITE CHNA, [unpublished raw data]. Trinity Health Michigan.

<sup>xxiii</sup> Michigan Profile for Healthy Youth (MIPHY) Washtenaw County High School Violence and Safety Reports 2021-2022 <https://mdoe.state.mi.us/schoolhealthsurveys/ExternalReports/CountyReportGeneration.aspx>

<sup>xxiv</sup> Overdose Washtenaw County Health Department– Opioid Report 2023 <https://www.washtenaw.org/DocumentCenter/View/32184>

<sup>xxv</sup> Michigan Substance Use Disorder Data Repository, Dashboard, 2023. <https://mi-suddr.com/blog/2021/07/13/opioid-overdose-deaths/>

<sup>xxvi</sup> Michigan Behavioral Risk Factor Surveillance System, LHD Tables 2018-2020 <https://www.michigan.gov/mdhhs/keep-mi-healthy/communicablediseases/epidemiology/chronicepi/bfrs/reglocal/michigan-bfrs-regional-and-local-health-department-tables>

<sup>xxvii</sup> Michigan Behavioral Risk Factor Surveillance System, LHD Tables 2020-2022 <https://www.michigan.gov/mdhhs/keep-mi-healthy/communicablediseases/epidemiology/chronicepi/bfrs/reglocal/michigan-bfrs-regional-and-local-health-department-tables>

<sup>xxviii</sup> Michigan Profile for Healthy Youth (MIPHY) Washtenaw County High School- Alcohol and Other Drug Reports 2021-2022

<sup>xxix</sup> U.S. Census Bureau 18+ U.S. Census Bureau. "Living Arrangements of Adults 18 Years and Over by Age." American Community Survey, ACS 5-Year Estimates Detailed Tables, Table B09021, 2022, <https://data.census.gov/table/ACSDT5Y2022.B09021?q=B09021&g=050XX00US26161>. Accessed on March 25, 2024

<sup>xxx</sup> U.S. Census Bureau. 65+ "Relationship by Household Type (Including Living Alone) for the Population 65 Years and Over." American Community Survey, ACS 5-Year Estimates Detailed Tables, Table B09020, 2022, [https://data.census.gov/table/ACSDT5Y2022.B09020?q=B09020: Relationship by Household Type \(Including Living Alone\) for the Population 65 Years and Over&g=050XX00US26161](https://data.census.gov/table/ACSDT5Y2022.B09020?q=B09020:Relationship%20by%20Household%20Type%20(Including%20Living%20Alone)%20for%20the%20Population%2065%20Years%20and%20Over&g=050XX00US26161). Accessed on March 25, 2024

- 
- <sup>xxx</sup> Holt-Lunstad, J., Smith, T. B., Baker, M., Harris, T., & Stephenson, D. (2015). Loneliness and Social Isolation as Risk Factors for Mortality: A Meta-Analytic Review. *Perspectives on Psychological Science*, 10(2), 227-237. <https://doi.org/10.1177/1745691614568352>
- <sup>xxxii</sup> U-M Health. (2021-2022). [UNITE CHNA patient data] [unpublished raw data]. University of Michigan Michigan Medicine.
- <sup>xxxiii</sup> Trinity Health. (2021-2022) UNITE CHNA, [unpublished raw data]. Trinity Health Michigan.
- <sup>xxxiv</sup> Trinity Health. (2021-2022) UNITE CHNA, [unpublished raw data]. Trinity Health Michigan.
- <sup>xxxv</sup> Trinity Health. (2021-2022) UNITE CHNA, [unpublished raw data]. Trinity Health Michigan.
- <sup>xxxvi</sup> Michigan Department of Health and Human Services – Prevalence of Trauma/Toxic Stress in Michigan, Adverse Childhood Experiences (ACE’s) in Adults in Washtenaw County, 2021 <https://www.michigan.gov/mdhhs/adult-child-serv/childrenfamilies/tts/btim/pttstm>
- <sup>xxxvii</sup> /MDHHS Division for Vital Records and Health Statistics 2021- 2022 <https://vitalstats.michigan.gov/OSR/CHI/Fatal2/NoByAge/FJAgeSubcatlistTrends.asp?ActiveDemo=T&Age=STANDARD&StatGroup=NC&TrendType=1&Display=X&CI=N&cmdPrintStatTable=&AreaCode=81&AreaType=C&Spill=NO&FTLCode=0&Detail=M&ActiveYear=2022&JS=No>
- <https://vitalstats.michigan.gov/osr/chi/fatal2/frame.html>
- <sup>xxxviii</sup> HRSA – Medically Underserved Areas <https://data.hrsa.gov/tools/shortage-area/mua-find>
- <sup>xxxix</sup> Michigan Department of Health and Human Services- ACS Hospitalizations – Leading Causes 2021 - <https://vitalstats.michigan.gov/osr/chi/hosp/frame.html>
- <sup>xl</sup> Washtenaw County Health Department – Health for All Dashboard <https://www.healthforallwashtenaw.org/indicators/index/view?indicatorId=5681&localeId=1363> (Measure reversed)
- <sup>xli</sup> MDHHS – Vital Statistics Washtenaw County Top 10 leading causes of Death, 2021- <https://vitalstats.michigan.gov/osr/chi/Deaths/frame.html>
- <sup>xlii</sup> CMS Mapping Medicare Disparities by Population via WCHD Washtenaw for All Dashboard <https://data.cms.gov/tools/mapping-medicare-disparities-by-population>
- <sup>xliii</sup> U-M Health. (2021-2022). [UNITE CHNA patient data] [unpublished raw data]. University of Michigan Michigan Medicine
- <sup>xliv</sup> MDHHS Division for Vital Records and Health Statistics, Birth Characteristics of Mother and Infant, Michigan Natality Statistics % Distribution of Live Births by Kessner Index and Race & Ancestry of Mother Washtenaw County, Michigan 2021) <https://vitalstats.michigan.gov/osr/chi/births14/frameBxChar.html>
- <sup>xlv</sup> MDHHS Division for Vital Records and Health Statistics, Live Births, Low Birth weight by Race, Washtenaw County 2021 <https://vitalstats.michigan.gov/osr/chi/births14/frameBxChar.html>
- <sup>xlvi</sup> 39. Infant Mortality MDHHS Division for Vital Records and Health Statistics – Washtenaw County <https://vitalstats.michigan.gov/osr/Index.asp?Id=3>
- <sup>xlvii</sup> US. Census B28002 Presence and Types of Internet Subscriptions in Household U.S. Census Bureau. "Presence and Types of Internet Subscriptions in Household." American Community Survey, ACS 5-Year Estimates Detailed Tables, Table B28002, 2022, <https://data.census.gov/table/ACS5Y2022.B28002?q=B28002: PRESENCE AND TYPES OF INTERNET SUBSCRIPTIONS IN HOUSEHOLD&g=050XX00US26161>. Accessed on March 25, 2024.
- <sup>xlviii</sup> U.S. Census Bureau. "Internet Subscriptions in Household." American Community Survey, ACS 5-Year Estimates Detailed Tables, Table B28011, 2022, [https://data.census.gov/table/ACS5Y2022.B28011?q=B28011 Internet Subscriptions in HouseholdL&g=050XX00US26161\\_860XX00US49240,49285](https://data.census.gov/table/ACS5Y2022.B28011?q=B28011 Internet Subscriptions in HouseholdL&g=050XX00US26161_860XX00US49240,49285). Accessed on March 25, 2024.
- <sup>xlix</sup> Feeding America – 2023 Map the Meal Gap Report, Washtenaw County 2019 - 2021 Child Food Insecurity <://map.feedingamerica.org/county/2021/child/michigan/county/washtenaw>
- <sup>l</sup> Feeding America – 2023 Map the Meal Gap Report, County data export Washtenaw County 2019 - 2021 Adult and Child Food Insecurity <https://map.feedingamerica.org/county/2021/overall/michigan/county/washtenaw>
- <sup>li</sup> Trinity Health. (2023) UNITE CHNA, unpublished.
- <sup>lii</sup> Data Dashboard — Washtenaw Area Transportation Study (miwats.org) 2015

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<sup>liii</sup> EPA 2019 <https://www.epa.gov/smartgrowth/smart-location-mapping#walkability>

<sup>liv</sup> Washington U.S. Census

[https://data.census.gov/table/ACSDT5Y2021.B08201?q=B08201:+Household+Size+by+Vehicles+Available&g=010XX00US\\_040XX00US26\\_050XX00US26093,26161&moe=false](https://data.census.gov/table/ACSDT5Y2021.B08201?q=B08201:+Household+Size+by+Vehicles+Available&g=010XX00US_040XX00US26_050XX00US26093,26161&moe=false)

<sup>lv</sup> Stockbridge <https://datausa.io/profile/geo/stockbridge-mi#transportation>

<sup>lvi</sup> Grass lake <https://datausa.io/profile/geo/grass-lake-mi#transportation>

<sup>lvii</sup> Trinity Health. (2023) UNITE CHNA, unpublished.

<sup>lviii</sup> Trinity Health. (2023) UNITE CHNA, unpublished.

<sup>lix</sup> U.S. Census Bureau. "Gross Rent as a percentage of Household Income in the Past 12 Months." American Community Survey, ACS 5-Year Estimates Detailed Tables, Table B25070, 2022,

<https://data.census.gov/table/ACSDT5Y2022.B25070?q=B25070:GROSSRENTASAPERCENTAGEOFHOUSEHOLDINCOMEIN THEPAST12MONTHS&g=050XX00US26161>. Accessed on March 28, 2024. U.S.

Census Bureau. "Mortgage Status by Selected Monthly Owner Costs as a percentage of Household Income in the Past 12 Months." American Community Survey, ACS 5-Year Estimates Detailed Tables, Table B25091, 2022, <https://data.census.gov/table/ACSDT5Y2022.B25091?q=B25091:MORTGAGESTATUSBYSELECTEDMONTHLYOWNER COSTSASAPERCENTAGEOFHOUSEHOLDINCOMEIN THEPAST12MONTHS&g=050XX00US26161>

<sup>lx</sup> U.S Census Table B25119 Median Household Income in Past 12 Months (in Inflation-Adjusted Dollars) by Tenure B25071 Median Gross Rent As a percentage of Household Income in the Past 12 Months (Dollars)

<sup>lxi</sup> Trinity Health. (2023) UNITE CHNA, unpublished.