



**HealthAlliance
Hospital**

Westchester Medical Center Health Network

**HEALTHALLIANCE HOSPITAL
COMMUNITY HEALTH NEEDS ASSESSMENT
2022-2024**



HealthAlliance Hospital of the Hudson Valley
105 Mary's Avenue Kingston, NY 12401

HealthAlliance Hospital
2022 - 2024 Community Health Needs Assessment

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I. Executive Summary

As mandated by the New York State Department of Health (NYSDOH), HealthAlliance Hospital, part of the HealthAlliance of the Hudson Valley and a member of the Westchester Medical Center Health Network (WMCHealth), is reaffirming its commitment to improve population health for all patients and communities it serves in Ulster County, as presented in this **2022-2024 Community Health Needs Assessment (CHNA)/Community Service Plan (CSP)**. Also included as part of the CHNA/CSP is HealthAlliance Hospital's adopted **Implementation Plan**, which outlines our action plans to address the identified health needs in Ulster County.

The CHNA/CSP is HealthAlliance Hospital's culmination of a year-long community health needs assessment process with two workgroups, the first led by the Ulster County Departments of Health and Mental Health (UCHMH), and the second by the Greater New York Hospital Association (GNYHA). The former is a collaborative effort of multi-sectoral partner providers within Ulster County, as part of the **Healthy Ulster Council**, including UCHMH, HealthAlliance Hospital, Ellenville Regional Hospital, Cornell Cooperative Extension, Live Well Kingston, American Lung Association, TFAC (Tobacco Free Action Communities) in Ulster, Dutchess, and Sullivan, and the Institute for Family Health. The community health assessment (CHA) was also a partnership among seven Departments of Health in the Mid-Hudson Region, NY, which are members of the Hudson Valley Public Health Collaborative (HVPHC), consisting of Dutchess, Orange, Putnam, Rockland, Sullivan, Ulster, and Westchester counties. Utilizing a similar multi-county CHA approach as in the previous 2019-2021 CHA, Siena College Research Institute (SCRI) in Albany County, NY, on behalf of the seven Departments of Health, conducted a phone and online survey of residents to gather their experiences, perceptions, and thoughts on what influences their health and well-being. SCRI also conducted a community provider survey of health and human services providers who serve underrepresented populations in the County to identify issues that could affect optimal health outcomes for residents. Key findings are incorporated in the region-wide

comprehensive health data report, published by the HVPHC, the **2022-2024 Mid-Hudson Regional Community Health Assessment**.

Additionally, HealthAlliance Hospital also joined GNYHA's 2022 Community Health Needs Assessment Collaborative, which supported participating hospital members' primary data collection efforts to meet the requirements of the NYS CSP, by gathering information on community health needs and engaging with community members. A diverse group of GNYHA member hospitals across the state participated in the Collaborative, including community and safety net hospitals, small health systems, and large academic medical centers.

Based on the findings at the conclusion of these assessments, along with an internal review process to determine HealthAlliance's areas of expertise and available resources, HealthAlliance Hospital aligned its action plans with the NYS 2019-2024 Prevention Agenda by targeting two public health prevention priorities:

- **Priority I: Prevent Chronic Disease**
 - *Focus Area 4: Chronic Disease Preventive Care and Management*
- **Priority II: Promote Healthy Women, Infants and Children**
 - *Focus Area 1: Maternal and Women's Health.*

For Priority I, HealthAlliance Hospital, through its outpatient Diabetes Education Center, plans to promote an evidence-based care intervention to prevent and manage diabetes and prediabetes patients by 1) increasing the proportion of people with diabetes who get formal diabetes education by 10% by December 2024 and 2) decreasing the percentage of adult members with diabetes whose most recent HbA1c (hemoglobin A1C) level indicated poor control (>9%) by 10% by December 2024. To achieve these goals, the Center, which is recognized by the American Diabetes Association (ADA), will provide the Intensive Lifestyle Interventions education program for patients with type 2 diabetes to improve their glycemic control and reduce their risk factors for cardiovascular disease. By

December 2024, the Center's Certified Diabetes Care and Education Specialists (CDCES) will serve a minimum of 220 patients annually and will develop individualized management plans that fit their patients' lifestyles, beliefs, and culture. The CDCES will also integrate the ADCES' (Association of Diabetes Care & Education Specialists) seven self-care behaviors: Healthy Coping, Healthy Eating, Being Active, Taking Medication, Monitoring, Reducing Risk, and Problem Solving, into the intervention. The program will also focus on providing additional support to Medicaid patients to address their social determinants of health (SDOH) needs.

For Priority II, by December 2024, HealthAlliance Hospital's goal is to reduce low-risk C-section (Cesarean delivery) to less than 25% from the current rate of 30%. Through WMCHHealth Institute for Women's Health and Wellness, the new Comprehensive Women's Health Center and HealthAlliance Hospital will attain this goal with a multi-strategic approach. Those strategies include: 1) train all Obstetrics staff with the **Relias** performance modules, which promote vaginal birth and fetal heart rate monitoring; 2) offer expectant mothers prenatal obstetrics consultations and patient education opportunities to raise awareness about how to prepare for a healthy pregnancy and promote natural childbirth; 3) implement an updated workflow process among providers to utilize the revised C-section checklists to enable prenatal record and ultrasonography review; 4) implement Peer-to-Peer Discussions prior to any unscheduled, non-urgent C-sections; and 5) collaborate with community partners and enhance community outreach efforts to increase the number of enrolled expectant mothers into prenatal care, as well as linking Substance Use Disorders (SUD) mothers through HealthAlliance Hospital's widely successful Neonatal Abstinence Syndrome (NAS) program to address their SUD and SDOH needs.

HealthAlliance Hospital recognizes the importance and solemnity of these commitments to its patients and residents of Ulster County in order to achieve health equity for all.

II. Hospital Description, Mission, and Vision

As Ulster County's largest employer, HealthAlliance of the Hudson Valley operates a 315-bed healthcare system comprising HealthAlliance Hospital: Mary's Avenue Campus and HealthAlliance Hospital: Broadway Campus in Kingston, NY, and Margaretville Hospital, a 15-bed critical access hospital in Margaretville, NY, which serves Delaware, Greene, Ulster and Schoharie counties. Joining WMCHHealth in 2016, HealthAlliance of the Hudson Valley also operates Mountainside Residential Care Center, an 82-bed residential care facility in Margaretville.

In the summer of 2019, NYSDOH granted full project approval to HealthAlliance for the significant expansion and enhancement of its hospital on Mary's Avenue in the City of Kingston. The new HealthAlliance Hospital features the addition of a two-story, 79,000-square-foot building adjoining the current facility, as well as a full renovation of 48,000 square feet of space within the existing hospital. Key components of the 175-bed facility include a newly constructed emergency care center; a newly constructed intensive care unit, along with a medical "stepdown" unit; a newly constructed birthing center; a new imaging department and fully remodeled centers for ambulatory surgery, infusion therapy and endoscopy. WMCHHealth and HealthAlliance are working closely with the City of Kingston and the project is on target for completion in 2023.

The current HealthAlliance Hospital: Broadway Campus will be converted into a "health village" — an innovative focal point for the area's outpatient healthcare and related needs — after patient care services at the Broadway campus are relocated to the new Mary's Avenue site. On the reimagined Broadway campus, in the heart of Kingston, HealthAlliance will collaborate with community partners in the health village to provide preventative and primary care services in one convenient destination. The combined projects on Mary's Avenue and Broadway, known as the *Healthy Neighborhood Initiative*, are expected to cost \$134.9 million, with \$88.8 million of the completion cost stemming from the NYS Capital Restructuring Financing Program.

HealthAlliance's mission is to provide the highest quality health care services to all people in our communities with its vision to continue to be the destination of choice for regional health care services, centering on patient care and community health, while integrating HealthAlliance of the Hudson Valley's guiding principles of Quality, People, Stewardship, and Growth.

About Westchester Medical Center Health Network

The Westchester Medical Center Health Network (WMCHealth) is a 1,700-bed health care system headquartered in Valhalla, New York, with nine hospitals on eight campuses spanning 6,200 square miles of the Hudson Valley. WMCHealth employs more than 12,000 people and has nearly 3,000 attending physicians. From Level 1, Level 2 and Pediatric Trauma Centers, the region's only acute care children's hospital, an academic medical center, several community hospitals, dozens of specialized institutes and centers, skilled nursing, assisted living facilities, home care services and one of the largest mental health systems in NYS, today WMCHealth is the preeminent provider of integrated healthcare in the Hudson Valley.

III. Facility Service Area and Description of Community

HealthAlliance defines its primary service area (PSA) by a federal definition that consists of the top 75% of hospital discharges from the lowest number of contiguous ZIP codes. Due to the geographical location of acute care hospitals under HealthAlliance, there are distinct primary service areas that lie within Ulster County, though not encompassing the entire county.

Ulster County, about the size of Rhode Island, is located in the southeast part of NYS, south of Albany and immediately west of the Hudson River. The County is bordered by Greene County to the north, Delaware County to the northwest, Sullivan County to the southwest, Orange County to the south, and Dutchess County across the Hudson River to the east. The County has only one major urban area, the City of Kingston, located in the eastern central portion of the County, encompassing just 7.4 square miles of the County's total area. The rest of the County is comprised of 20 towns and three villages. Ulster County is home to nine school districts and two colleges and universities within its 1,161-square mile area.¹ There are about 178,371 residents living in Ulster County among 70,088 households, with a median income of \$65,306. The gender division is almost evenly divided between male and female, with 81.9% White, 6.1% Black, and 1.8% Asian; 10.5% identified as Hispanic (see *Table 1*).² Education services, health care, and social assistance comprise almost one-third of employment opportunities in the County; retail trade, arts, entertainment, recreation, accommodation, food services, professional, and scientific services make up another third of employment prospects.³

Ulster County is also a popular vacation destination as a four-season recreation area. The County is home to many outdoor landscapes, including the Catskill Mountains, the Hudson River, Minnewaska State Park, Catskill Park, Shawangunk Mountains and the

¹ Mid-Hudson Regional Community Health Assessment 2022-2024 <https://ulstercountyny.gov/health/research-and-reports>

² US Census, ACS Narrative Profile (2016-2020) - <https://www.census.gov/acs/www/data/data-tables-and-tools/narrative-profiles/2020/>.

³ US Census. Ibid 9.

Shawangunk Ridge. Each area offers multiple recreation opportunities, including hiking, bicycling, skiing, horseback riding, kayaking, rock climbing, windsurfing, hunting, and fishing. Ulster County has also been able to take advantage of its farming community as the Hudson River Valley is ground zero for the resurgence in farmers' markets and natural foods. The apple business is especially strong and when in season, corn, fruits, and vegetables of all varieties are available at farm stands and markets. Comprised of mostly suburban and semi-rural communities, there is limited public transportation in Ulster County. *Trailways of New York* provides services to and from New York City and Albany. The *Ulster County Area Transit* mainly travels along Routes 28 and 32, while the City of Kingston is serviced by the *Kingston Citibus*. The lack of adequate means of transportation creates barriers for individuals from getting the health care services that they need.

Transportation is one of the social determinants of health (SDOH) factors, which are the conditions in the environments where people are born, live, learn, work, play, worship, and age, and have been established as having a causal impact on health outcomes. Food insecurity, defined as the disruption of food intake or eating patterns due to lack of money and other resources, is another SDOH factor as access to healthy food plays an essential role in living a healthy lifestyle. Populations most at risk for food insecurity include children, seniors, minorities, and those living in poverty or rural communities, such as Ulster County. Based on data collected by Feeding America, the percentage of overall food insecurity in the County steadily increased from 2017-2020 from 10.7% to 11.5%.⁴

⁴ Mid-Hudson CHA 2022-2024. Ibid, 9.

Table 1: Demographic Data⁵

	US	NYS	Ulster County
Total Population	326.6M	19.5M	178,371
Female (n, %)	165.8M (50.8)	10M (51.5)	89,871 (50.4)
Male (n, %)	160.8M (49.2)	9.5M (48.5)	88,500 (49.6)
Median Age	38.2	39.0	44.1
White (%)	70.4	62.3	81.9
Black (%)	12.6	15.4	6.1
Asian (%)	5.6	8.6	1.8
Hispanic (%)	18.2	19.1	10.5
Population 65+ (%)	16.0	16.5	19.8
Education (% Bachelor's +)	32.9	37.5	33.2
Employed (% 16 years old +)	59.6	59.3	57.0
Median Income	\$64,994	\$71,117	\$65,306
Poverty (%)	12.8	13.6	13.7
Disability (%)	12.7	11.6	14.4
Broadband internet (%)	85.2	85.2	78.9

Housing is another SDOH factor and in 2016-2020, cost-burdened households, defined as those paying 30% or more of their income on housing costs, accounted for 35.3% of owners with a mortgage, 20.8% of owners without a mortgage, and 56.9% of renters. Among cost-burdened renters, Ulster County historically exceeds that of NYS and five other counties in the region. The same trend is also observed for poverty; Ulster County had the second highest poverty rate in the region. A closer analysis of poverty by race/ethnicity, however, shows that Ulster County has the highest poverty rates for Hispanic and non-Hispanic Blacks, at 23.2% and 26.1% respectively, compared to the region and NYS overall, which range from 0% in Putnam to 24.2% in Sullivan counties.⁶ Poverty, or not having enough resources to

⁵ US Census. Ibid 9.

⁶ Mid-Hudson CHA 2022-2024. Ibid, 9.

meet basic needs including food, clothing and shelter, exacerbates and magnifies social economic disparities among minority communities. According to the World Bank Organization, *“Poverty is hunger. Poverty is lack of shelter. Poverty is being sick and not being able to see a doctor. Poverty is not having access to school and not knowing how to read. Poverty is not having a job, is fear for the future, living one day at a time.”*⁷

In addition to the US Census data, examination of the ALICE threshold data (Asset Limited, Income Constrained, Employed) – households that earn more than the Federal Poverty Level, but less than the basic cost of living for the county - provides a better understanding of the breadth and scope of challenges families face when it comes to poverty and related factors. Based on the 2018 ALICE, in the Mid-Hudson region, Ulster County has the second highest percentage of households that fall below the ALICE threshold, at 41%, only lower than Sullivan County at 46%.⁸ Moreover, the Social Vulnerability Index (SVI) from the CDC/ATSDR (Centers for Disease Control and Prevention and Agency for Toxic Substances and Disease Registry) for Ulster County was also explored. Social vulnerability refers to a community’s capacity to prepare for and respond to the stress of hazardous events ranging from natural disasters, such as tornadoes or disease outbreaks, to human-caused threats. The factors include economic data as well as data regarding education, family characteristics, housing, language ability, ethnicity, and vehicle access. Possible scores range from 0 (lowest vulnerability) to 1 (highest vulnerability).⁹ In 2020, Ulster County scored **0.6393**, indicating a medium to high level of vulnerability. The combination of the County’s geography and social economic factors, therefore, impacts the overall health of the population.

⁷ New Brunswick, Canada Economic and Social Inclusion Corporation - What is Poverty?
https://www2.gnb.ca/content/gnb/en/departments/esic/overview/content/what_is_poverty.html.

⁸ Mid-Hudson CHA 2022-2024. Ibid, 9.

⁹ CDC/ATSDR Social Vulnerability Index 2020 https://www.atsdr.cdc.gov/placeandhealth/svi/at-a-glance_svi.html.

IV. Health Needs Assessment Process

HealthAlliance Hospital participated in two community health needs assessment workgroups. The first, led by the Ulster County Departments of Health and Mental Health (UCHMH), includes members of the established *Healthy Ulster Council*. Representatives from UCHMH, HealthAlliance Hospital, Ellenville Regional Hospital, Cornell Cooperative Extension, Live Well Kingston, American Lung Association, TFAC (Tobacco Free Action Communities) in Ulster, Dutchess, and Sullivan, and the Institute for Family Health, regularly meet to build on existing strengths, share services with one another, and create an integrated system of chronic disease prevention.¹⁰ The focus for 2022, however, has been on the community health assessment (CHA) and the monthly meetings were spent discussing assessment timeline, survey distribution strategies, data review, Prevention Agenda priority selection, and best-practices intervention presentations to be included in the members' community health improvement plan (CHIP) or community service plan (CSP). While all members reviewed and analyzed secondary data sources, e.g., federal, state, regional and local data, to identify trends and patterns that influence or result in poor physical and behavioral health outcomes for Ulster County residents, primary data collection and analysis activities were conducted by Siena College Research Institute (SCRI) under contract with the seven counties' Departments of Health, including Ulster County.¹¹

SCRI conducted a *Mid-Hudson Regional Community Health Assessment* survey and collected 5,699 responses from the region's adult residents from March – May 2022. The overall sample was weighted by age, gender, reported race/ethnicity, income and county using the 2015-2020 American Community Survey (ACS) 5-year estimates to ensure statistical representativeness. Respondents were contacted in English and Spanish via

¹⁰ Mid-Hudson CHA 2022-2024. Ibid, 9.

¹¹ Ulster County DOH Community Health Assessment/Community Health Improvement Plan Overview (2022) – Internal presentation.

landline telephone, cell phone, an online panel, online recruitment from each county and at various in-person events, and other community partnerships to enhance representation.

HealthAlliance Hospital further facilitated survey distribution efforts to ensure all segments of the county's population were provided a chance to voice their health needs and concerns, especially those underserved and underrepresented. The hospital posted the community survey link on its public-facing webpage and publicized the survey opportunity through its social media platforms, including Instagram and Twitter. HealthAlliance also disseminated the survey to all employees for their participation and input; partnered with Ulster County Chamber of Commerce and utilized the snow-ball method to distribute to all of their members, who in turn encouraged their employees to complete the survey; conducted community outreach at community events, including the popular *Hudson Valley Renegades* baseball games in the Minor League, the *Dutchess/Ulster Heart Walk*, and the *Kingston Women's Bike Fest*; partnered with *People's Place*, a not-for-profit agency in Ulster County, to ask their patrons to participate in the survey as the agency serves a traditionally underserved and low-income population; and promoted the survey link via a QR code (e.g. printed and publicly posted large posters with the QR code) for ease of participation. Over a two-month period, a total of 647 Ulster County adult residents completed the community survey. The county-wide sample of 647 was also weighted by age, gender, reported race/ethnicity, and income to ensure statistical representativeness.¹²

In addition to participating in the Mid-Hudson Regional Community Health survey, a *Community Partner Survey* was also conducted by Siena College in the spring and early summer of 2022. The survey collected data from health and human services providers who serve underrepresented populations, including low-income, veterans, persons experiencing homelessness, the aging population, the LGBTQIA+ community, and people with a mental

¹² Adapted UCHMH (2022) Hudson Valley Health 2022 Survey Methodology. Unpublished internal document.

health diagnosis or those with a substance use disorder (SUD). HealthAlliance Hospital participated as a respondent among the final sample of 40.¹³

2022 GNYHA CHNA SURVEY COLLABORATIVE

HealthAlliance Hospital also joined the Greater New York Hospital Association's (GNYHA) 2022 Community Health Needs Assessment (CHNA) Collaborative, which supported participating hospital members' primary data collection efforts to meet the requirements of the NYS CSP by gathering information on community health needs and engaging with community members. A diverse group of GNYHA member hospitals across the state participated in the Collaborative, including community and safety net hospitals, small health systems, and large academic medical centers. GNYHA developed the CHNA survey with members' input in multiple stages through a collaborative and iterative process, made the survey available in 11 languages on paper and online, collected the data and analyzed the results, and created custom reports for each participating hospital. The survey used validated questions from existing surveys such as the CDC, BRFSS (Behavioral Risk Factor Surveillance System), and the NYC Department of Health and Mental Hygiene's Community Health Survey (NYC CHS). Once the CHNA survey was designed, all recruitment activities were tasked among participating hospital members. HealthAlliance Hospital, along with other participating collaborative members, engaged and enlisted adult participants using similar strategies as the *Mid-Hudson Regional Community Health* survey mentioned above. The Collaborative efforts resulted in a final sample of more than 17,600 responses; 331 of which were from Ulster County.¹⁴

Other Data Sources

The HealthAlliance Hospital CHNA/CSP is the distillation of all significant health data, which were diligently reviewed and analyzed by the hospital and its partners, notably the

¹³ Mid-Hudson CHA 2022-2024. Ibid, 9.

¹⁴ Adapted GNYHA Community Health Needs Assessment (2022) – Unpublished survey methodology.

seven Departments of Health in the Mid-Hudson Region, which are members of the Hudson Valley Public Health Collaborative (HVPHC), and the Healthy Ulster Coalition. While not all data are presented in this CHNA/CSP, the pertinent conclusions are drawn from the extraction of the latest key findings found in the following trusted data sources:¹⁵

- American Community Survey (ACS)
- American Medical Association Online Data Collection Center
- Behavioral Risk Factor Surveillance System (BRFSS)
- Centers for Medicare and Medicaid Services National Provider Identifier Standard
- Community Partner Focus Groups
- Comprehensive Housing Affordability Strategy Data (CHAS)
- County Health Rankings & Roadmaps
- Department of Health and Human Services (HRSA) Data Warehouse
- Department of Health and Human Services Area Health Resource Files
- Feeding America
- Healthy People 2030
- Mid-Hudson Region Community Health Survey
- National Environmental Public Health Tracking Network
- New York City Regional Poison Control Center
- New York Citywide Immunization Registry
- NYS Board of Elections
- NYS Cancer Registry
- NYS Childhood Lead Poisoning Prevention Program (CLPPP)
- NYS Communicable Disease Annual Reports
- NYS Communicable Disease Electronic Surveillance System (CDESS)
- NYS Department of Health Bureau of Occupational Health & Injury Prevention

¹⁵ Mid-Hudson CHA 2022-2024. Ibid, 9.

- NYS Department of Health Bureau of Oral Health
- NYS Department of Health Community Health Indicator Reports (CHIRS)
- NYS Department of Health County Health Indicators by Race/Ethnicity (CHIRE)
- NYS Department of Health Electronic Clinical Laboratory Reporting System (ECLRS)
- NYS Department of Health Office of Sexual Health and Epidemiology
- NYS Department of Health Rabies Laboratory
- NYS Department of Health Wadsworth Center
- NYS Department of Motor Vehicles
- NYS Division of Criminal Justice
- NYS Education Department
- NYS HIV Surveillance System
- NYS Immunization Information System
- NYS Medicaid and Child Health Plus
- NYS Office of Addiction Services and Supports
- NYS Opioid Dashboard
- NYS Prescription Monitoring Program (PMP) Registry
- NYS Student Weight Status Category Reporting System:
- NY Statewide Planning and Research Cooperative System (SPARCS)
- Safe Drinking Water Information System
- Small Area Health Insurance Estimates (SAHIE)
- United for ALICE
- Upstate New York Poison Control Center
- US Census Bureau
- US Department of Agriculture (USDA) Food Environment Atlas
- Vital Statistics of NYS

At the conclusion of the CHNA process, the key findings below emerged for Ulster County. It is noteworthy that with the exception of the fifth finding, violence, which was only included in the GNYHA community survey, both community-based surveys concurred on all Ulster County residents' key health needs. In addition, the provider-based survey conducted by Siena College also agreed on the identified SDOH needs for the County -- all of which confirm their significance. Key findings include:

1. An exceptionally high suicide mortality rate, including among teens & older adults
2. A high percentage of children and adults who are overweight or obese
3. An unacceptably high rate of maternal mortality
4. High opioid related prescription, fatality, and emergency department visit rates that are well above the Mid-Hudson Region and NYS averages
5. A high concern about violence, including gun violence, among residents.¹⁶

Other areas of concern:

- Diabetes mortality and hospitalization rates are high, even though the incidence rate is among the lowest in the Mid-Hudson Region.
- The percentage of adults, aged 45+, who have had a test for high blood sugar or diabetes is lower than those of the Mid-Hudson Region and NYS (excluding NYC).
- In the past year, 23% of women in Ulster County, aged 18-44, have not had a preventative medical screening.
- The percentage of adults with an annual household income less than \$25,000 with perceived food security was only 54.7, slightly lower than the Mid-Hudson Region and NYS averages, yet still unacceptably high.
- High housing costs are one of the top issues affecting the people of Ulster County.

¹⁶ GNYHA Community Health Needs Assessment (2022) – Unpublished key findings for Ulster County.

- Access to mental health providers is a major challenge, a finding which corresponds to regional, state, and national trends; followed by access to affordable and reliable public transportation.¹⁷

HealthAlliance Hospital cross-walked the results of the CHNA against the Prevention Agenda priority areas selected by the Healthy Ulster Council, proposed interventions by fellow Council members, and the hospital's areas of expertise, priorities, and available resources. Ultimately, HealthAlliance Hospital chose the following **NYS Prevention Agenda Priority Areas**:

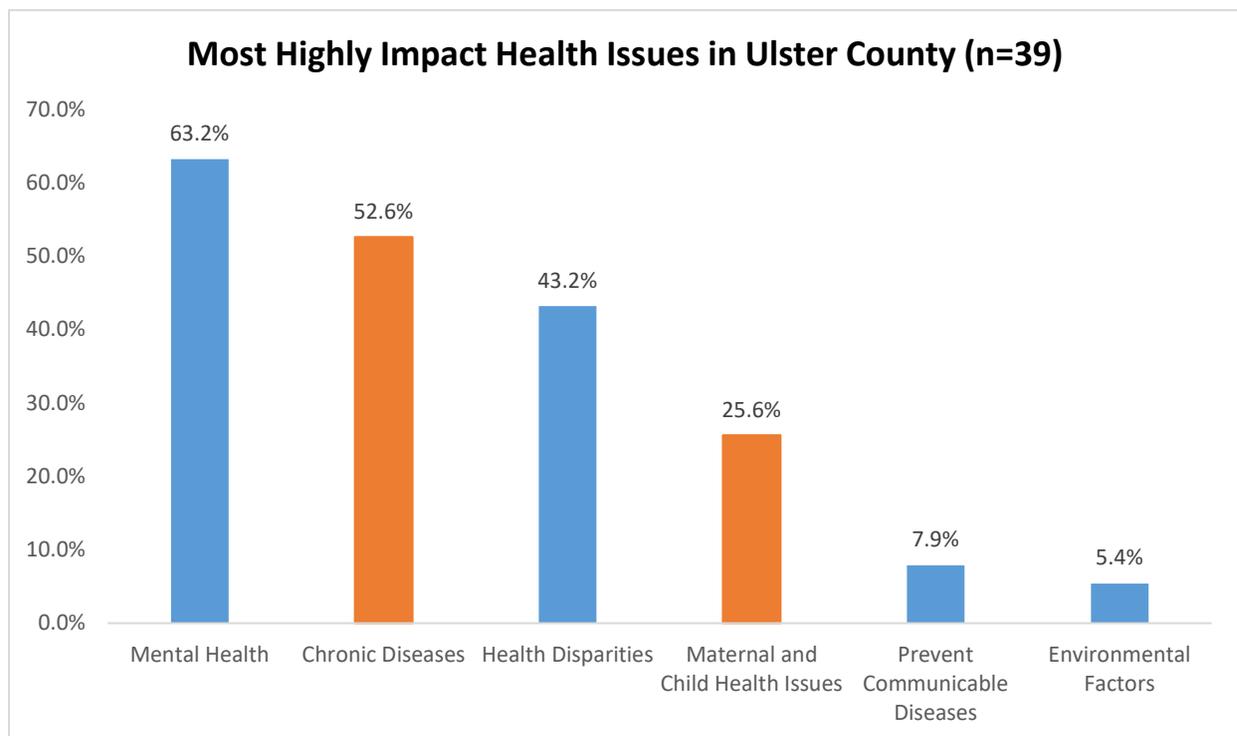
- **Priority I: Prevent Chronic Disease**
 - *Focus Area 4: Chronic Disease Preventive Care and Management*
- **Priority II: Promote Healthy Women, Infants and Children**
 - *Focus Area 1: Maternal and Women's Health.*

¹⁷ Mid-Hudson CHA 2022-2024. Ibid, 9.

V. Priority Health Needs

Key findings from the community health needs assessment indicate that the prevention of diabetes and prediabetes, and the improvement of maternal health, including a reduction of maternal mortality rate, are areas of high needs in Ulster County. Based on the collected *Community Partner* survey providers' responses (n=39), chronic diseases, including diabetes, and maternal and child health ranked 2nd and 4th respectively for high impact health issues in Ulster County (see *Figure 1*).¹⁸ After a year-long health needs assessment process, HealthAlliance Hospital pledges to focus on these needs as the hospital's public health priorities for 2022-2024.

Figure 1: Most Highly Impact Health Issues in Ulster, Community Partner Survey (2022)



¹⁸ Ulster County DOH CHA/CHIP. Ibid, 13.

Priority I: Prevent and Manage Diabetes and Pre-Diabetes

Type 2 diabetes mellitus, a chronic health condition in which blood sugar (glucose) levels are above normal, is contributing to a substantial burden of disease.¹⁹ Worldwide prevalence of type 2 diabetes is expected to increase from 382 million individuals in 2013 to 417 million individuals by 2035.²⁰ According to the CDC, more than 37 million Americans – about 1 in 10 – have diabetes, and 90-95% of them have type 2 diabetes. Yet, 23% of adults with diabetes are not aware of having the condition. While type 2 diabetes more commonly occurs in people over age 45, increasingly children, teens, and young adults are also at risk.²¹ Common causes include genetic and lifestyle factors; individuals are likely to develop type 2 diabetes if they are obese, have high blood pressure, and live a sedentary lifestyle.²² Those with diabetes are also at a higher risk of developing kidney, eye, liver and cardiovascular diseases, stroke, depression, and nerve damage,²³ causing devastating lifelong consequences like blindness, amputation, cancer, kidney and liver failures, or even death.²⁴

According to the County Health Rankings & Roadmaps, a program of the University of Wisconsin Population Health Institute, in 2022 Ulster County ranks 25 out of 62 counties in NYS for overall health outcomes. This ranking represents how healthy a county is in terms of length and quality of life; the healthiest county is ranked number one. Within the region, Ulster County is the second lowest ranking county. In the prevention of diabetes and prediabetes, notable areas that could be improved include premature deaths, especially among Blacks, adult obesity, percentage of low-income individuals without access to healthy

¹⁹ Jusung Lee, Timothy Callaghan, Marcia Ory, Hongwei Zhao, Jane N. Bolin; The Impact of Medicaid Expansion on Diabetes Management. *Diabetes Care* 1 May 2020; 43 (5): 1094–1101. <https://doi.org/10.2337/dc19-1173>.

²⁰ Polonsky WH, Henry RR. Poor medication adherence in type 2 diabetes: recognizing the scope of the problem and its key contributors. *Patient Prefer Adherence*. 2016 Jul 22; 10:1299-307. doi: 10.2147/PPA.S106821. PMID: 27524885; PMCID: PMC4966497.

²¹ CDC – Type 2 Diabetes (2022) <https://www.cdc.gov/diabetes/basics/type2.html>.

²² National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) – 2022 - <https://www.niddk.nih.gov/health-information/diabetes/overview/symptoms-causes#:~:text=Overweight%2C%20obesity%2C%20and%20physical%20inactivity,fat%20also%20makes%20a%20difference.>

²³ NIDDK. Ibid, 21.

²⁴ World Health Organization Diabetes Fact Sheet (2022) - [https://www.who.int/news-room/fact-sheets/detail/diabetes#:~:text=Over%20time%2C%20diabetes%20can%20damage,attacks%20and%20strokes%20\(2\).](https://www.who.int/news-room/fact-sheets/detail/diabetes#:~:text=Over%20time%2C%20diabetes%20can%20damage,attacks%20and%20strokes%20(2).)

foods, access to exercise opportunities, excessive drinking, and food environment index (see *Table 2*).²⁵ These health factors, collectively, concur with findings from other data sources and are indicative of Ulster County’s challenges to reducing the number of adults with diabetes.

Table 2 – 2022 County Health Ranking & Type 2 Diabetes Health Factors²⁶

	NYS	Ulster County
2022 County Health Ranking	N/A	25 (out of 62)
Health Factors Related to Type 2 Diabetes		
Premature Death (under age 75; per 100,000)*	6,000	6,500
Adult Obesity	27%	31%
Adult Smoking	13%	17%
Excessive Drinking	19%	23%
Physical Inactivity	27%	27%
Access to Exercise Opportunities	88%	71%
Limited Access to Healthy Foods [¥]	2%	6%
Food Environment Index [€]	9.0	8.1

Note: * Rate for Blacks in Ulster County is significantly higher, at 9,400
 ¥ Percentage of population who are low-income and do not live close to a grocery store.
 € Index of factors that contribute to a healthy food environment, which includes access to healthy foods and food insecurity from 0 (worst) to 10 (best).

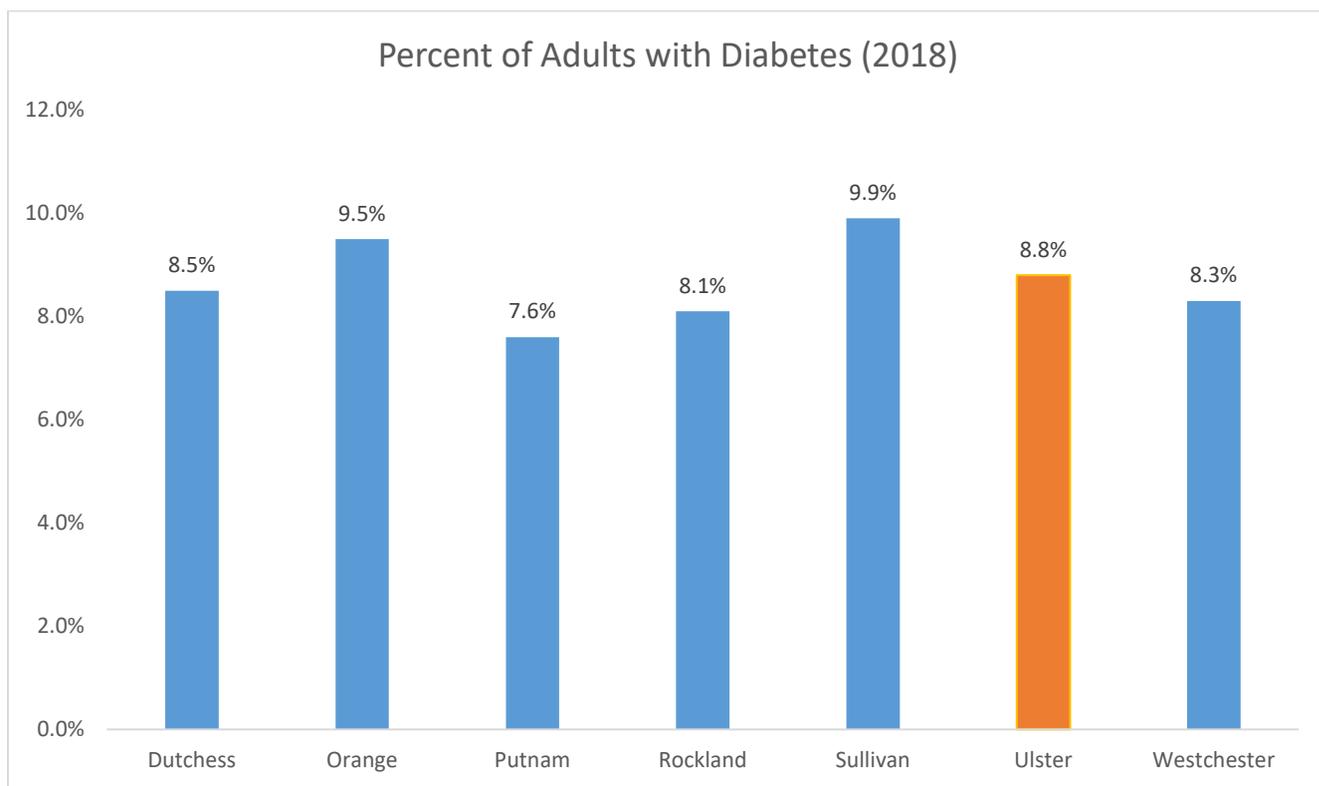
In NYS, an estimated 1.7 million people, or 11% of the adult population, have been diagnosed with diabetes. County-level prevalence of diagnosed diabetes from the 2021 NYSDOH report for the Mid-Hudson region shows Ulster County has the third highest prevalence rate, below Orange and Sullivan counties (see *Figure 2*).²⁷

Type 2 diabetes, a serious health condition with increased morbidity and mortality risks, can be managed by eating healthy meals, limiting calories and alcohol intake, being physically active, regularly monitoring blood glucose levels, quitting smoking, and taking all medications as prescribed. Nevertheless, many affected individuals find it overwhelming and struggle to adhere to their treatment plan. For starters, many individuals are not aware that

²⁵ County Health Rankings & Roadmaps - University of Wisconsin Population Health Institute <https://www.countyhealthrankings.org/explore-health-rankings/new-york/ulster?year=2022>.
²⁶ County Health Rankings & Roadmaps. Ibid, 22.
²⁷ NYS Information for Action #2021 – https://www.health.ny.gov/statistics/prevention/injury_prevention/information_for_action/docs/2021-01_ifa_report.pdf.

they have diabetes. Even among those diagnosed, it is not uncommon not to experience ill health during the early stages of the disease; as a result, there is no motivation for individuals to make drastic changes to their diet, level of physical activity, or to regularly monitor their blood glucose level, often a repetitive and painful routine, or take medications, many of which come with undesirable and at times deleterious side-effects.

Figure 2: Percentage of Adults with Diagnosed Diabetes, By County (2018)²⁸



Additionally, it is recommended that people diagnosed with diabetes have an HbA1c reading every 3 to 6 months, and more frequently for those planning to start a family, having problems controlling their blood sugar, or who have had a recent change to their treatment plan. HbA1c, also known as glycated hemoglobin, is produced when glucose in the blood sticks to hemoglobin, a protein within red blood cells required for the transportation of oxygen. As a rule, the more glucose in the blood, the more HbA1c is produced (see *Figure 3*).

²⁸ NYS Information for Action #2021. Ibid, 22.

Figure 3: HbA1C as an Indicator for Diabetes Control²⁹

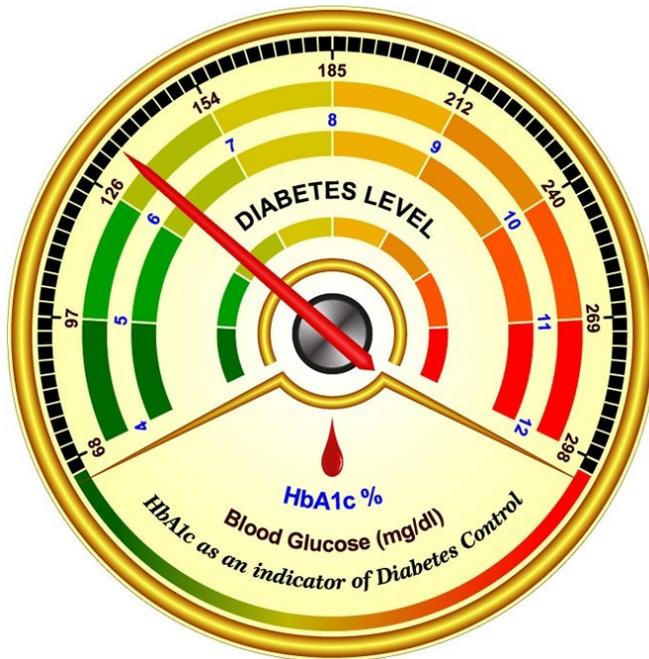


Image Credit: Fouad A. Saad / Shutterstock

It is important for diabetic patients to carefully monitor and, if necessary, reduce levels of HbA1c as persistent high-blood glucose level is detrimental to overall health. Several large-scale studies have demonstrated that lowering HbA1c by even 1% can significantly reduce the risk of developing neuropathy (damage to nerve endings), retinopathy, diabetic nephropathy (kidney disease), heart failure and vascular disease.³⁰ HealthAlliance Hospital's Diabetes Education Center tracked 61 patients over a 20-month period from 2021-2022; on average from the first to sixth visit, HbA1C levels fell from 8.17% to 6.78%, a decrease of 1.39%, reflecting roughly a 20% improvement, which speaks to the program's effectiveness.

Diabetes is a complex and challenging disease that requires daily self-management. Studies of best-practices show that with the right education and ongoing support, patients acquire the knowledge, skills and assistance to manage their diabetes and prediabetes and build their confidence in taking on these responsibilities longer-term. Many patients can

²⁹ Medical Life Sciences News – What Is HbA1c? <https://www.news-medical.net/health/What-is-HbA1c.aspx>.

³⁰ Medical Life Sciences News. Ibid, 24.

achieve their diabetes care goals, prevent further disease progression and damage, or even reverse the condition's trajectory. Leveraging HealthAlliance Hospital's Diabetes Education Center's current success, with additional institutional support, the Center will be in a position to offer educational opportunities to more patients and design individual management plans tailored to each patient's unique life situation, resulting in a more patient-centric care model that addresses a critical health need for the residents for Ulster County.

Addressing Health Disparities for Minority and Low-Income Diabetic Patients

It is well-documented that diabetes disproportionately affects racial/ethnic minority groups, specifically Hispanics and non-Hispanic Blacks, and those with low-income. Even with health insurance coverage, the costs of managing the disease, including costs for insulin, insulin syringes, insulin pens, insulin pumps, blood sugar meters, blood lancets, diabetic test strips, ketone test strips, glucose tablets, and glucagon, are exorbitant relative to household income, creating another immense barrier for patients to successfully manage the disease. As reported, minority residents in Ulster County already face a high rate of poverty and some are genetically predisposed to developing this disease, which exacerbates their vulnerability. The program, therefore, will provide additional support to Medicaid and minority patients by linking them to additional resources, such as ways to obtain free or reduced-cost supplies, and to other community resources to address their SDOH needs.

Priority II: Improve Maternal Health Outcomes by Decrease Low Risk C-section Rate

C-section (Cesarean delivery) is a surgical procedure used to deliver a baby. Planning for a C-section might be necessary if there are certain complications in a high-risk pregnancy, or when there is an urgent safety concern for mother or baby and immediate delivery is the only option. While this procedure has saved countless lives, like any major surgery, it could carry extra risks and complications for patients. It is therefore imperative

that all preventative measures are taken prior to labor to ensure that pregnancies remain low-risk to prevent avoidable C-sections. Common criteria for low-risk pregnancies include:

- Being a first-time mother;
- Carrying a full-term pregnancy;
- Carrying a single baby; and
- The baby has a vertex presentation (the head of the fetus most commonly faces to the right and slightly to the rear).

Data have shown, however, that despite expectant mothers having met these criteria, some still had C-sections, in many cases due to a conversion from a low-risk to a high-risk pregnancy. Contributing factors for the conversion include maternal physical and behavioral health causes, as well as SDOH issues. Some of these issues are: none or lack of prenatal care, maternal obesity, maternal gestational diabetes, pre-eclampsia, pre-term labor and having a history of pre-term delivery, having a substance use disorder, and having pre-existing medical conditions that can cause maternal mortality. A pregnancy remains low-risk when it does not have any active complications or any maternal or fetal factors that would place the pregnancy at an increased risk for complications.

In the US, according to a 2021 National Center for Health Statistics report, births by C-section have steadily increased over the last two decades, to about 32%,³¹ while NYS ranks 12th in the nation, at 34.4%, in 2017.³² Data for Ulster County show similar trends and rates to the national and state data. Moreover, Black and Hispanic women reported higher rates of C-sections compared to White women, indicating maternal health disparities among minority women living in Ulster County.

³¹ The Washington Post – The US Rate of C-section births continue to climb (2022) - <https://www.washingtonpost.com/health/2022/07/26/us-rate-c-section-births-continues-climb/>.

³² NYS Health Data - Hospital Maternity Percentage of Cesarean Births and Vaginal Births by Hospital (2022) - <https://health.data.ny.gov/Health/Hospital-Maternity-Percentage-of-Cesarean-Births-a/kwry-k6ej>.

According to NYS latest Maternal and Child Health (MCH) indicator dashboard, data from 2018 show that Ulster County has not met the established MCH 2020 goals and performed poorly compared to NYS in three key areas: 1) low percentage of births with early prenatal care; 2) high maternal mortality rate per 100,000 live births; and 3) high rate (almost threefold) of newborns with neonatal withdrawal symptoms and/or affected by maternal use of drugs or addiction per 1,000 newborn discharges (see *Table 3*).³³

Table 3: NYS Maternal and Child Health Dashboard – Ulster County (2018)³⁴

	% of Births with Early Prenatal Care	Maternal Mortality Rate (per 100,000 live births)	Newborns with neonatal withdrawal symptoms and/or affected by maternal use of drugs or addiction (per 1,000 newborn discharges)
Ulster County	74.5%	22.2	23.0
NYS	76.0%	18.1	9.0
MCH 2020	79.2%	16.1	9.1

In April 2022, NYSDOH released the first report by the NYSDOH Maternal Mortality Review Board (MMRB) and Maternal Mortality Morbidity Advisory Council (MMMMAC). Key findings from the report include:

- ***Black women continue to die from pregnancy-related causes at higher rates than their peers:*** Black, non-Hispanic women were five times more likely to die of pregnancy-related causes than White, non-Hispanic women.
- ***Many of these deaths are preventable:*** When analyzing each case, the report concluded that 78% of these deaths were preventable and that 100% of the deaths caused by hemorrhage, mental health conditions, and cardiomyopathy were preventable.

³³ NYS Maternal and Child Health Dashboard – Ulster County (2022) - https://webbi1.health.ny.gov/SASStoredProcess/guest? program=%2FEBI%2FPHIG%2Fapps%2Fmch_dashboard%2Fmch_dashboard&p=ch&cos=51.

³⁴ NYS Maternal and Child Health Dashboard. Ibid, 27.

- Discrimination contributes to these deaths: in 46% of all pregnancy-related deaths, discrimination was identified as a probable or definite circumstance surrounding the death.
- Deaths most often occurred within six weeks of pregnancy: Over half (51.2%) of pregnancy-related deaths occurred within six weeks of pregnancy – meaning women frequently died when pregnant or shortly after delivery/birth.
- ***Cesarean delivery has a higher correlation with pregnancy-related death than vaginal delivery:*** women who had a cesarean delivery were 1.7 times more likely to die of pregnancy-related causes than women who delivered vaginally.³⁵

At the time this report’s data were collected in 2018, HealthAlliance Hospital had already undertaken vital initiatives to mitigate these MCH health disparities in Ulster County. The hospital started a multi-strategic approach to reduce low-risk C-section rate in Ulster County. In addition, HealthAlliance Hospital’s Department of Obstetrics and Gynecology – ***The Family Birth Place*** – has partnered with Westchester Medical Center Genetic Consultation Services to provide comprehensive genetic consultation and counseling services via telemedicine, and utilized the HealthAlliance Transfusion Center to provide Intravenous Iron and Hydration Care for obstetric and gynecologic patients. With the success of the intervention, the rate for first birth, low-risk C-sections at HealthAlliance Hospital decreased from 40.7% to 29.4% from 2018-2021. HealthAlliance Hospital, with enhanced institutional support for the program, plans to continue with this evidence-based intervention (see *Section VI - Implementation Strategy*, page 34).

Likewise, to reduce the rate of newborns with neonatal withdrawal symptoms, HealthAlliance Hospital has collaborated with Margaretville Hospital in Delaware County, another WMCHHealth network hospital, since 2020, to offer and continually expand services

³⁵ NYSDOH Report on Maternal Mortality (2022) - https://www.health.ny.gov/press/releases/2022/2022-04-13_maternal_mortality_report.htm.

focused on SUD in Delaware and Ulster counties and surrounding areas through the Neonatal Abstinence Syndrome (NAS) Program. The NAS program aims at assisting pregnant individuals with a SUD. The program employs a Wellness Coordinator who is stationed at both hospitals and the Bridgeback Methadone Clinic in Kingston, Ulster County, during select hours. The Wellness Coordinator maintains an inventory of baby clothes, food, blankets, washcloths, toys, bottles, diapers, baby formula, baby wipes, and more, to be provided to parents with a SUD. Additionally, there are dedicated hospital staff who provide parenting classes, women's support meetings, supplies for babies and parents, recovery support, as well as certified postpartum doula services. These staff members can be sought out for recovery support, assistance prior to and following the birth of a baby, and act as advocates for the mothers through their prenatal to postnatal journey. Based on internal data collected thus far for 2022, as of September, the program has distributed 251 baby items, served 44 NAS mothers for prenatal and postpartum care, recovery support services, and referrals to WMCHealth network's community-based partners for services such as recovery housing, community support, and transportation. Due to the program's success and the remained high SDOH needs among these at-risk mothers and infants, HealthAlliance Hospital intends to continue with the NAS program for the foreseeable future.

Other Health Needs Not Addressed in the HealthAlliance Hospital CHNA/CSP

The NYS Prevention Agenda outlines three other priority areas that were not selected as public health priorities for the HealthAlliance Hospital 2022-2024 CHNA/CSP: *Promote a Healthy and Safe Environment, Promote Well-Being and Prevent Mental and Substance Use Disorders, and Prevent Communicable Diseases*, as a result of the public input and internal ranking system process. Beyond the two selected public health priorities, HealthAlliance Hospital acknowledges the wide range of significant health needs that were identified but cannot be addressed by the hospital due to the level of priority and the lack of expertise and resources. Historically, the Ulster County DOH has strong community partnerships with

hundreds of organizations serving its residents, including HealthAlliance and Ellenville Regional hospitals, several FQHCs (federally qualified health centers), private medical providers, local two-year and four-year colleges, a medical school, community-based organizations, and regional organizations, serving a broad variety of community needs. Ulster County Departments of Health and Mental Health have established multiple coalitions, including the Healthy Ulster Council, Integrated Ulster, Ulster County Human Services Coalition, Ulster County Suicide Prevention Coalition, Ulster County Opioid Prevention Strategic Action Leadership Team, Ulster County Legislature Workforce Housing Committee, and Ulster County Public Health Preparedness Task Force. These coalitions' partners and key service providers are mobilized to address the health areas of focus and emerging issues identified through the 2022-2024 CHNA.³⁶

Presently there are various institutions, organizations, and programs in Ulster County that are actively working to advance the NYS Prevention Agenda priorities. Below are six selected proposed interventions for the 2022-2024 community health improvement plan (CHIP), which cover a wide range of initiatives, from service provision to training and education and policy reform efforts, addressing a myriad of urgent health issues in Ulster County, including substance use, smoking cessation, nutrition, physical activities, needed health-promoting built environment, and mental health. Examples include:

1) The Center for a Tobacco-Free Hudson Valley/Health Systems for a Tobacco-Free New York proposes a *Tobacco Dependence Treatment* with FQHCs and mental health and substance use providers. Through funding from the Bureau of Tobacco at NYSDOH, the team serves all seven counties in the Mid-Hudson region, targeting Medicaid members.

2) Tobacco Free Action Communities (TFAC) proposes to strengthen Ulster County Tobacco Marketing Law -- Local Law #6 of 2015 -- to ban the sale of all flavored tobacco

³⁶ Mid-Hudson CHA 2022-2024. Ibid, 9.

products, including menthol in Ulster County. The current law establishes a county-required license for the sale of tobacco products, in addition to the NYS Retail Sales Certificate. However, existing retailers were "grandfathered" in, so if they sold their business to a new owner, the new owner would be able to apply for the license, potentially allowing the current license, even those located within K-12 school zones, to exist in perpetuity. The proposed plan calls for an amendment of the law to discontinue the license "grandfathered" practice, and to add flavored tobacco products, including menthol, to the prohibited list.

3) The City of Kingston/Live Well Kingston and Cornell Cooperative Extension propose to create the *Healthy Schools and Communities* program, which supports policy, system, and environmental changes across multiple domains, including nutrition in the community and worksites, active transportation, and nutrition and physical activity in Kingston City School Districts and early care centers. The program uses a 5-year, \$1.5M grant from NYSDOH, Division of Chronic Disease Prevention, to address adult and childhood obesity. To achieve these goals, the project focuses on 5 strategic areas: Early Care & Education, Food Service Guidelines, School Nutrition & Physical Activity, Connecting Routes to Destinations, and Communications & Sustainability. Community partners for this program include the Family of Woodstock, the YMCA of Kingston and Ulster County, Midtown Neighborhood Center, People's Place, school officials, staff, and parents. The program offers a wide-range of obesity prevention activities; from gardening and healthy food cooking demonstrations, to improved healthy vending machine policies, supporting the walk-and-bike to school, launching a yoga club, providing Lunch-and-Learns for staff, supporting the *Pedestrian and Bicycle Master Plan*, place-making landscape plans in the community, building a bicycle shelter at Kingston Point Beach, facilitating a bike rack installation program, and supporting the transportation education campaign: *Be A Road Hero*. The program will also have regular communication with the community, media, and legislature to support behavior change, policy change, and convey critical information.

4) The Institute for Family Health and Ellenville Regional Hospital propose to increase care navigation services by hiring a patient service coordinator for care management to promote and increase cancer screenings at the Institute for Family Health, an FQHC, by working with health care providers and clinics to put various systems in place for patient and provider cancer-screening reminders. The program will identify providers, including those out-of-network, to participate in the initiative for referral, provide patient education, and assist patients with transportation to care sites.

5) Ulster County Department of Mental Health (UCMH) proposes a Substance Use OD (overdose) Prevention through harm reduction street outreach. Based on local data, the program will address the top five identified risk factors including: prior overdose, homelessness, prior incarceration, recent (within 30 days) discharge from hospital/jail, and co-occurring events. The program will utilize two evidence-based best practices and connect affected individuals to OEND (Opioid Overdose Education & Naloxone Distribution) and MOUD (Medications for Opioid Use Disorder). Naloxone is an opioid antagonist that rapidly reverses an opioid overdose. The program hopes to reduce opioid fatalities in Ulster County from 18-58% over a one-year period.

6) UCMH also proposes a *School Support Teams* program to work with county-wide middle school students. Referral to the program will be based on the student's school refusal, behavioral problems, and family complexities. Aiming for a wraparound holistic approach, the program will work with youths and their families, both in the home and school environments, to reduce risk factors while building protective factors. The program will support 100 youths across the county with ten students per school at any given time.³⁷

³⁷ Adapted UCHMH September and October 2022 CHA Meeting Notes. Unpublished internal document.

In addition, Ulster County continues to:

1) Implement its comprehensive and integrated strategic action plan to address the opioid epidemic. To date, a substantial expansion of harm reduction services including access to MAT (medication-assisted treatment) and connections to care, and intermediate and long-term support services, has already reduced opioid overdose fatalities by 50% in 2022 versus the same time in 2021.

2) Make significant improvements in the built environment through a combination of federal, state, and local funds. These include ongoing development of a world-class rail trail system throughout the county, pedestrian and bike friendly Complete Streets initiatives, safe routes to schools, and others. All are designed to encourage physical activity, improve access to fresh and healthier foods, and increase social engagement to help prevent chronic diseases. This will also continue to reduce Ulster County's carbon footprint with a positive impact on reducing air pollution.

3) Strengthen the availability of and access to mental health services with the establishment of a walk-in mental health clinic, and a soon-to-be constructed crisis stabilization center.

4) Develop an innovative *Community Smart Housing Initiative* designed to help and connect local municipalities as they develop and implement housing action plans. The initiative will support or provide zoning amendments, financial incentives, innovative regulations, and other state-of-the-art tools to increase the number of affordable housing units for low and middle-income residents.³⁸

³⁸ Mid-Hudson CHA 2022-2024. Ibid, 9.

VI. Implementation Strategy

HealthAlliance Hospital plans to address the two selected Prevention Agenda priorities as follows:

PRIORITY 1: PREVENT CHRONIC DISEASES

Focus Area 4: Preventive care and management

- Goal 4.3: Promote evidence-based care to prevent and manage diabetes and prediabetes
 - Objective 4.3.1: Increase the proportion of people with diabetes who get formal diabetes education as per *Healthy People 2030: D-06* by **10% by December 2024** (baseline to be set in 2022)
 - Intervention 1: Diabetes Management - Intensive Lifestyle Interventions for patients with type 2 diabetes to improve glycemic control and reduce risk factors for cardiovascular disease
[\(<https://www.thecommunityguide.org/findings/diabetes-intensive-lifestyle-interventions-patients-type-2-diabetes>\)](https://www.thecommunityguide.org/findings/diabetes-intensive-lifestyle-interventions-patients-type-2-diabetes).

Family of Measures:

- ❖ Number of participants referred to the ADA (American Diabetes Association) education program, with the incorporation of the ADCES (Association of Diabetes Care & Education Specialist) seven self-care behaviors: Healthy Coping, Healthy Eating, Being Active, Taking Medication, Monitoring, Reducing Risk, and Problem Solving
- ❖ Number of participants who participate in the ADA education program
- ❖ Percentage of participants who complete the ADA education program

- Objective 4.3.2: Decrease the percentage of adult members with diabetes whose most recent HbA1c level indicated poor control (>9%) by **10% by December 2024** (baseline to be set in 2022)
 - Intervention 2: Diabetes care and education specialists (DCES) will serve approximately 220 participants annually by December 2024 and develop individualized management plans that fit their lifestyles, beliefs and cultures. The DCES will ensure participants understand how to use various diabetic prevention devices like glucometers, insulin pens, pumps and continuous glucose monitoring devices; and use the information from these devices and participants' lifestyles to identify patterns and opportunities for better diabetic management. Furthermore, the specialists will help participants to develop coping skills to address the daily challenges of the disease, reduce the risks for complications, decrease costs by reducing or eliminating the need for medications and emergency room visits, and help find and access cost-savings programs.

Family of Measures:

- ❖ Participants' weights/BMI (body-mass index)
- ❖ Participants' HbA1c level
- ❖ Number of visits to the Center
- ❖ Number of dilated eye exams participants received
- ❖ Number of lipid profile assessments per participant
- ❖ Number of medical nutrition therapy sessions participants received for diabetes and chronic kidney disease.

For both Interventions, HealthAlliance Hospital, through its outpatient Diabetes Education Center, the only ADA-recognized education center west of Dutchess and north of Orange counties until Albany County, will support the Diabetes Education Center's staff by

providing the needed operational resources, increasing community outreach and engagement to raise awareness about the program through the hospital's Marketing department, and enhancing internal referral processes from inpatient and outpatient services to increase the number of participants who have poorly controlled diabetes or prediabetes conditions. The hospital will also identify a Physician Champion to support these objectives, including informing and encouraging hospitalists to engage with their acute care patients and provide information about the Diabetes Education Center as a resource. The program will also address disparities among Medicaid patients by providing additional support to address some of their SDOH needs. The hospital will also partner with Ulster County Department of Health to help promote the diabetes programs through their social media accounts.

Priority 2: Promote Healthy Women, Infants, and Children

Focus Area 1: Maternal & Women's Health

- Goal 1.2: Reduce maternal mortality and morbidity
 - Objective 1.2.1: Decrease low-risk C-section rate to less than 25% from the current rate of 30%.
 - Intervention: Employ a multi-strategic plan aimed to decrease the low risk C-section rate, and overall maternal mortality, in Ulster County.

HealthAlliance Hospital will carry out the specific strategies as follows:

- Enroll Obstetrics (OB) staff: nursing staff, residents, Family Medicine Attending Physicians, OB Attending Physicians, and Midwives will be trained in an interactive online training platform, **Relias** performance modules, which promote vaginal birth and fetal heart rate monitoring;

- Offer expectant mothers prenatal obstetrics consultations, including anesthesia consultation to evaluate high-risk stratified patients and determine candidacy for delivery at HealthAlliance, in addition to patient education opportunities to raise awareness about how to prepare for a healthy pregnancy and to promote natural, vaginal childbirth;
- Necessitate the usage of the revised C-section checklists, such as the *Labor Induction* and *C-Section Scheduling* forms, as part of a standardized process and workflow among providers to enable prenatal record and ultrasonography review; and
- Implement Peer-to-Peer Discussions prior to any unscheduled, non-urgent C-sections to ensure evidence-based care practice guidelines, in accordance with the American College of Obstetricians and Gynecologists (ACOG), are properly followed.

Through collaborations with community partners, HealthAlliance Hospital will increase the number of expectant mothers enrolled into prenatal care. The hospital will also link patients to Peer Support Services, Postpartum Doula Care, and Referrals and/or Scheduling for MAT, Family Pantry, Transportation Links and Housing Referrals through HealthAlliance's widely successful NAS program -- addressing maternal and child health, substance use, and SDOH issues endured by this highly vulnerable population. Furthermore, as Medicaid members represent more than 80% of total childbirths at HealthAlliance, this intervention will also address some of the social economic disparities. HealthAlliance's community partners for this project include the *Maternal & Infant Community Health Collaborative* (MICHC) through the Dutchess County Healthy Families, a program aimed at improving the health and well-being of high need women throughout their reproductive life years and improving birth outcomes, and the *Public Policy and Education Fund of New York* (PPFNY) by

working with a NYS Certified Community Health Care Navigator in Ulster County to enhance community outreach efforts, and to serve as a resource for these expectant mothers.

Family of Measures:

- ❖ Total Deliveries
 - # of Operative Vaginal Births
 - # of Cesarean Births (# of Primary and Repeat)
 - # of First Trimester Prenatal Care
 - # of Late/No Prenatal Care
 - First Birth C-section Rate for Low-Risk Women
 - Pre-term Rate
 - Alcohol Abstinence in Pregnancy Rate
 - Smoking Abstinence in Pregnancy Rate
 - Illicit Drug Use Abstinence in Pregnancy Rate
- ❖ Dominant Indication for C-section Births (e.g. Failure to Progress, Fetus at Risk, Mal-presentation, Refused VBAC (vaginal birth after C-section), and Previous C-section)
- ❖ Risk Factors/Complications of Pregnancy and Delivery (e.g. Diabetes, Hypertension, Prolonged Rupture of Membranes, Maternal Transfusion, and Infertility Treatment)
- ❖ Outcomes of Live Births (e.g., Low Birth Weight, Premature, Serious Congenital Anomalies, Received NICU (neonatal intensive care unit) Care In-house or Transferred Out, and In-Hospital Deaths)

In conclusion, the interventions for these two NYS Prevention Agenda priorities will serve to enhance and grow existing services and will positively impact the community-at-large, including community members, local government agencies, and social service

providers, by increasing their awareness of these health issues and creating opportunities for community-wide coordination of services and care. HealthAlliance Hospital will enhance capabilities of local providers as the hospital operationalizes and shares the evidence-based interventions described in the CHNA/CSP.

HealthAlliance Hospital, as a result of a thorough health needs assessment process, with the support of robust health data indicators and identified SDOH needs, is cognizant of the health care needs and disparities for at-risk individuals with type 2 diabetes and preventable low-risk C-section in Ulster County. The hospital is ready and committed to addressing these issues as evidenced by the strategies outlined in this section and described fully in the accompanied ***Implementation Plan***.

VII. Dissemination Plan

HealthAlliance Hospital will disseminate its 2022-2024 Community Service Plan/Community Health Needs Assessment and Implementation Plan to the general public, professional organizations, government agencies, and stakeholders as follows:

- Publish a press release upon completion;
- Post the documents on HealthAlliance Hospital's website: <https://www.hahv.org/>;
- Publicize the information through HealthAlliance Hospital's social media platforms;
- Broadcast the documents via HealthAlliance Hospital's intranet channel, **TheBeat**, to make them accessible to the entire workforce;
- Circulate the documents to our community partners via email and make available upon request;
- Provide an electronic copy to the Ulster County Departments of Health and Mental Health to be published as an appendix within the county's 2022-2024 Community Health Improvement Plan (CHIP), which is available to all residents of Ulster County. The documents were also shared with Ulster County Prevention Agenda Leadership Team (UCPALT).

VIII. Governing Board Approval

Both the Community Health Needs Assessment/Community Service Plan and the Implementation Plan were approved by HealthAlliance Hospital Board on December 8, 2022.