Geisinger Jersey Shore Hospital
Community Health Needs Assessment

January 1, 2021 – December 31, 2023

Adopted December 2020

Geisinger

Contents

Our Commitment to Our Communities

Founded over a century ago as a single hospital in Danville, Pa., today Geisinger provides superior healthcare services to communities throughout central and northeast Pennsylvania. The nonprofit mission of the professionals at our nine hospital campuses and other locations is not only to meet the immediate healthcare needs of their region's residents, but to anticipate, identify and address future health issues and trends.

Our integrated healthcare system has become a nationally recognized model of care delivery. Together with our communities, we have a shared goal to help people stay well, not just through clinical treatment and positive patient experiences, but also through education and programs that help them prevent or manage disease and live healthier lives.

The community health needs assessment (CHNA) report is exactly what the name describes. Every three years we conduct a formal survey to identify the specific needs of the communities and regions we serve — and then we develop meaningful, measurable responses to those needs in conjunction with our communities.

Geisinger's well-being is closely tied to the health of our communities, and we remain committed to understanding and responding to identified community health needs. We have taken major steps toward constant improvement and more focused responsiveness to community needs at each of our campuses as demonstrated by this report.

We are firmly committed to staying on the forefront of innovation, quality and value; finding the most efficient and effective ways to deliver care; and collaborating with other organizations to best serve the communities where we live, work and play.

A Collaborative Approach to Community Health Improvement

CHNA Collaborating Health Systems

The 2021 Geisinger Community Health Needs Assessment (CHNA) was conducted in partnership with Geisinger, Allied Services Integrated Health System, and Evangelical Community Hospital. The study area included 15 counties across central and northeastern Pennsylvania, which represented the health systems' collective service areas. Collaboration in this way conserves vital community resources while fostering a platform for "collective impact" that aligns community efforts toward a common goal or action. To distinguish unique service areas among hospitals, regional research and reporting was developed.

2021 CHNA Geographic Regions and Primary Service Counties

Region	Primary Service Counties	Hospitals
Central	Columbia County Montour County Northumberland County Schuylkill County Snyder County Union County	Geisinger Bloomsburg Hospital Geisinger Medical Center Geisinger Shamokin Area Community Hospital Geisinger Encompass Health Rehabilitation Hospital Evangelical Community Hospital
North Central	Clinton County Lycoming County	Geisinger Jersey Shore Hospital Geisinger Medical Center Muncy (new)
Northeast Region	Lackawanna County Luzerne County Wayne County Wyoming County	Allied Services Rehab Hospital Geisinger Community Medical Center Geisinger South Wilkes-Barre Geisinger Wyoming Valley Medical Center Heinz Rehab Hospital
Western Region	Centre County Juniata County Mifflin County	Geisinger Lewistown Hospital

Geisinger Systemwide CHNA Approach

The 2021 CHNA focused on the primary service areas of each of Geisinger's nine hospital campuses. Understanding overlapping geographic boundaries, socioeconomics, and related community indicators, Geisinger hospitals were grouped into regions to allow for localized data comparisons.

Systemwide priorities were determined to address common needs across the whole service area, while individual hospital Implementation Plans outlined specific strategies to guide local efforts and collaboration with community partners.

The following pages describe the process, research methods, and findings of the 2021 CHNA.

2021 CHNA Executive Summary

CHNA Leadership

The 2021 CHNA was overseen by a Planning Committee of representatives from each health system, as well as a Regional Advisory Committee of hospital and health system representatives. Community health consultants assisted in all phases of the CHNA, including project management, data collection and analysis, and report writing.

CHNA Planning Committee

Rachel Manotti, Vice President Strategy and Market Advancement, Geisinger
Allison Clark, Community Benefit Coordinator, Geisinger
John Grabusky, Senior Director Community Relations, Geisinger
Barb Norton, Director Corporate & Foundation Relations, Allied Services Integrated Health System
Sheila Packer, Director Community Health and Wellness, Evangelical Community Hospital

CHNA Regional Advisory Committee

David Argust, Vice President, Allied Services Integrated Health System
Jordan Barbour, Operations Director, Geisinger Marworth Treatment Center
Renee Blakiewicz, Administrative Director, Geisinger Community Medical Center
Julie Bordo, Vice Presidents, Geisinger Wyoming Valley Medical Center/Geisinger South Wilkes-Barre
Jim Brogna, Vice President, Allied Services Integrated Health System
Lissa Bryan-Smith, Vice President, Geisinger Bloomsburg Hospital
Sherry Dean, Operations Manager, Geisinger Community Medical Center
Stephanie Derk, Specialist Community Engagement, Geisinger
John Devine, MD, Vice President, Evangelical Community Hospital
Kristin Dobransky, Administrative Fellow, Geisinger Holy Spirit*
Brian Ebersole, Senior Director, Geisinger
Eileen Evert, Senior Director, Geisinger Health Plan
Starr Haines, Communications Specialist, Geisinger
Allison Hess, Vice President, Geisinger Health Plan
Kristy Hine, Associate Vice President, Geisinger Lewistown Hospital
Karen Kearney, Vice President, Allied Services Integrated Health System
Daniel Landesberg, Associate Vice President, Geisinger Wyoming Valley Medical Center/Geisinger South Wilkes-Barre
Jose Lopez, Administrative Fellow, Geisinger Lewistown Hospital
Diana Lupinski, Associate Vice President, Geisinger Jersey Shore Hospital/Geisinger Medical Center Muncy
Lori Moran, Director, Geisinger
Michael Morgan, Administrative Director, Geisinger Medical Center/Geisinger Shamokin Area Community Hospital
Paulette Nish, Vice President, Geisinger Jersey Shore Hospital/Geisinger Medical Center Muncy
Karley Oeler, Administrative Fellow, Geisinger Medical Center
Tamara Persing, Vice President, Evangelical Community Hospital
Valerie Reed, Communications Specialist, Geisinger
Peter Rowe, Manager Internal Communications, Geisinger
Rebecca Ruckno, Director, Geisinger
Brock Trunzo, Communications Specialist, Geisinger Jersey Shore Hospital
Tina Westover, Senior Tax Accountant, Geisinger
Amy Wright, Business Development Director, Geisinger Encompass Health Rehabilitation Hospital
Randy Zickgraf, Director, Geisinger
Amy Zumkhawala-Cook, Administrative Director, Operations, Geisinger Holy Spirit*

*Geisinger Holy Spirit representatives served on the RAC through November 1, 2020, the effective date for the hospital's transfer of ownership to Penn State Health.

Consulting Team

Catherine Birdsey, MPH, CHES, Baker Tilly
Colleen Milligan, MBA, Community Research Consulting

CHNA Methodology

The 2021 CHNA was conducted from July to December 2020. Quantitative and qualitative methods, representing both primary and secondary research, were used to illustrate and compare health and social trends and disparities across each region and hospital service area. The following research methods were used to determine community health needs:

- Statistical analysis of health and socioeconomic data indicators; a full listing of data references is included in Appendix A, and a summary of data findings is included in Appendix B
- Electronic survey of key stakeholders, including experts in public health and individuals representing medically underserved, low-income and minority populations; a list of key informants and their respective organizations is included in Appendix C
- Discussion and prioritization of community health needs to determine the most pressing health issues on which to focus community health improvement efforts

Community Engagement

Community engagement was an integral part of the 2021 CHNA. A Virtual Town Hall was held in August 2020 to announce the onset of the CHNA and encourage broad stakeholder participation. A Key Informant Survey was sent to nearly 1,000 community stakeholders to solicit input on health disparities, opportunities for collaboration, COVID-19 response, community health priorities, among other insights. Continued community engagement activities are planned to ensure ongoing dialogue and a forum for addressing community health needs.

Prioritized Community Health Needs

To work toward health equity, it is imperative to prioritize resources and activities toward the most pressing and cross-cutting health needs within the community. Priorities were jointly determined by the CHNA collaborating health systems using feedback from community stakeholders. Through this process, CHNA partners affirmed the following priority health needs:

- **Access to Care**
- **Behavioral Health**
- **Chronic Disease Prevention and Management**

These priorities are consistent with those determined in the previous FY2019 CHNA and reflect complex needs requiring sustained commitment and resources.

Maternal and child health needs are also prevalent across the service area. While CHNA partners did not identify maternal and child health as a priority issue due to the need to focus available resources, many of the hospitals support maternal and child health strategies as part of their Implementation Plan. These strategies include free or low-cost classes and support groups for pregnant and new mothers, lactation consultation, treatment and support services for mothers in recovery, social assistance, and postpartum depression screening, among others.

CHNA Implementation Plan

To direct community benefit and health improvement activities, CHNA partners created individual hospital Implementation Plans to detail the resources and services that will be used to address health priorities. The Implementation Plans build upon previous health improvement activities and take into consideration new health needs and the changing health care delivery environment as detailed in the 2021 CHNA.

Board Approval

The 2021 CHNA was conducted in a timeline to comply with IRS Tax Code 501(r) requirements to conduct a CHNA every three years as set forth by the Affordable Care Act (ACA). The research findings will be used to guide community benefit initiatives for the hospitals and engage local partners to collectively address identified health needs.

The CHNA report was presented to the Geisinger Board of Directors and approved in December 2020. Geisinger is committed to advancing initiatives and community collaboration to support the issues identified through the CHNA.

Following the Board's approval, all CHNA reports were made available to the public via the Geisinger website at https://www.geisinger.org/about-geisinger/in-our-community/chna.

Geisinger's prior CHNA was adopted in June 2018, consistent with their fiscal tax year beginning July 1 and ending the following June 30. Starting in 2021, Geisinger will transition its year-end to a calendar year. Due to the change in year-end, the 2021 CHNA and Implementation Plan adopted for Geisinger Jersey Shore Hospital will be in effect from January 1, 2021 through December 31, 2023.

For questions regarding the CHNA or Geisinger's commitment to community health, please contact Allison Clark, Community Benefit Coordinator, Strategy & Market Advancement, Geisinger at aclark1@geisinger.edu.

North Central Region Summary of Findings

Population Trends

The North Central Region is predominantly rural. Total population of the North Central Region is approximately 150,000; 75% of the population is located within Lycoming County. Williamsport (Lycoming County) is the largest municipality in the region with approximately 30,000 residents. The Williamsport population is more diverse in age, race, and ethnicity than the surrounding municipalities. Lycoming College (1,100 student body) and Pennsylvania College of Technology, known as Penn College, (5,000 student body) are located in Williamsport.

Lock Haven is the largest city center in Clinton County with approximately 10,000 residents. Lock Haven is the county seat and home to Lock Haven University of Pennsylvania with a student body of about 3,400.

Clinton County had the fastest declining population in the Geisinger service area

As a whole, the North Central Region is significantly less diverse and older as compared to state and/or national benchmarks. Pennsylvania and the North Central Region have a higher median age than the nation. Approximately 20% of residents across the state and region are age 65 or over, and that percentage is projected to increase nearly 7 percentage points by 2025. The Clinton County population declined by 5.1% from 2017-2020, the largest population decline in the Geisinger service area. This pace is projected to slow by 2025 and align with Lycoming County at about -1.5%.

About 5% of residents in Lycoming County are Black compared to 1.6% in Clinton County, and less than 3% of residents in either county identify as Latinx (of any race). Greater diversity in Lycoming County is driven primarily by the Williamsport City population, where 14% of the population is Black and about 4% of the population is Latinx (of any race).

Williamsport is the most diverse municipality in the North Central Region

The Amish population makes up approximately 2.5% of the total North Central Region population. Clinton County has more than twice as many Amish (2,527) as Lycoming County (1,194). The estimated Amish population for the region increased nearly 11% from 3,360 to 3,721 from 2017 to 2020.

Disability—both physical and cognitive—is more prevalent among people in the North Central Region than in other PA counties. While seniors comprise the majority of individuals with a disability, within Clinton County, more than 7% of youth report a disability compared to 5% statewide.

Socioeconomic Trends

Clinton and Lycoming counties boast rich natural resources and a long heritage in agriculture and manufacturing. Multiple generations of families reside within well-established communities, anchored by faith and predominantly conservative-leaning values.

The socioeconomics of Clinton and Lycoming counties are consistent with other rural communities across PA. Common factors include a predominantly blue-collar workforce; lower median income levels; increased food insecurity; average high school graduation rates with less college degrees; and more home ownership with lower housing cost burden. Despite common factors across the North Central Region, distinct differences exist between the two counties.

Clinton County is more rural than Lycoming County with more than 60% of the county designated as state land and open to the public. The City of Williamsport (Lycoming County) boasts cultural attractions including The Little League World Series and Little League Hall of Fame. These resources lend to strong tourism in both counties.

More than one in five children live in poverty in the North Central Region

Fulltime Clinton County residents experience more poverty and related concerns than Lycoming County residents. In Clinton County, 17% of all residents and 23% of children live in poverty compared to 14% of Lycoming County residents and 21% of children and statewide percentages of 13% and 18%, respectively. One in five (20%) of children live in food insecure households compared to 18% in Lycoming County and 15% statewide and nationally.

The percentage of renters is equal in both counties, but Lycoming County renters are more likely to be cost burdened than Clinton County renters. Both counties are less cost burdened than the state or national averages. Housing cost burden is defined as spending 30% or more of household income on rent or mortgage expenses. Housing stock in Lycoming County is generally older than in Clinton County, and the state and nation.

Fracking, or hydrofracking, has been a controversial industry across PA and the North Central Region. It has brought economic benefit to the North Central Region, but it has also generated concerns about health, increased housing rental costs, decreased property values, and long-term environment impact. Continued monitoring of health, socioeconomic, and environmental factors is essential to better understand the full impact of this industry on the North Central Region.

Unemployment more than doubled in the North Central Region due to COVID-19

As a result of the COVID-19 pandemic, the North Central Region unemployment rate more than doubled in Clinton County and nearly tripled in Lycoming County from May 2019 to May 2020. As of May 2020, unemployment rates in Clinton (11%) and Lycoming (13%) counties were similar to or lower than the state and nation (13%).

Health Trends

Access to Healthcare

The primary care provider rate, a measure of provider availability, increased in Lycoming County and is similar to the state rate. The Clinton County provider rate decreased and is nearly 30 points lower than the state. The North Central Region has fewer dentists than the state and nation; both Clinton and Lycoming counties are dental Health Professional Shortage Areas (HPSAs) for low-income residents. Both counties are also mental health HPSAs.

Key Informant Survey respondents affirmed the need for additional behavioral health services, particularly mental health services. Mental health services were the top ranked missing resource in the region, identified by 63% of respondents. Substance use disorder services were the third ranked missing resource, identified by 33% of respondents.

The percentage of uninsured youth in Clinton County is more than double national averages

Across the North Central Region, uninsured rates among adults are decreasing and generally in line with the state and better than the national average. However, the percentage of uninsured youth in Clinton County is more than double state and national averages. Most uninsured residents in Clinton County are White, while Black and/or Latinx residents experience disparities in health insurance coverage in Lycoming County.

Chronic Disease Prevention and Management

About 59% of Key Informant Survey respondents named overweight/obesity among the top three health concerns, ranking it as the #1 concern for the region. Obesity among adults and children in the North Central Region continues to increase and exceeds state and national benchmarks. As of 2017, approximately 40% of adults in both counties were obese and nearly 30% of students in grades 7-12 were obese compared to 19.5% of their peers statewide.

Tobacco use is increasing among adults and youth in PA and the North Central Region

In contrast to national trends, tobacco use is increasing among adults in PA and the North Central Region. Lycoming County has the highest rate of adult smoking, exceeding the state and nation, but Clinton County saw the greatest increase in adult smoking (3 points) from 2016 to 2017. Youth vaping/e-cigarette use is also on the rise. From 2015 to 2019, the percentage of Lycoming County youth who reported recent vaping or e-cigarette use increased from 17% to 23% and currently exceeds the statewide average of 19%.

The North Central Region has higher death rates than the state and nation for cancer, chronic lower respiratory disease, and diabetes

These risk factors may contribute to higher death rates from chronic disease. The North Central Region has higher death rates than the state and nation for cancer, chronic lower respiratory disease, and diabetes. Clinton County also has a higher, increasing death rate due to

heart disease. Consistent with state and national data, cancer death rates are declining within the North Central Region.

Higher poverty rates, lower educational attainment, and rural geographies consistent with most of the North Central Region contribute to health disparities and reduce residents' ability to access needed health and social services. People of color historically and frequently experience a higher incidence of poor health and socioeconomic status than White people. While the North Central Region is significantly less diverse compared to the state and nation, city centers that benefit from more diversity, like Williamsport, must be monitored to appreciate the nature and extent of disparities among racial and ethnic subpopulations.

Behavioral Health

Mental health conditions were the top ranked health concern in the Key Informant Survey

Behavioral health, particularly mental health, was seen as a top community health need by Key Informant Survey respondents. North Central Region adults and youth experience more mental distress than their peers statewide and nationally. The Lycoming County suicide death rate is increasing and currently exceeds state and national benchmarks. Clinton County suicide death data are limited, but available data indicate similar, high rates. These findings, coupled with a mental health HPSA designation, indicate that North Central Region residents likely do not receive the mental healthcare they need.

Lycoming County youth are also more likely to report feelings of depression, attempted suicide, and use of alcohol, marijuana, or other substances than youth statewide. Youth behavioral health findings for Lycoming County have been largely consistent since 2015. Clinton County data are limited, but indicate that mental health measures, including feelings of depression and attempted suicide, may also be elevated.

Hospitalizations for opioid overdose across PA decreased by 23.8% from 2017 (3,500) to 2018 (2,667). During this time, overdoses from pain medication increased 8 percentage points while heroin overdoses decreased 8 points. Opioid overdose hospitalizations were more prevalent in areas of socioeconomic distress.

Overdose deaths in the North Central Region declined, but suicide rates are on the rise

Overdose deaths in the North Central Region declined in the past four years. In Lycoming County, deaths dropped from a high of 38 in 2017 to 3 as reported in August 2020. Clinton County dropped from 10 to 5 deaths during that time. While these findings are indicative of improved access to care and treatment for substance use disorder, they should continue to be monitored, particularly in light of COVID-19. The American Medical Association (AMA) stated in October 2020 that it, "Is greatly concerned by an increasing number of reports from national, state and local media suggesting increases in opioid- and other drug-related mortality—particularly from illicitly manufactured fentanyl and fentanyl analogs."

Maternal and Child Health

The birth rate in the North Central Region has been consistent from 2015-2018, and is similar to the state at approximately 20 births per 1,000. Consistent with current and projected county demographics, 87% of births in Lycoming County and 98% of births in Clinton County are to White mothers.

Lycoming County exceeds state and national benchmarks for first trimester care across all racial and ethnic groups. Clinton County lags Lycoming County by 10 percentage points on this measure and falls below the state by 7 points. Despite positive prenatal care findings, Lycoming County has a higher percentage of both low birth weight and preterm births than the state and nation; Black mothers and their infants are about 1.5 times more likely than White mothers to experience poorer birth outcomes for these indicators. More women smoke during pregnancy in the North Central Region compared to the state and nation, which may also contribute to poorer birth outcomes.

Lycoming County exceeds state and national benchmarks for first trimester care across all racial and ethnic groups

Lycoming County saw poorer maternal and child health outcomes from 2017 to 2018. Consistent with these trends, the county's infant death rate increased after years of notable decline. Lycoming County's 2016-2018 infant death rate exceeds state and national rates. The opioid crisis may have contributed to this increase, as demonstrated by the increased number of infants that developed NAS.

More women smoke during pregnancy in the North Central Region compared to the state and nation

Senior Health

Clinton and Lycoming counties are aging faster than the state and national averages. Compounding an increasing aging population, seniors in both counties are more likely to have multiple chronic conditions and disability than their peers statewide or nationally. Clinton County seniors are more likely to have multiple comorbidities than other seniors across the CHNA service area.

The North Central Region population is aging faster than the state or nation, and seniors are less healthy overall

Despite having an increased number of conditions, annual Medicare spending among North Central Region senior Medicare beneficiaries is lower than state and national spending, which may reflect an overall lower cost of living.

The Alzheimer's disease death rate (calculated per 100,000 people) is higher in Clinton (300) and Lycoming (238.6) counties than PA (108.8) and the nation (233.2). Clinton County had the steepest increase in the Alzheimer's disease death rate over the past five years, but rates across all geographies appear to be decreasing or leveling off.

More seniors live alone in PA (13%) than the national average (11%). Clinton County is higher than PA, while Lycoming County is more closely aligned with the state. Living alone is a key driver for social isolation, which is associated with poor mental and physical health among seniors.

COVID-19 Statistics

Coronaviruses are a large family of viruses which may cause illness in animals or humans. COVID-19, named as a novel coronavirus discovered in Wuhan China in December 2019, caused a worldwide pandemic, resulting in nearly one million deaths worldwide (as of the printing of this report) and global economic impact. New insights are derived daily during this dynamic situation and we will continue to learn from data collected throughout the pandemic. As of October 2020, Clinton County had 233 cases and 6 deaths and Lycoming County had 858 cases and 29 deaths due to COVID-19.

Responses from the Key Informant Survey indicated that community representatives were "somewhat" to "moderately" worried about the long-term impact of COVID-19 on communities and residents. They were most concerned about the impact on the well-being of the elderly, mental and emotional health of residents, and well-being of healthcare workers. Most agencies had effectively transitioned to using technology and social media to provide virtual learning and services, and many organizations had increased the number of programs and services offered within communities. They encouraged increased cross-sector collaboration to disseminate services and consistent communication.

Racial and Ethnic Disparities

About 41% of key informants indicated that social and community context declined in the past 3-5 years

Historical public policies and systematic inequities have perpetuated stark and persistent racial disparities in wealth, education attainment, health, power distribution, and nearly every measure of well-being for people of color. While efforts to reconcile these disparities are being made, people of color in the North Central Region continue to experience these inequities, as demonstrated by disproportionate poverty levels, lower education attainment, and related socioeconomic measures. These social determinants of health directly drive decreased access to healthcare, higher death rates, and overall lower life expectancy. About 41% of key informants indicated that social and community context, including perceptions of discrimination and equity, declined in the past 3-5 years.

Across the state and nation, and demonstrated where data is available for the North Central Region, Black and Latinx residents historically experience disproportionately high death rates due to chronic conditions. Women of color and their babies also experience poorer maternal and birth outcomes.

Because the North Central Region is less racially and ethnically diverse, these disparities can be difficult to demonstrate due to low numbers for data collection. To ensure disparities are quantified and reconciled, it is imperative that patient outcome data is carefully tracked and regularly reviewed for patients of color to ensure equitable healthcare access and outcomes.

Rural Health Factors

Approximately 44% of key informants perceived that economic stability had declined across the region. Rural communities have been particularly impacted due to decreased availability of services, as well as increased travel time and distance to health and social services. These factors can delay or deter residents' ability to receive care when they need it.

Generally, more healthcare providers and social services are available in Lycoming County than Clinton County. The Lycoming County primary care provider density rate is more closely aligned with the state, while Clinton County's primary care provider rate is nearly 30 points lower. Both counties are designated as HPSAs for dental and mental health providers. Data demonstrate increased health and social need in Clinton County over Lycoming County, which is consistent with a more rural geography and reduced availability of services.

Telehealth and other virtual services are increasing and can be a successful way to mitigate rural health disparities. Internet service and smart devices are essential tools for successful utilization of these services. In the North Central Region, residents are less likely to own a computer or smart phone compared to the state and national averages. Approximately 76% of households in either county have an internet subscription, compared to about 80% statewide and nationally.

Fewer North Central Region households have internet service and/or smart devices

Community Engagement and Collaboration

Among questions on the Key Informant Survey, respondents were asked about their partnerships with health providers and community engagement of diverse stakeholders and residents. Approximately 81% of respondents indicated that they regularly partnered with hospitals on health improvement initiatives. About 54% of respondents thought that these types of partnerships were effective at addressing health needs, while 23% of informants thought there was room for improvement. Similarly, 19% of informants thought that healthcare providers could do better to garner resident feedback or engage residents when developing health improvement initiatives.

Demonstrating outcomes; using shared data or measurement tools; and aligning service areas were seen as the top ways that healthcare and social service providers could improve effective collaboration. Respondents referenced the need for formal structure, resources, and organizational commitment to long-term change to foster accountable leadership and advance discussion and planning.

A full summary of CHNA research findings and comparisons to state and national benchmarks follows.

Full Report of CHNA Research Findings

Secondary Data Profile

Background

Secondary data, including demographic, socioeconomic, and public health indicators, were analyzed for the North Central Region and Geisinger Jersey Shore Hospital service area to measure key data trends and priority health issues identified in the FY2019 CHNA, and to assess emerging health needs. Data were compared to Pennsylvania (PA) and United States (US) benchmarks and Healthy People 2020 (HP2020) goals, as available, to assess areas of strength and opportunity for the region. Healthy People 2020 is a US Department of Health and Human Services health promotion and disease prevention initiative that sets science-based, 10-year national objectives for improving the health of all Americans.

All reported demographic and socioeconomic data were provided by ESRI Business Analyst, 2020 and the US Census Bureau, American Community Survey, unless otherwise noted. Public health data were analyzed for a number of health issues, including access to care, health behaviors and outcomes, chronic disease prevalence and mortality, mental health and substance use disorder, and maternal and child health. Data were compiled from secondary sources including the Pennsylvania Department of Health, the Centers for Disease Control and Prevention (CDC), the Behavioral Risk Factor Surveillance System (BRFSS), the University of Wisconsin County Health Rankings & Roadmaps program, among other sources. A comprehensive list of data sources can be found in Appendix A.

Age-adjusted rates are referenced throughout the report to depict a comparable burden of disease among residents. Age-adjusted rates are summary measures adjusted for differences in age distributions so that data from one year to another, or between one geographic area and another, can be compared as if the communities reflected the same age distribution.

The BRFSS is a telephone survey of residents age 18 or over conducted nationally by states as required by the CDC. A consistent survey tool is used across the US to assess health risk behaviors, prevalence of chronic health conditions, access to care, preventive health measures, among other health indicators. BRFSS data indicators are referenced throughout the public health data analysis.

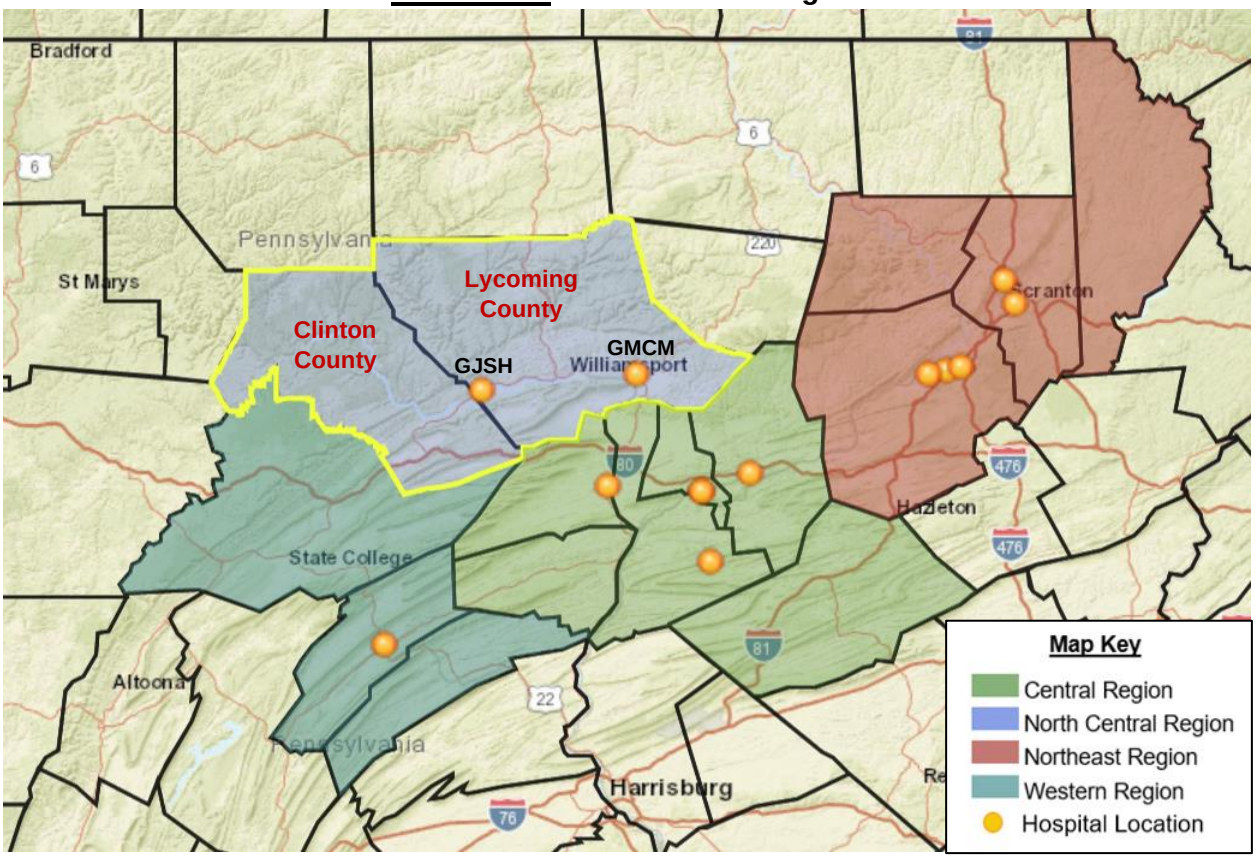
A summary of public health data findings is included in Appendix B. The summary provides a snapshot of areas of strength and opportunity for the region in comparison to state and national benchmarks.

North Central Region Service Area

For purposes of the CHNA, Geisinger and its CHNA partners, Allied Services Integrated Health System and Evangelical Community Hospital, focused on their collective primary service areas comprising 15 counties across Pennsylvania. To better understand the strengths and challenges of unique communities across this wide geography, CHNA partners grouped communities into four regional service areas based on common political jurisdictions, geographical considerations, population trends, and related factors.

The North Central Region is comprised of Clinton and Lycoming counties and is primarily served by Geisinger Jersey Shore Hospital (GJSH) and Geisinger's newest facility, Geisinger Medical Center Muncy (GMCM), as shown on the map below.

2021 CHNA 15-County Service Area
Focus Area: North Central Region



North Central Region Population Trends

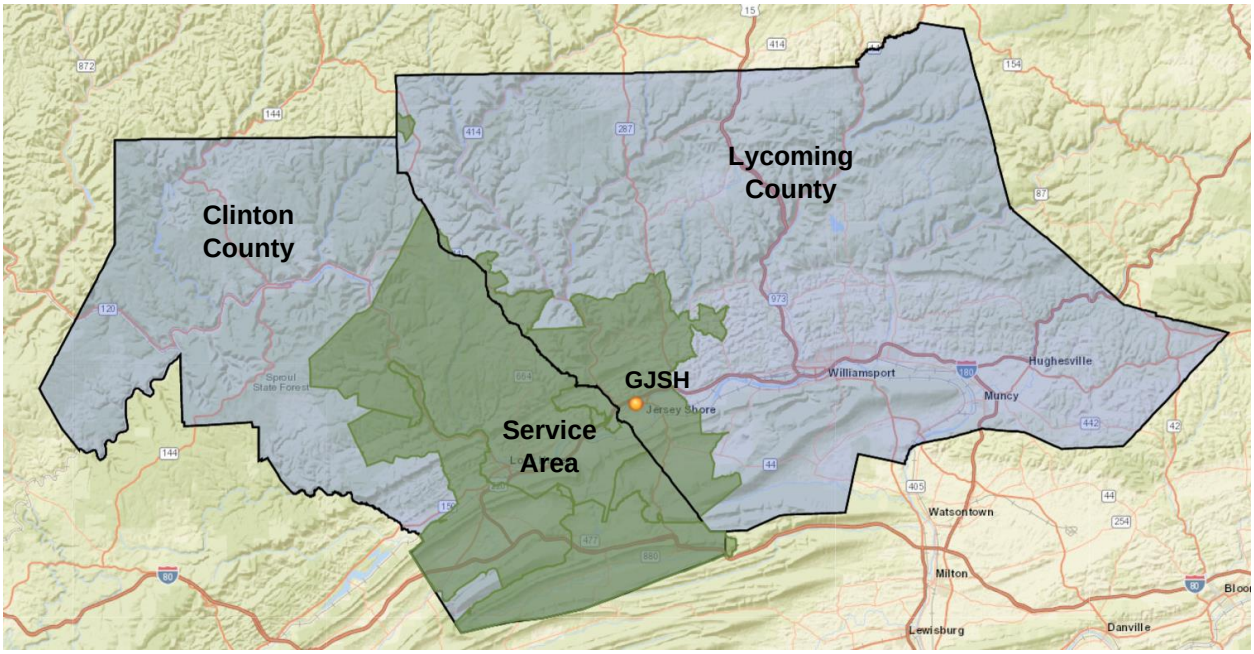
	2017 Population*	2020 Population	Growth 2017-2020	Growth by 2025
Clinton County	40,309	38,272	-5.1%	-1.4%
Lycoming County	116,794	113,801	-2.6%	-1.5%
Total Population	**157,103**	**152,073**	**-3.2%**	**-1.5%**

*Population as measured at the time of the FY2019 CHNA.

Geisinger Jersey Shore Hospital Service Area Description

For the purposes of the 2021 CHNA, GJSH defined its primary service area as five zip codes within the North Central Region, shown in the map below. The primary service area was identified based on the patient zip codes of origin comprising 80% or more of hospital discharges in fiscal year 2019.

GJSH Service Area



GJSH Service Area Zip Codes

Zip Code	County
17721, Avis	Clinton
17740, Jersey Shore	Lycoming
17745, Lock Haven	Clinton
17747, Loganton	Clinton
17751, Mill Hall	Clinton

Population Overview

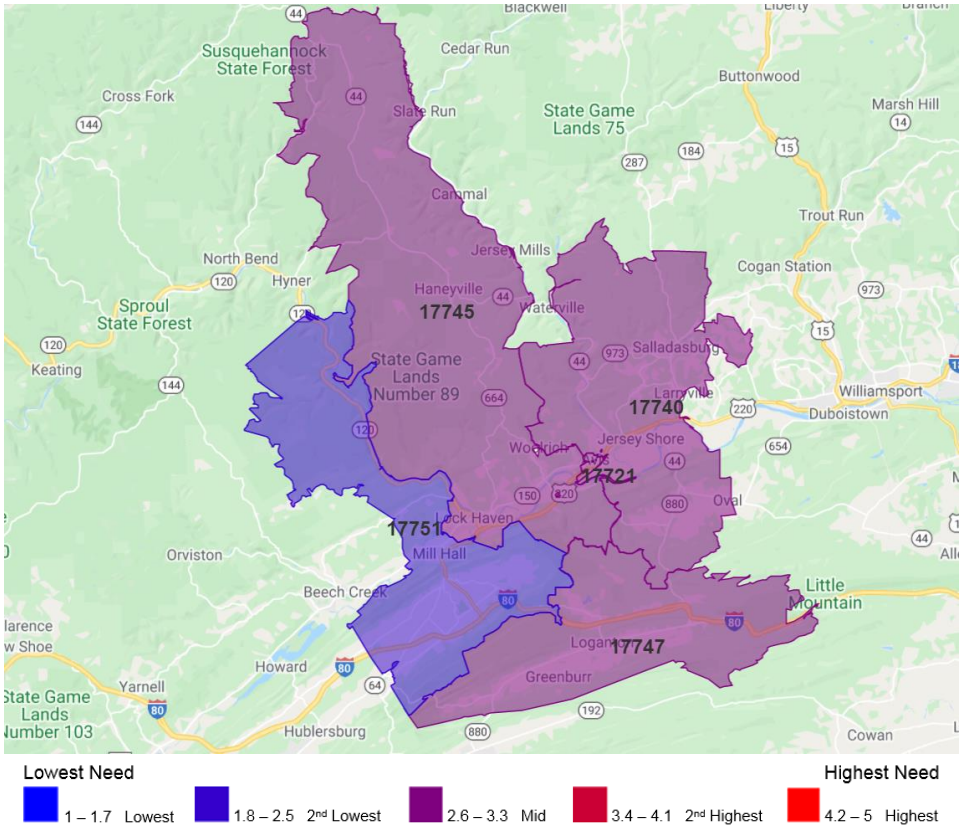
Zip code of residence is one of the most important predictors of health disparity; where residents live matters in determining their health. The Community Need Index (CNI) was developed by Dignity Health and Truven Health Analytics to illustrate the potential for health disparity at the zip code level. The CNI scores zip codes on a scale of 1.0 (low need) to 5.0 (high need) based on data indicators for five socioeconomic barriers:

- Income: Poverty among elderly households, families with children, and single female-headed families with children
- Culture/Language: Minority populations and English language barriers
- Education: Population over 25 years without a high school diploma
- Insurance coverage: Unemployment rate among population 16 years or over and population without health insurance
- Housing status: Householders renting their home

The CNI score for 17721, Avis increased from the FY2019 CHNA from 2.0 to 2.6

The weighted average CNI score for GJSH's service area is 2.8, indicating moderate overall community need. CNI scores by service area zip code are shown in the map below. Zip code 17745, Lock Haven continues to have the highest CNI score in the service area (3.2), although the score declined marginally from the FY2019 CHNA (3.4). Of note, zip code 17721, Avis saw an increase in the CNI score from 2.0 to 2.6.

GJSH Service Area Community Needs Index



The following tables analyze demographic characteristics for GJSH's service area, as well as select social determinants of health contributing to zip code CNI scores. Cells highlighted in yellow are at least 3 percentage points *higher* than the state and nation.

The GJSH service area comprises a majority White population with little racial or ethnic diversity. Nearly 96% of the population identifies as White compared to 69% nationwide. Consistent with the state overall, the population is older with 19% of residents age 65 or over. The exception is zip code 17747, Loganton, where 30% of residents are children. The overall population is declining in all service area zip codes, particularly 17721, Avis (-2.4%).

Social determinants of health indicators for the GJSH service area are largely consistent with the state, with the exception of slightly elevated poverty. Data indicators for zip codes 17745, Lock Haven and 17747, Loganton are impacted by Lock Haven University students and Amish residents, respectively.

GJSH Service Area 2020 Population (pop.) Demographics

	Total Pop.	Pop. Growth by 2025	Asian	Black	White	Latinx (any race)	Under Age 18	Age 65 or Over
17721	1,477	-2.4%	0.3%	0.6%	98.3%	0.9%	21.6%	19.8%
17740	12,603	-1.8%	0.3%	0.6%	97.8%	0.8%	21.0%	19.6%
17745	18,620	-1.7%	1.0%	2.8%	93.6%	2.2%	16.2%	18.8%
17747	3,075	-0.8%	0.2%	0.1%	97.2%	2.1%	30.3%	14.5%
17751	7,511	-1.4%	0.6%	0.6%	97.2%	1.4%	20.6%	20.1%
GJSH Service Area	**43,286**	**-1.6%**	**0.6%**	**1.5%**	**95.9%**	**1.6%**	**19.5%**	**19.0%**
PA	**--**	**0.9%**	**3.8%**	**11.4%**	**78.5%**	**8.2%**	**19.9%**	**19.3%**
US	**--**	**3.6%**	**5.9%**	**13.0%**	**69.4%**	**18.8%**	**22.0%**	**16.6%**

Source: Esri

GJSH Service Area Social Determinants of Health Indicators

	2014-2018 Households in Poverty	2020 No High School Diploma	2014-2018 No Health Insurance	2014-2018 Renter Households	2020 CNI	2017 CNI*
17721	14.6%	8.9%	2.1%	31.5%	2.6	2.0
17740	10.6%	9.1%	6.2%	25.7%	2.6	2.4
17745	20.2%	8.4%	4.2%	43.2%	3.2	3.4
17747	9.5%	19.2%	31.5%	20.2%	2.6	NA
17751	13.4%	9.3%	9.1%	23.0%	2.4	2.4
GJSH Service Area	**15.4%**	**9.5%**	**7.7%**	**32.6%**	**--**	**--**
PA	**12.3%**	**8.7%**	**6.2%**	**31.0%**	**--**	**--**
US	**13.4%**	**11.3%**	**9.4%**	**36.2%**	**--**	**--**

Source: Esri & Dignity Health

*CNI score reported at the time of the FY2019 CHNA. Zip codes without a reportable CNI score were not included in the FY2019 CHNA service area.

Regional Demographics and Socioeconomics

Analyses of demographic and socioeconomic data are essential in understanding health trends and determining key drivers of health status. Socioeconomic indicators play a significant role in community and individual health. Known as **social determinants of health**, they are defined as factors within the environment in which people live, work, and play that can affect health and quality of life. Social determinants of health are often the root causes of **health disparities**.

Demographic Key Findings

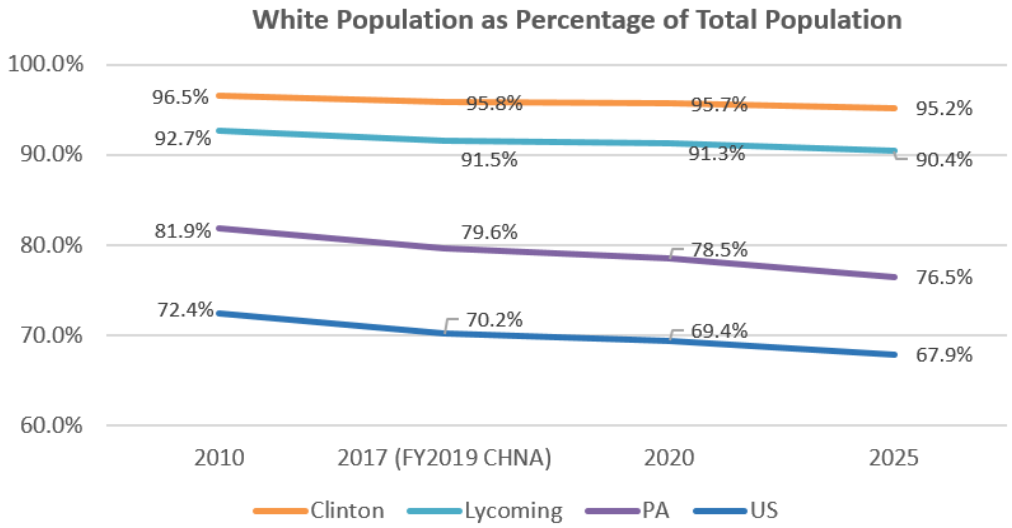
- The PA population as a whole is less diverse than the population nationwide; the North Central Region population is less diverse than the state. Approximately 91% of Lycoming County and 96% of Clinton County residents identify as White compared to 78.5% statewide. Less than 3% of residents in either county identify as Latinx (any race).
- Consistent with the FY2019 CHNA, population diversity within the North Central Region is increasing, although at a slower pace than the state and nation. The White population as a percentage of the total population will continue to decline through 2025, with the greatest projected decline in Lycoming County (-0.9 percentage point).
- Pennsylvania and North Central Region counties have a higher median age than the nation; approximately 20% of residents are age 65 or over compared to 17% nationwide. The senior population is projected to continue to grow. From 2010 to 2025, the senior population as a percentage of the total population will increase nearly 7 percentage points in both Clinton and Lycoming counties.
- Clinton and Lycoming county seniors are less healthy than their peers statewide and nationally. Approximately 36% of Lycoming County seniors and 39% of Clinton County seniors have a disability compared to 34%-35% across PA and the US. Seniors in both counties have a higher prevalence of hearing disabilities; Clinton County seniors also have a higher prevalence of cognitive disabilities.
- Pennsylvania residents overall are slightly more likely to report a disability when compared to the nation. Residents of Clinton and Lycoming counties are more likely to report a disability when compared to the state. While seniors comprise the majority of individuals with a disability, it is worth noting that within Clinton County, more than 7% of youth report a disability compared to 5% statewide.
- From 2017 to 2020, the estimated Amish population for the region grew from 3,360 to 3,721. Clinton County has the largest Amish population in the region at 2,527 individuals.
- Approximately 83% of Clinton County households and 85% of Lycoming County households have a computer device, lower than state (86.5%) and national (89%) averages. Residents are particularly less likely to have a smartphone. Approximately 76% of households in either county have an internet subscription, also lower than the state (80%) and nation (81%). Only 75% of households have broadband internet, a 4-5 point deficit from the state and nation.

Demographic Data Summary

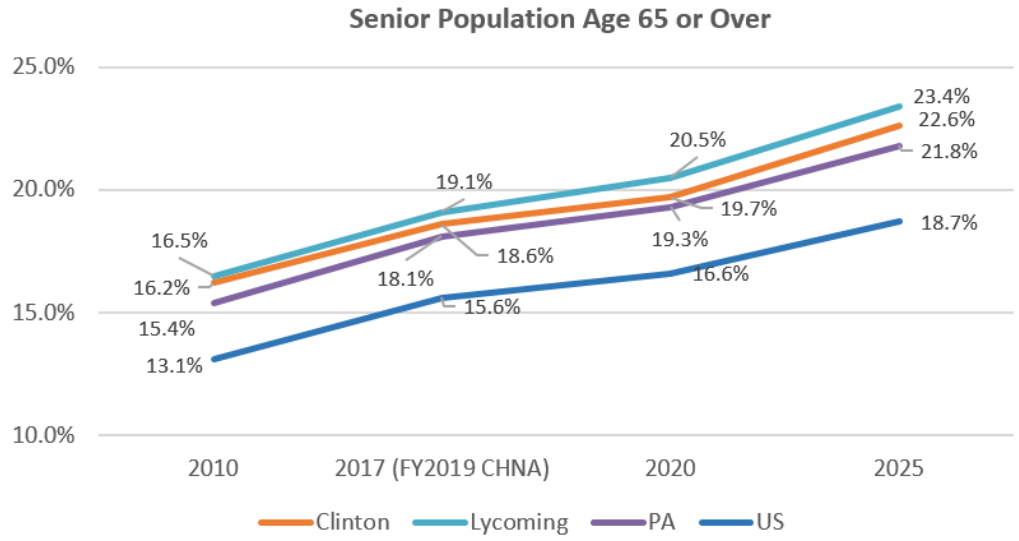
Yellow highlighting indicates a percentage that is at least 3 points *higher* than the state and nation.
Grey highlighting indicates a percentage that is at least 3 points *lower* than the state and nation.

	Clinton County	Lycoming County	PA	US
Racial and Ethnic Diversity (ESRI)				
2020 Asian	0.7%	0.6%	3.8%	5.9%
2025 Projection	0.8%	0.7%	4.5%	6.5%
2020 Black	1.6%	4.7%	11.4%	13.0%
2025 Projection	1.5%	4.9%	11.8%	13.1%
2020 White	95.7%	91.3%	78.5%	69.4%
2025 Projection	95.2%	90.4%	76.5%	67.9%
2020 Latinx, any race	1.7%	2.3%	8.2%	18.8%
2025 Projection	2.0%	3.0%	9.8%	20.1%
Primary language other than English (2014-2018)	6.2%	3.7%	11.3%	21.5%
Age Distribution (ESRI, 2020)				
Under 15 years	15.7%	15.6%	16.5%	18.4%
15-24 years	16.4%	13.3%	12.7%	13.0%
25-34 years	12.1%	12.4%	12.8%	14.0%
35-54 years	22.2%	23.6%	24.6%	25.0%
55-64 years	14.0%	14.5%	14.2%	13.0%
65+ years	19.7%	20.5%	19.3%	16.6%
Median Age	40.5	42.7	41.6	38.5
Disability Status (US Census Bureau, 2014-2018)				
Total population	16.5%	15.6%	13.9%	12.6%
Under 18 years	7.3%	6.0%	5.3%	4.2%
65+ years	38.7%	36.3%	34.1%	35.0%
Ambulatory	22.4%	21.6%	21.2%	22.2%
Independent Living	13.6%	14.3%	14.2%	14.5%
Hearing	19.1%	17.2%	14.1%	14.6%
Cognitive	9.7%	7.7%	8.0%	8.8%
Vision	5.8%	6.3%	5.7%	6.4%
Household Internet/Digital Access (US Census Bureau, 2014-2018)				
Computer device (1+)	83.2%	85.2%	86.5%	88.8%
Desktop/laptop	75.0%	73.8%	76.6%	77.9%
Smartphone	62.2%	65.3%	70.9%	75.9%
Other	51.9%	54.3%	57.9%	61.5%
Internet subscription	75.9%	76.3%	79.9%	80.9%
Dial-up only	1.3%	1.0%	0.7%	0.5%
Broadband	74.5%	75.3%	79.2%	80.4%

Notable Demographic Trends



Source: Esri Business Analyst



Source: Esri Business Analyst

Estimated Amish Population (pop.) by Settlement

County	Settlements	2017 Pop.	2020 Pop.	% Change
Clinton	Nittany Valley/Howard, Loganton/Sugar Valley	2,266	2,527	11.5%
Lycoming	Nippenose Valley/Williamsport, White Deer Valley/Allenwood	1,094	1,194	9.1%
Central Region		3,360	3,721	10.7%
Pennsylvania		74,251	81,499	9.8%

Source: Elizabethtown College, Young Center for Anabaptist and Pietist Studies

Socioeconomic Key Findings

- Clinton and Lycoming counties reflect blue-collar workforce trends with overall lower median incomes and educational attainment compared to the state and nation. Approximately 20% of Clinton County residents and 24% of Lycoming County residents have attained a bachelor's degree compared to approximately one-third of residents across PA and the US.
- The percentage of people living in poverty generally declined in Lycoming County and currently mirrors national trends. Poverty in Clinton County has been consistently high, affecting 17% of all residents compared to 13% statewide.
- Children are more at risk for socioeconomic disparity, particularly in the North Central Region. Approximately 21% of Lycoming County children and 23% of Clinton County children live in poverty compared to 18% statewide. Children are also more likely to be food insecure, particularly in Clinton County (20%). However, Clinton County data may be skewed by the Amish population. While a higher percentage of Amish individuals are considered to live in poverty based on national thresholds, their engagement in barter and sharing economies and a simpler lifestyle contribute to a lower cost of living.
- COVID-19 has increased unemployment rates. Within the North Central Region, unemployment more than doubled in Clinton County and nearly tripled in Lycoming County from May 2019 to May 2020. Current unemployment for Clinton (11%) and Lycoming (13%) counties is similar to or lower than the state and nation (13%).
- Approximately 69% of homes regionally and statewide are owner-occupied, a higher percentage than the nation overall (64%). Homes in the North Central Region, particularly Clinton County, are generally more affordable when compared to the state and nation and fewer homeowners are considered housing cost burdened. Clinton County renters are also less likely to experience housing cost burden, although the percentage is still notable at 41%.
- Pennsylvania's housing stock is older than the nation's housing stock with 70% of homes built before 1980. North Central Region housing stock is also older, particularly in Lycoming County, where 73% of homes were built before 1980. In general, occupants of older housing have higher rates of chronic disease and accidental injury.
- Racial and ethnic socioeconomic disparities exist across the North Central Region, although findings should be interpreted with caution due to low population counts. Most notably, nearly 40% of Black residents and more than 25% of Latinx residents in either county live in poverty. Latinx residents experience higher poverty despite being more likely to attain higher education in comparison to both their peers statewide and nationally and other populations living in the region.

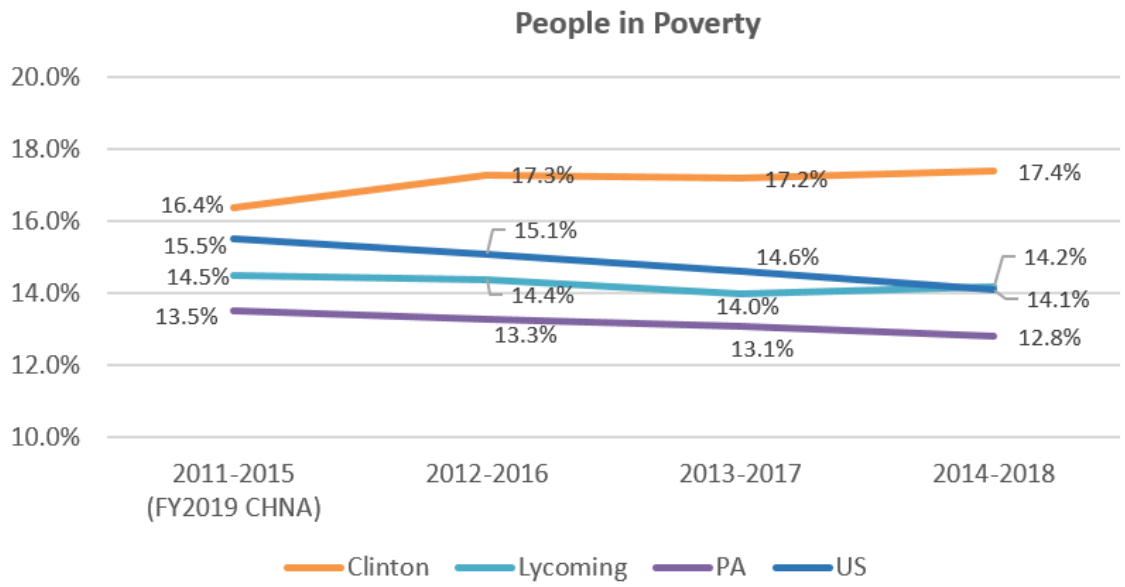
Socioeconomic Data Summary

Red highlighting indicates potential *disparity* based on at least a 3-point difference from the state and nation.
Green highlighting indicates potential *strength* based on at least a 3-point difference from the state and nation.

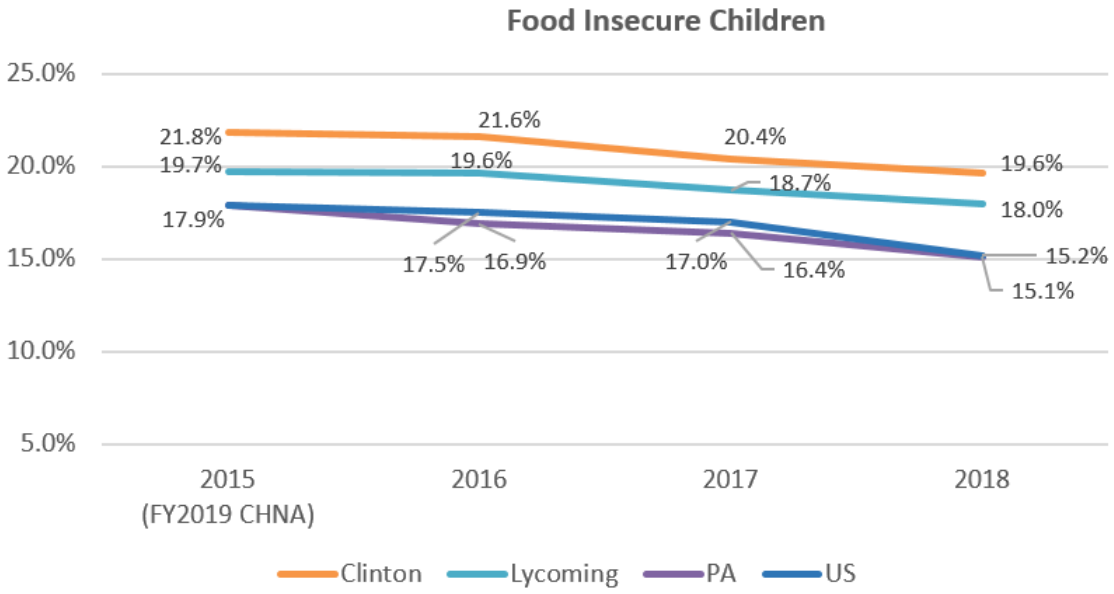
	Clinton County[1]	Lycoming County[1]	PA	US
Income and Poverty (US Census Bureau, 2014-2018)				
Median household income	$49,234	$52,407	$59,445	$60,293
All people in poverty	17.4%	14.2%	12.8%	14.1%
Asian	1.5%	31.9%	14.3%	11.5%
Black	35.2%	39.4%	26.9%	24.2%
White	17.1%	12.4%	10.0%	11.6%
Latinx, any race	25.3%	27.8%	29.4%	21.0%
Children in poverty	23.4%	21.4%	18.1%	19.5%
Seniors in poverty	9.8%	7.8%	8.1%	9.3%
Households with SNAP[2]	15.2%	15.4%	13.2%	12.2%
Food Insecurity (Feeding America, 2018)				
All people	12.8%	11.8%	10.9%	11.5%
Children	19.6%	18.0%	15.1%	15.2%
Unemployment (US Bureau of Labor Statistics)				
May 2019	4.8%	4.3%	4.0%	3.4%
May 2020	11.4%	12.7%	13.2%	13.0%
Housing (US Census Bureau, 2014-2018)				
Renters	30.6%	30.6%	31.0%	36.2%
Cost burdened[3]	40.9%	48.7%	48.4%	50.2%
Owners	69.4%	69.4%	69.0%	63.8%
Median home value	$130,900	$152,400	$174,100	$204,900
Cost burdened[3]	23.4%	25.6%	26.0%	28.7%
Housing built before 1980	69.6%	73.4%	70.1%	54.2%
Education (ESRI, 2020; US Census Bureau, 2014-2018 race/ethnicity data)				
No high school diploma	10.0%	9.0%	8.7%	11.3%
Bachelor's degree or higher	20.2%	24.2%	32.3%	33.1%
Asian	52.1%	50.8%	55.4%	53.5%
Black	18.8%	8.4%	18.5%	21.1%
White	18.9%	23.3%	31.7%	32.9%
Latinx, any race	24.4%	30.2%	15.8%	15.8%

[1] Race/ethnicity data are based on small counts; interpret data findings with caution.
[2] Supplemental Nutrition Assistance Program.
[3] Housing cost burden is defined as spending 30% or more of household income on housing-related costs.

Notable Socioeconomic Trends



Source: US Census Bureau



Source: Feeding America

Public Health Data Analysis

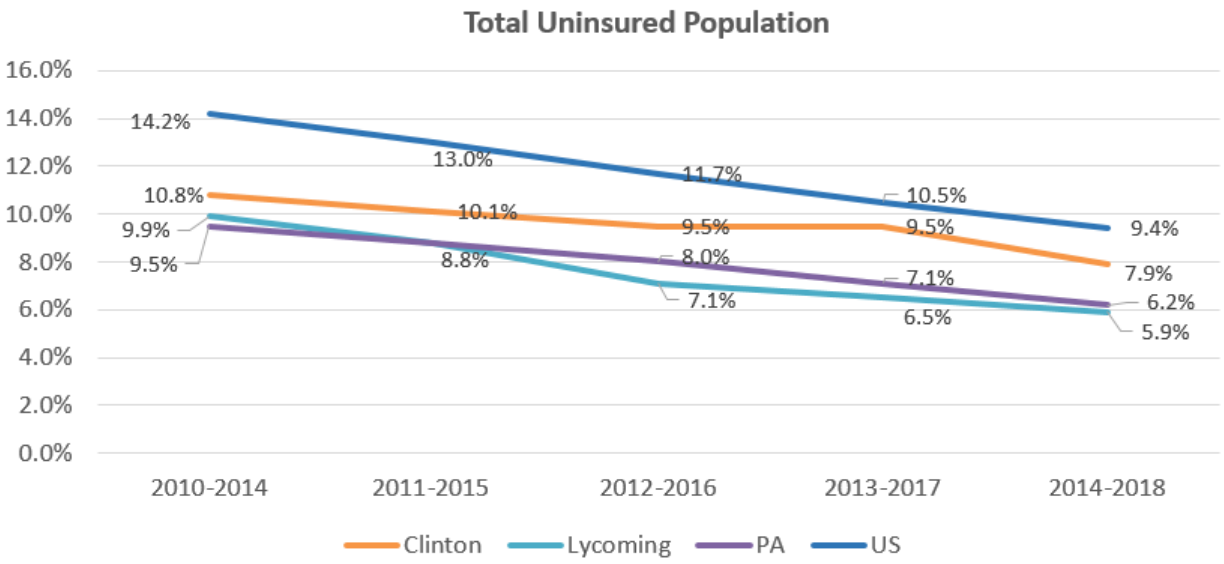
Public health data supports that the FY2019 CHNA priorities of Access to Care, Behavioral Health, and Chronic Disease Prevention and Management continue to be community health needs within the North Central Region. These priorities reflect complex needs requiring sustained commitment and resources.

The following sections highlight key public health data findings by topic area, with a focus on priority health needs and vulnerable and high-risk populations.

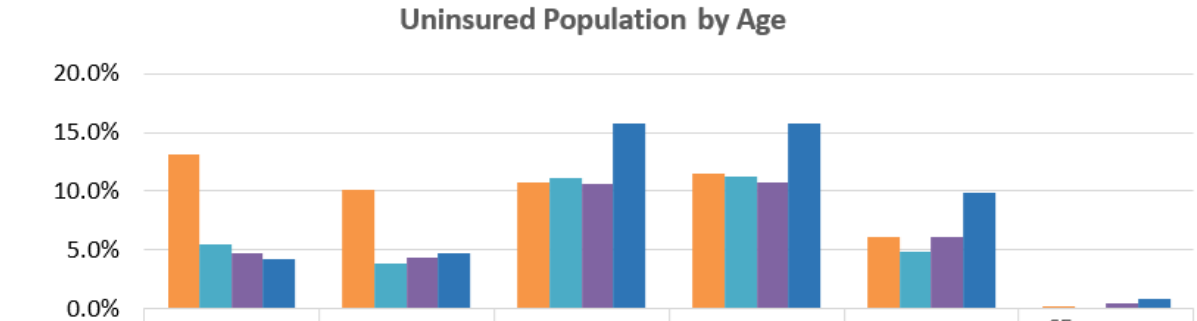
Healthcare Access Key Findings

- The total uninsured population continued to decline across the region. Lycoming County has a lower uninsured percentage than both the state and nation. Clinton County has a lower overall uninsured percentage than the nation, but the percentage of uninsured youth is double to triple national averages. This finding may be due in part to a prominent Amish population that is less likely to participate in insurance programs.
- Uninsured rates among Black and Latinx residents declined statewide and nationally, but continue to be disproportionately higher compared to Whites. Similar racial and ethnic disparities exist in Lycoming County. Within Clinton County, a lower percentage of minority residents are uninsured compared to White residents, but findings are based on small population counts.
- Employer-based insurance continues to be the majority coverage type within the North Central Region, covering a similar percentage of residents as the state and nation. Consistent with the expansion of Medicaid in PA, the percentage of Medicaid insured residents increased from the FY2019 CHNA. More than 20% of North Central Region residents are Medicaid insured, a slightly higher percentage than the state and nation.
- Provider availability is a barrier to healthcare access within the North Central Region, particularly Clinton County. While Lycoming County's primary care provider rate increased and is similar to the state rate, Clinton County's provider rate decreased and is nearly 30 points lower. Both counties have fewer dentists than the state and nation and are dental Health Professional Shortage Areas (HPSAs) for low-income residents. Both counties are also mental health HPSAs, despite provider rate increases.
- Potentially preventable hospitalizations are inpatient stays that might have been avoided with effective primary or preventative care. North Central Region counties have a lower rate of preventable hospitalizations than the state, but the rate is higher in Clinton County where there are fewer available primary care providers.
- COVID-19 has highlighted long-standing, systemic health and socioeconomic disparities among minority populations, particularly Black residents. Across PA, the COVID-19 death rate is more than 3 times higher among Black residents as White residents. While the North Central Region has seen low COVID-19 death counts overall, statewide findings are indicative of broader health disparities affecting all geographies.

Health Insurance Coverage Data



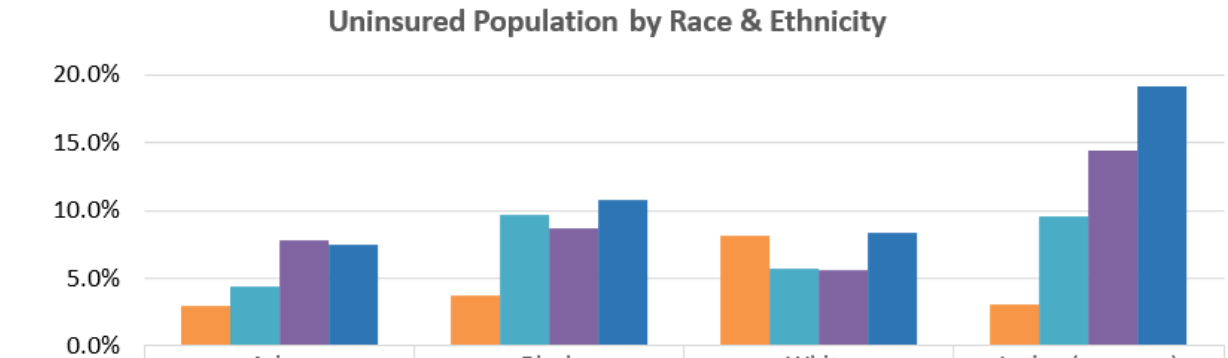
Source: US Census Bureau



	Under 6 years	6-18 years	19-25 years	26-44 years	45-64 years	65 years or over
Clinton	13.1%	10.1%	10.8%	11.5%	6.1%	0.2%
Lycoming	5.5%	3.9%	11.1%	11.3%	4.8%	0.1%
PA	4.7%	4.4%	10.6%	10.7%	6.1%	0.4%
US	4.2%	4.7%	15.8%	15.7%	9.8%	0.8%

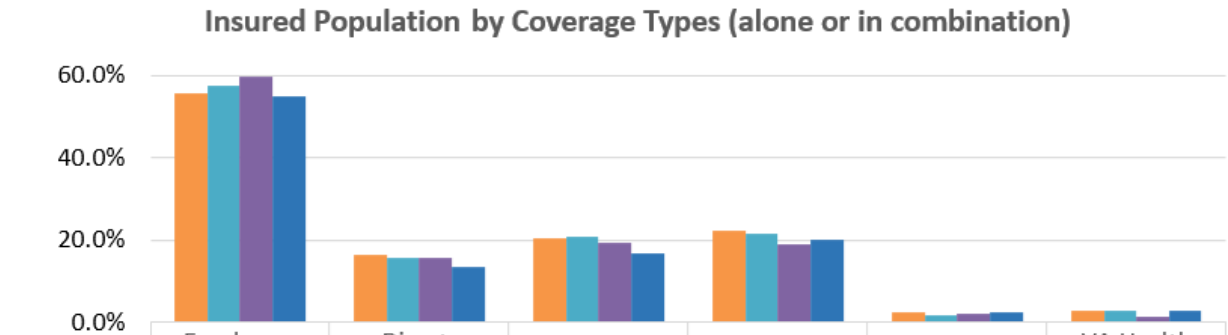
Source: US Census Bureau, 2014-2018

Health Insurance Coverage Data



	Asian	Black	White	Latinx (any race)
Clinton	3.0%	3.7%	8.1%	3.1%
Lycoming	4.4%	9.7%	5.7%	9.6%
PA	7.8%	8.7%	5.6%	14.4%
US	7.5%	10.8%	8.4%	19.2%

Source: US Census Bureau, 2014-2018

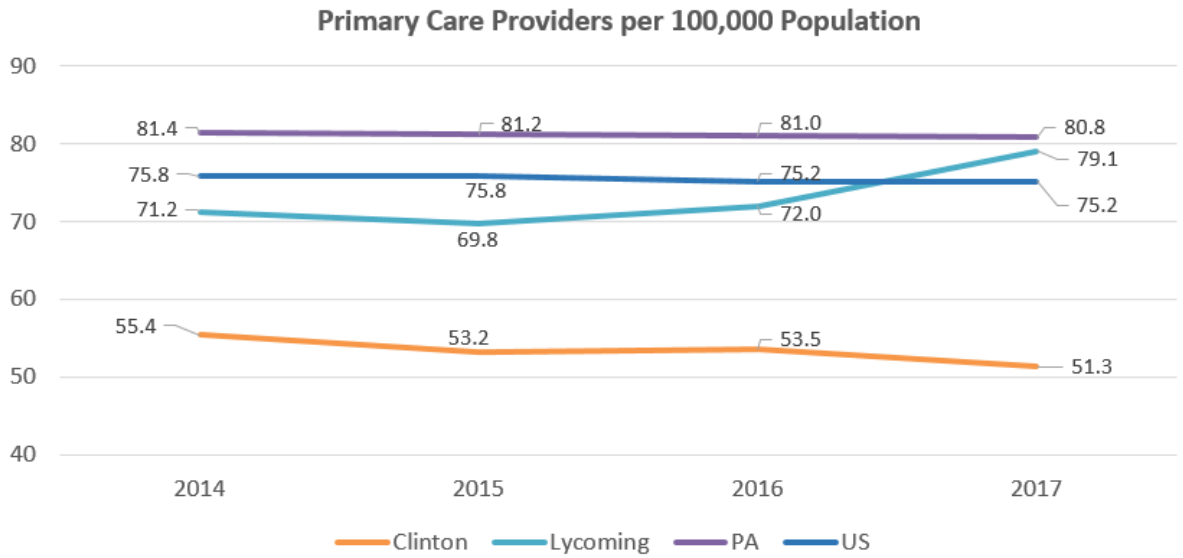


	Employer-based	Direct-purchase	Medicare	Medicaid	TRICARE	VA Health Care
Clinton	55.7%	16.4%	20.6%	22.3%	2.3%	2.8%
Lycoming	57.4%	15.7%	20.9%	21.4%	1.7%	2.7%
PA	59.6%	15.7%	19.2%	18.9%	2.1%	1.4%
US	55.0%	13.6%	16.9%	20.1%	2.3%	2.7%

Source: US Census Bureau, 2014-2018

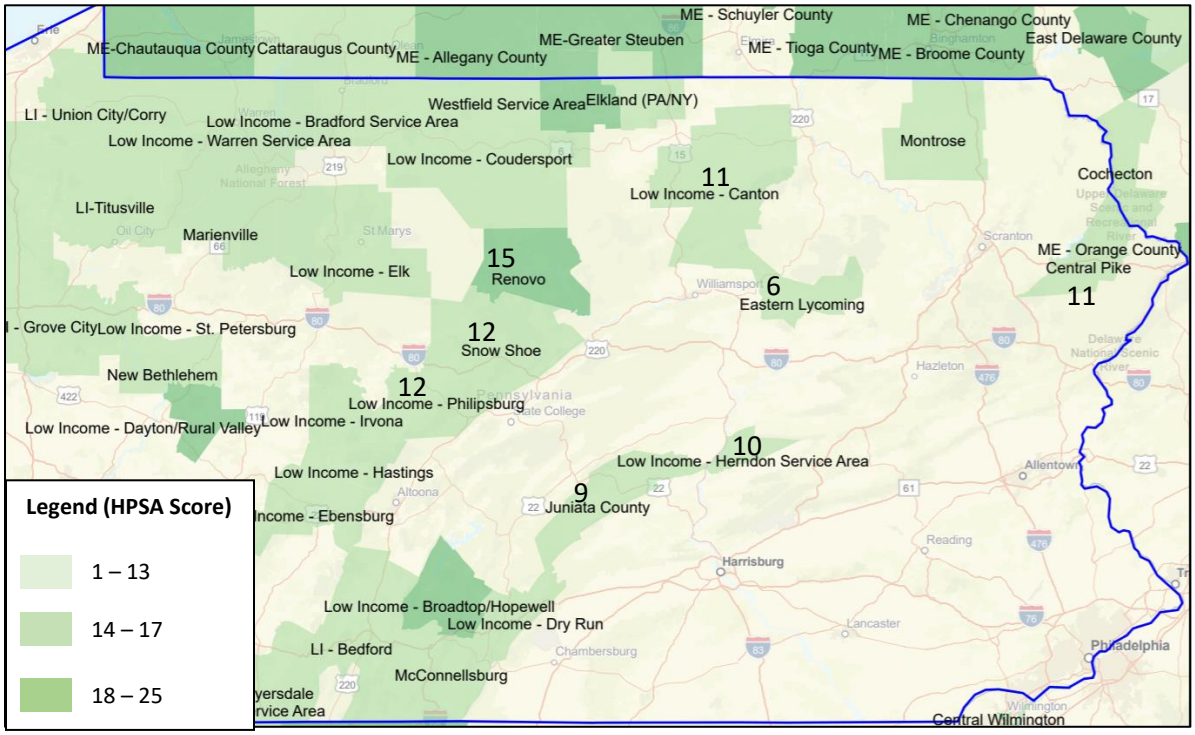
Provider Availability Data

Note: Providers are identified based on their preferred business mailing address; provider rates do not take into account providers that serve multiple counties or satellite clinics.



Source: Health Resources & Services Administration

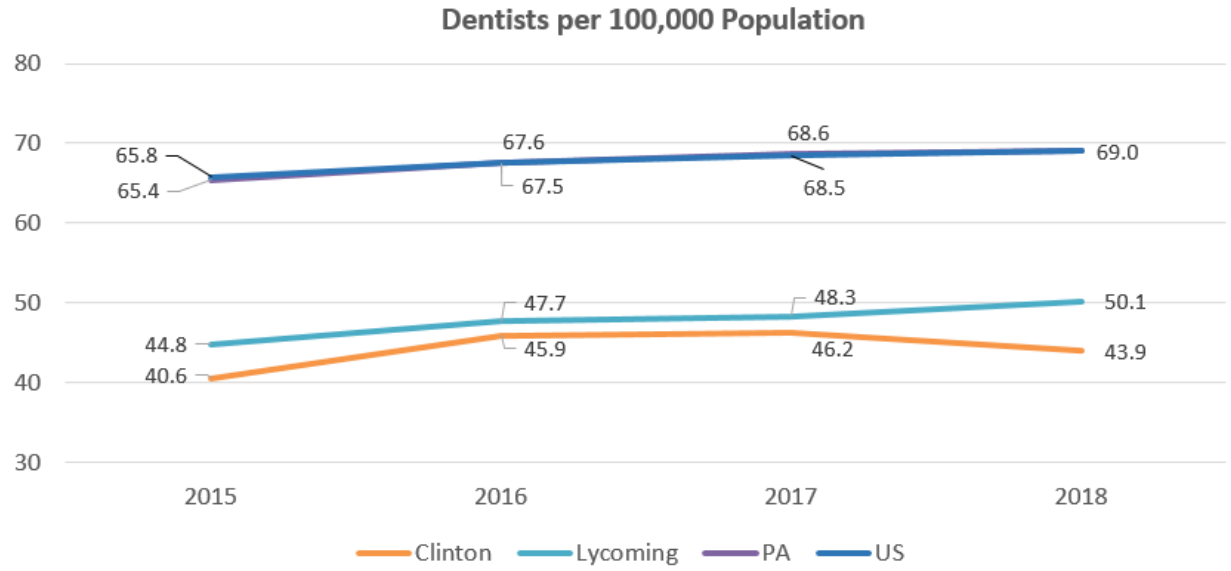
Primary Care Health Professional Shortage Areas (HPSA)
HPSA Scores Noted within CHNA Service Counties



Source: Health Resources & Services Administration

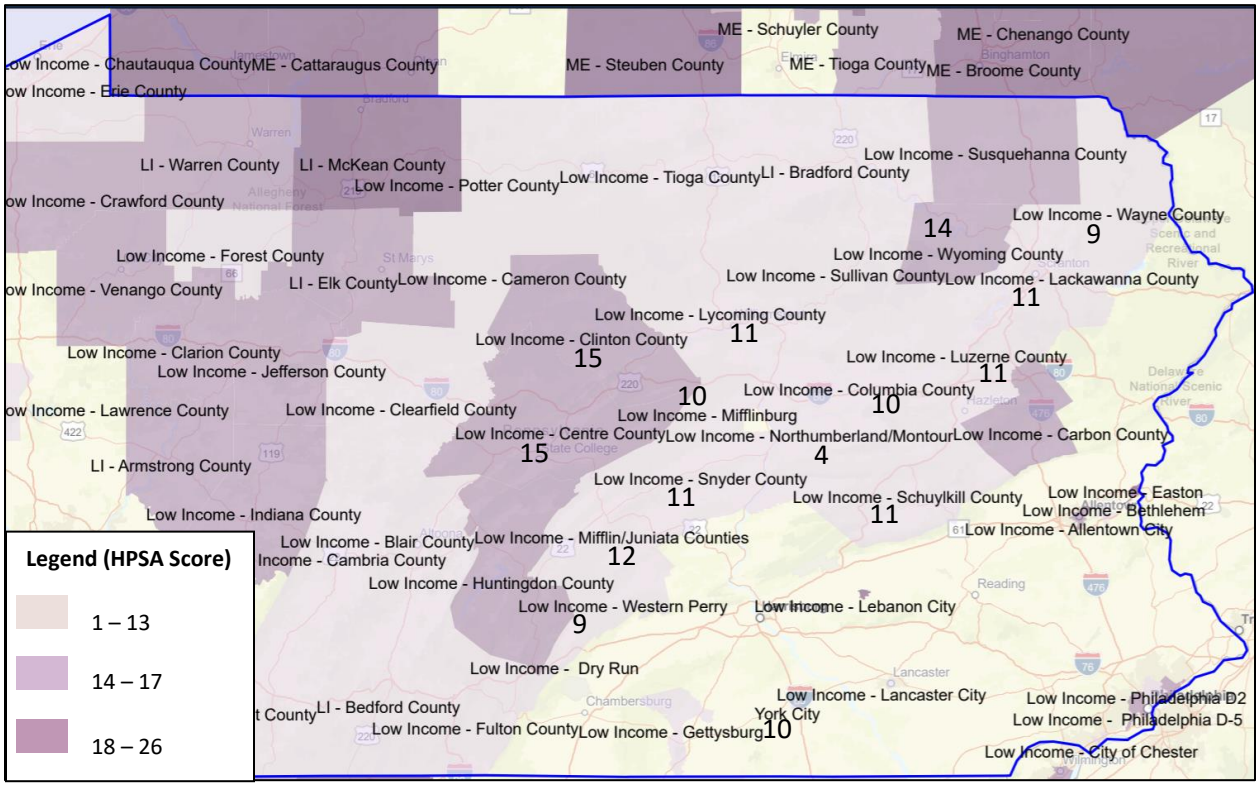
*Primary care HPSAs can receive a score between 0-25, with 25 indicating the highest need.

Provider Availability Data



Source: Health Resources & Services Administration

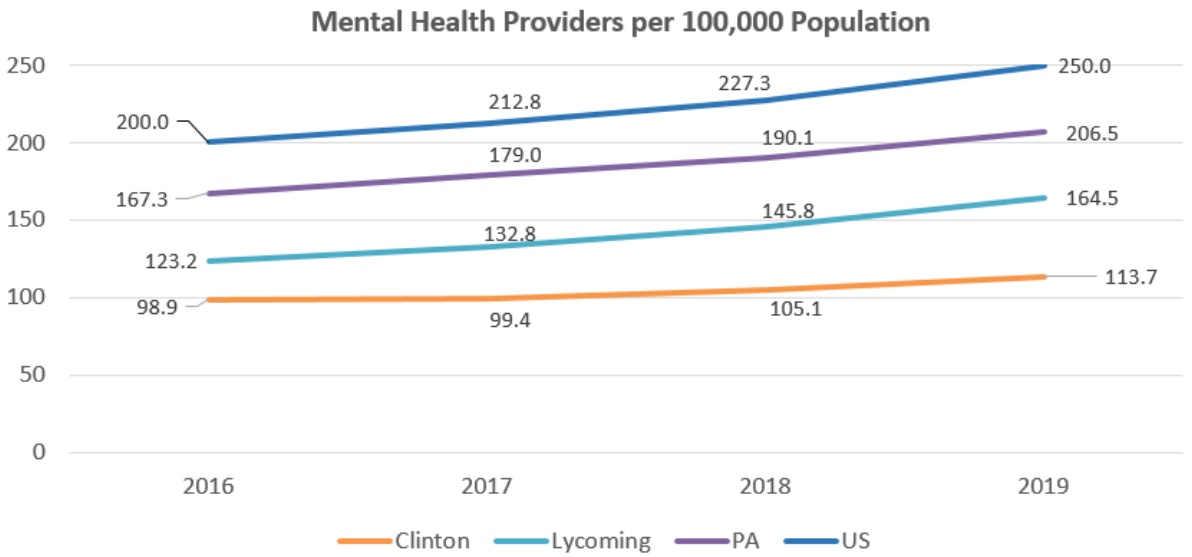
Dental Care Health Professional Shortage Areas (HPSA)
HPSA Scores Noted within CHNA Service Counties



Source: Health Resources & Services Administration

*Dental care HPSAs can receive a score between 0-26 with 26 indicating the highest need.

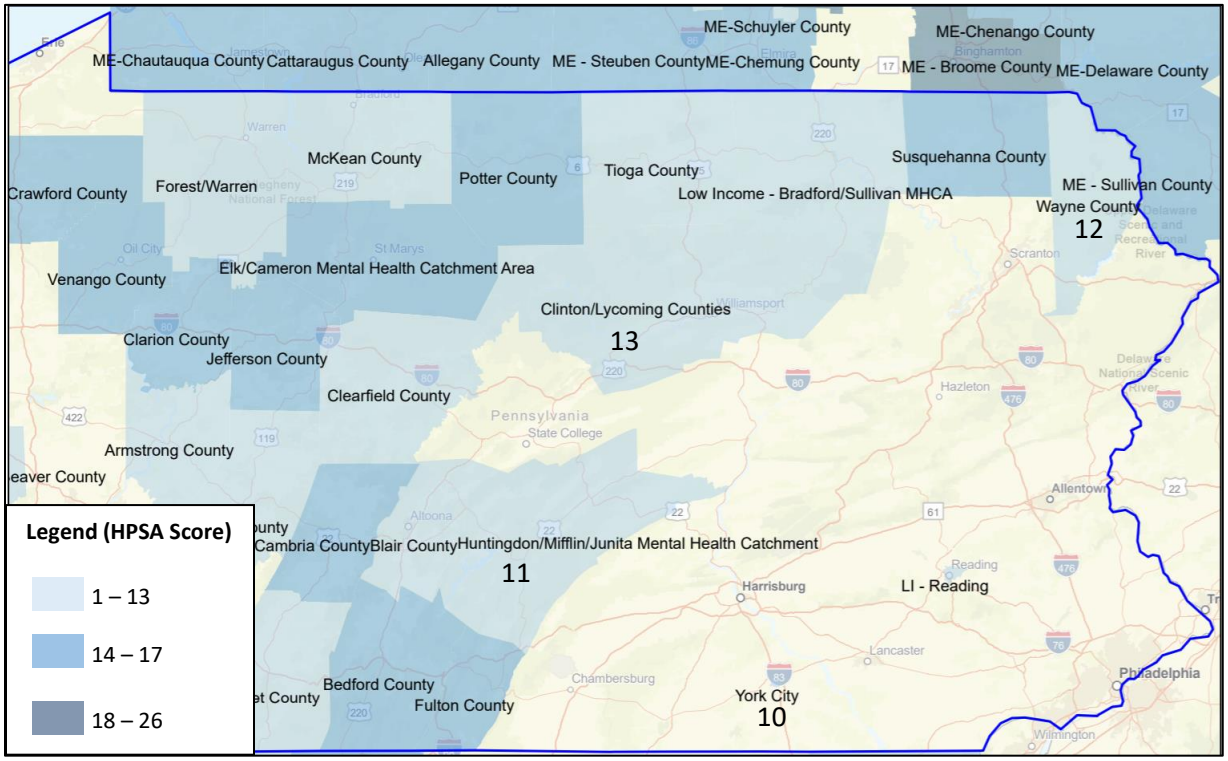
Provider Availability Data



Source: Centers for Medicare and Medicaid Services

*Mental health providers include psychiatrists, psychologists, licensed clinical social workers, counselors, and mental health providers that treat alcohol and other drug abuse, among other providers.

Mental Health Professional Shortage Areas (HPSA)
HPSA Scores Noted within CHNA Service Counties

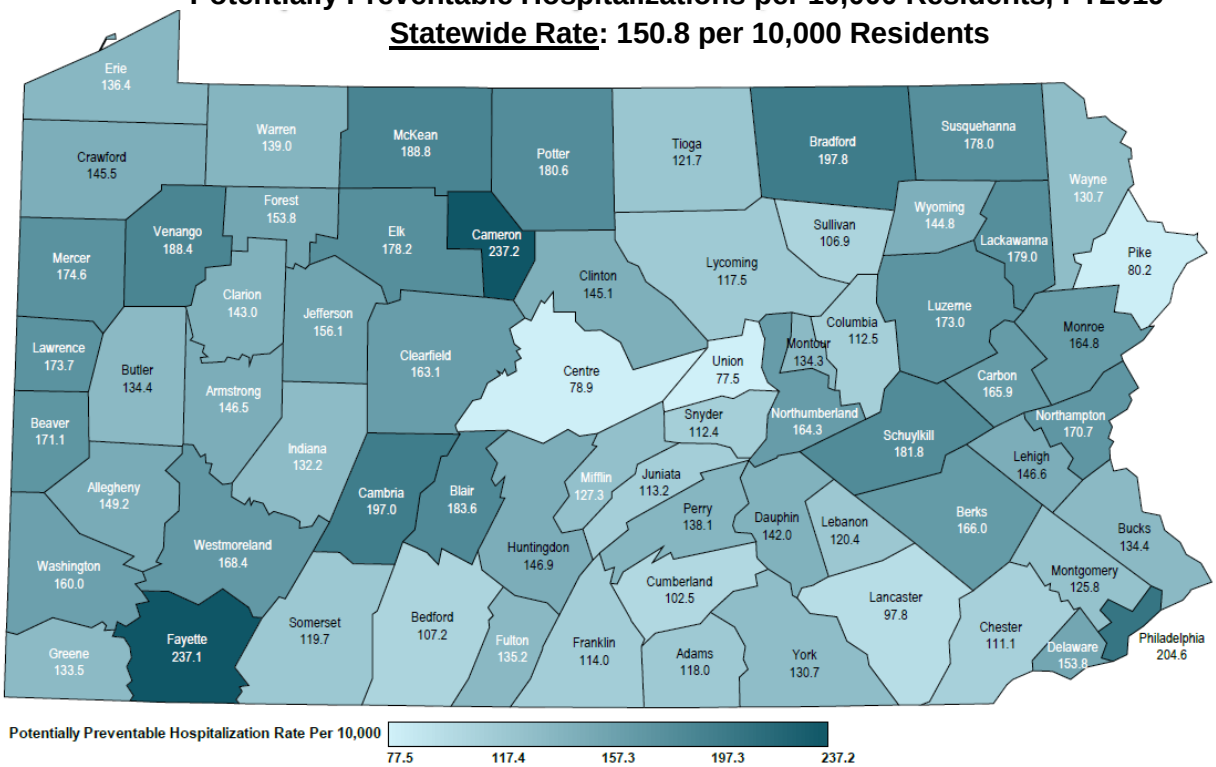


Source: Health Resources & Services Administration

*Mental health HPSAs can receive a score between 0-25, with 25 indicating the highest need.

Preventable Hospitalizations Data

Potentially Preventable Hospitalizations per 10,000 Residents, FY2019
Statewide Rate: 150.8 per 10,000 Residents



Source: Pennsylvania Health Care Cost Containment Council (PHC4), July 1, 2018-June 30, 2019

*PHC4 defines potentially preventable hospitalizations as, "Inpatient stays for select conditions that might have been avoided with effective primary or preventive care—thereby avoiding the need for a more expensive hospital admission."

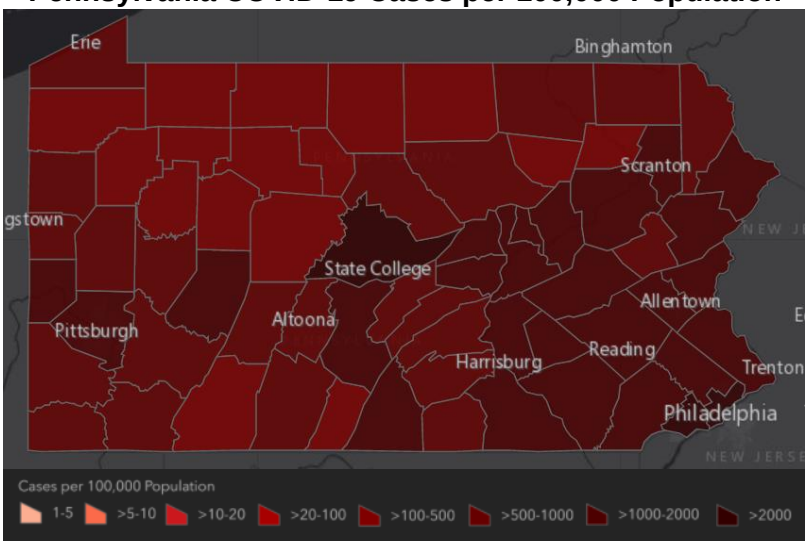
Statewide Potentially Preventable Hospitalizations by Condition, FY2019

	Number of Cases	Percent of Cases	Total Number of Hospital Days
Heart Failure	54,676	35.7%	284,232
COPD or Asthma (adults age 40+)	28,742	18.8%	116,136
Pneumonia	20,472	13.4%	87,354
Urinary Tract Infection	13,974	9.1%	51,454
Diabetes – Long-term Complications	10,641	6.9%	61,254
Diabetes – Short-term Complications	8,387	5.5%	29,718
Hypertension	6,142	4.0%	19,430
Diabetes – Uncontrolled	4,824	3.1%	16,288
Lower Extremity Amputation	3,876	2.5%	41,393
Asthma (adults age 18-39)	1,502	1.0%	4,039
Total	**153,236**	**100%**	**711,298**

Source: Pennsylvania Health Care Cost Containment Council (PHC4), July 1, 2018-June 30, 2019

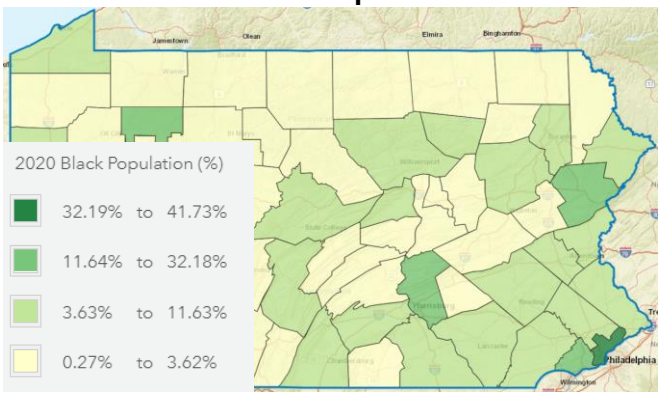
COVID-19 Data

Pennsylvania COVID-19 Cases per 100,000 Population

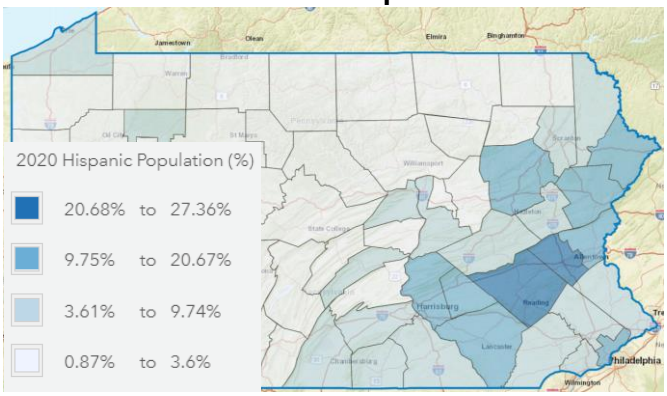


Source: Pennsylvania Department of Health, October 15, 2020

2020 Black Population



2020 Latinx Population



COVID-19 Age-Adjusted Death Rate per 100,000 by Race and Ethnicity

	Black	Latinx	White	Asian
PA	147.7	121.2	43.5	57.1
US	131.3	125.1	38.4	49.7

Source: American Public Media Research Lab, September 15, 2020

North Central Region COVID-19 Cases

	Cases	Cases per 100,000	Deaths	Deaths per 100,000
Clinton County	233	602.3	6	15.5
Lycoming County	858	754.9	29	25.5

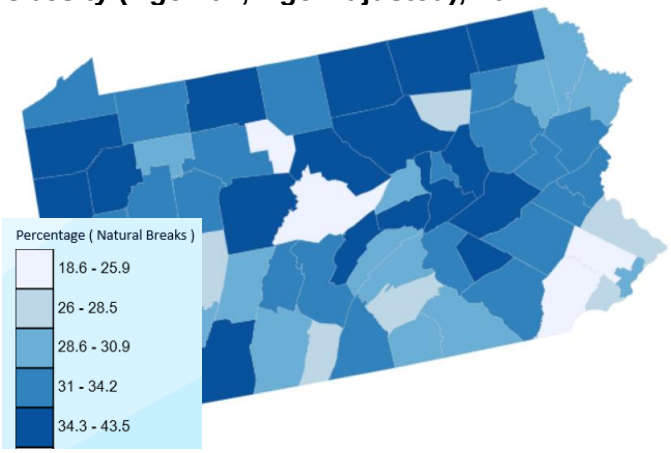
Source: Pennsylvania Department of Health, October 15, 2020

Chronic Disease and Health Risk Factors Key Findings

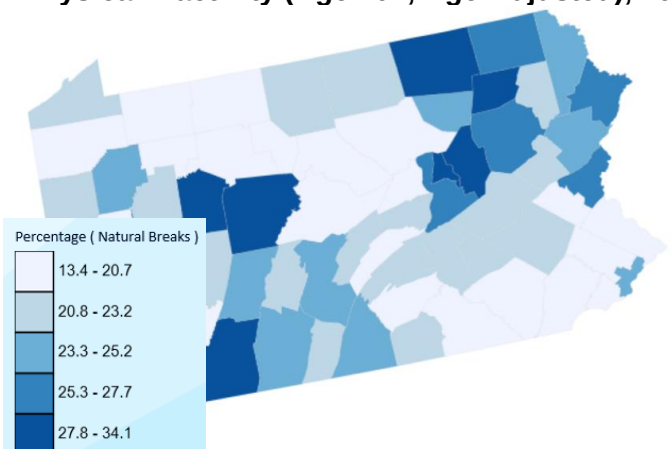
- Socioeconomic barriers have a direct impact on health. Pennsylvania counties with a lower median income and fewer opportunities for physical activity generally have higher rates of obesity and chronic conditions. This trend is reflected in the North Central Region, where nearly 40% of adults are obese and death rates due to chronic conditions generally exceed state and national benchmarks.
- Adult obesity increased in Clinton and Lycoming counties and currently exceeds state and national benchmarks. As of 2017, approximately 39% of adults in both counties are obese, a 7-8 point increase from 2013. Youth obesity is also higher in Clinton and Lycoming counties. As of the 2017-2018 school year, nearly 30% of students in grades 7-12 were obese compared to 19.5% of their peers statewide.
- Despite increasing obesity rates, adult diabetes prevalence declined in the North Central Region. Clinton and Lycoming counties have a similar or lower percentage of adults with diagnosed diabetes as the state and nation. However, both counties have higher diabetes death rates. The Clinton County death rate increased nearly 6 points in recent years. This finding may indicate underdiagnosed and/or mismanaged diabetes conditions.
- Adult smoking continued to decline across the nation, but increased in PA and the North Central Region from 2016 to 2017. This trend may be due in part to vaping/e-cigarette use. Lycoming County has the highest reported rate of adult smoking, exceeding the state and nation, but Clinton County saw the greatest increase in adult smoking of 3 percentage points. Both counties have a higher death rate due to chronic lower respiratory disease and lung cancer, due in part to historically high tobacco use.
- Youth are particularly vulnerable to vaping/e-cigarette trends, as illustrated in Lycoming County, where there was a nearly 7-point increase in use from 2015 to 2019. Lycoming County students are more likely to report vaping/e-cigarette use when compared to the state. They are also slightly more like to report using traditional cigarettes, although the percentage is declining rapidly. Recent youth data are not available for Clinton County.
- Heart disease and cancer continue to be the leading causes of death regionally, statewide, and nationally. Clinton County has a higher rate of death due to both heart disease and cancer compared to the state and nation; the heart disease death rate increased more than 50 points from 2014. Lycoming County has a higher cancer death rate than the state and nation, but both cancer and heart disease death rates declined. Across the state and nation, Black residents continue to have disproportionately higher death rates due to heart disease and cancer, among other chronic conditions.
- Colorectal cancer is a health concern for Clinton County. Residents have higher incidence and death rates due to colorectal cancer when compared to the state and nation; the death rate is nearly 6 points higher.
- Asthma is the most prevalent chronic condition among youth. Approximately 5% of Clinton County youth and 8.5% of Lycoming County youth have asthma, lower percentages than the state average of 11%.

Health Risk Factors Data

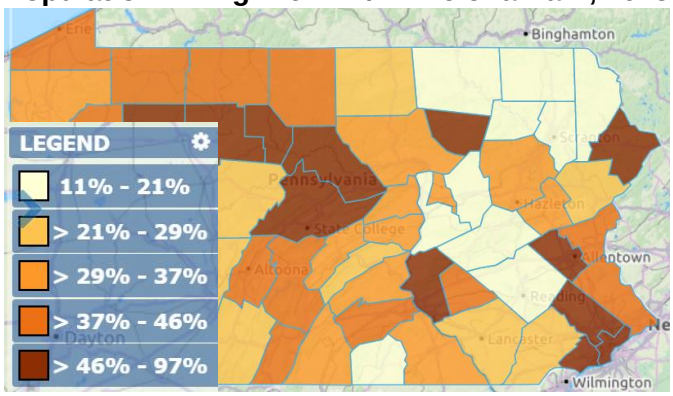
Obesity (Age 20+, Age-Adjusted), 2017



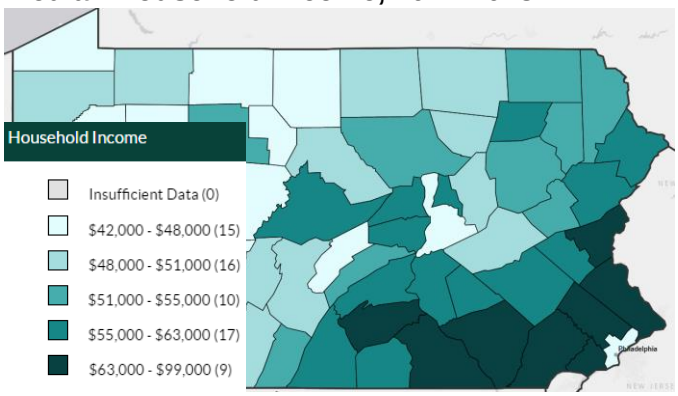
Physical Inactivity (Age 20+, Age-Adjusted), 2017



Population Living within 1/2 Mile of a Park, 2015



Median Household Income, 2014-2018



Age-Adjusted Adult (Age 20+) Health Risk Factors and Social Determinants of Health

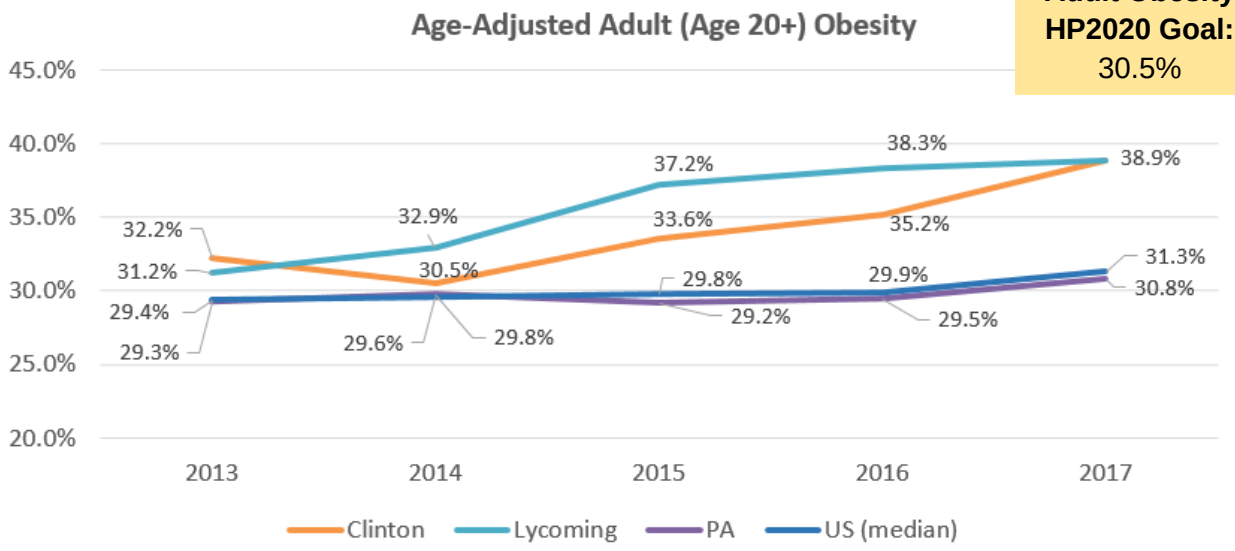
	Clinton County	Lycoming County	PA	US (median)
Obesity	38.9%	38.9%	30.8%	31.3%
Physical inactivity	16.5%	20.3%	23.9%	25.6%
Population living with 1/2 mile of a park	11%	18%	47%	NA
Median household income	$49,234	$52,407	$59,445	$60,293

Source: Centers for Disease Control and Prevention

*Green highlighting indicates positive socioeconomic *and* health outcomes in comparison to the state and nation; red highlighting indicates negative outcomes.

Health Risk Factors Data

Adult Obesity HP2020 Goal: 30.5%



Source: Centers for Disease Control and Prevention

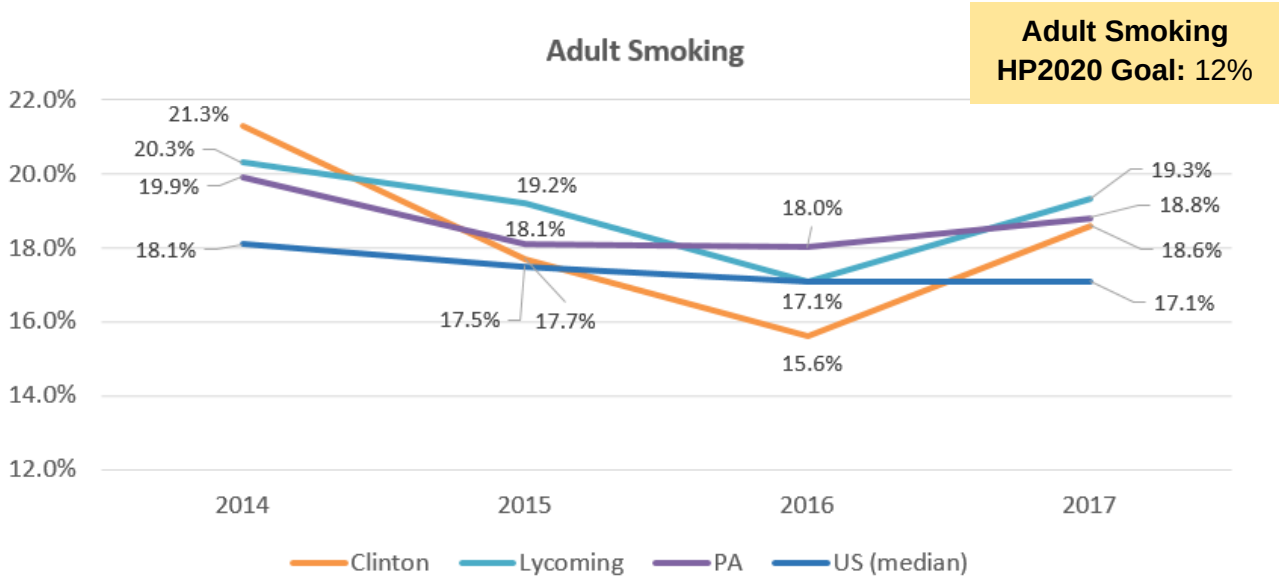
Youth Obesity by School Year

	Clinton County	Lycoming County	PA
Grades K-6			
2017-2018	22.3%	19.9%	16.8%
2016-2017	23.1%	19.1%	16.4%
2015-2016	23.4%	19.1%	16.7%
2014-2015	23.4%	19.5%	16.5%
2013-2014	23.3%	19.9%	16.3%
Grades 7-12			
2017-2018	29.1%	26.3% ▲	19.5%
2016-2017	27.7%	23.1%	18.9%
2015-2016	27.6%	22.5%	19.1%
2014-2015	26.2%	22.6%	18.6%
2013-2014	29.2%	21.8%	18.2%

Source: Pennsylvania Department of Health

*Green highlighting indicates a lower percentage than the state; red highlighting indicates a higher percentage. Trending denoted as increasing (▲) or decreasing (▼) by ≥2 percentage points since 2013-2014.

Health Risk Factors Data



Source: Centers for Disease Control and Prevention

Youth Tobacco Use (Grades 6, 8, 10, 12)

	Clinton County	Lycoming County	PA
Cigarette use within Past 30 Days			
2019	NA	4.0% ▼	3.5%
2017	3.7%	7.2%	5.6%
2015	NA	8.2%	6.4%
Vaping/E-cigarette use within Past 30 Days			
2019	NA	23.4% ▲	19.0%
2017	10.9%	14.9%	16.3%
2015	NA	16.7%	15.5%

Source: Pennsylvania Commission on Crime and Delinquency

*Green highlighting indicates a lower percentage than the state; red highlighting indicates a higher percentage. Trending denoted as increasing (▲) or decreasing (▼) by ≥2 percentage points since 2015.

**Clinton County data are limited due to low school district participation.

Chronic Disease Data

Leading Chronic Disease Causes of Death, Age-Adjusted Death Rates per 100,000

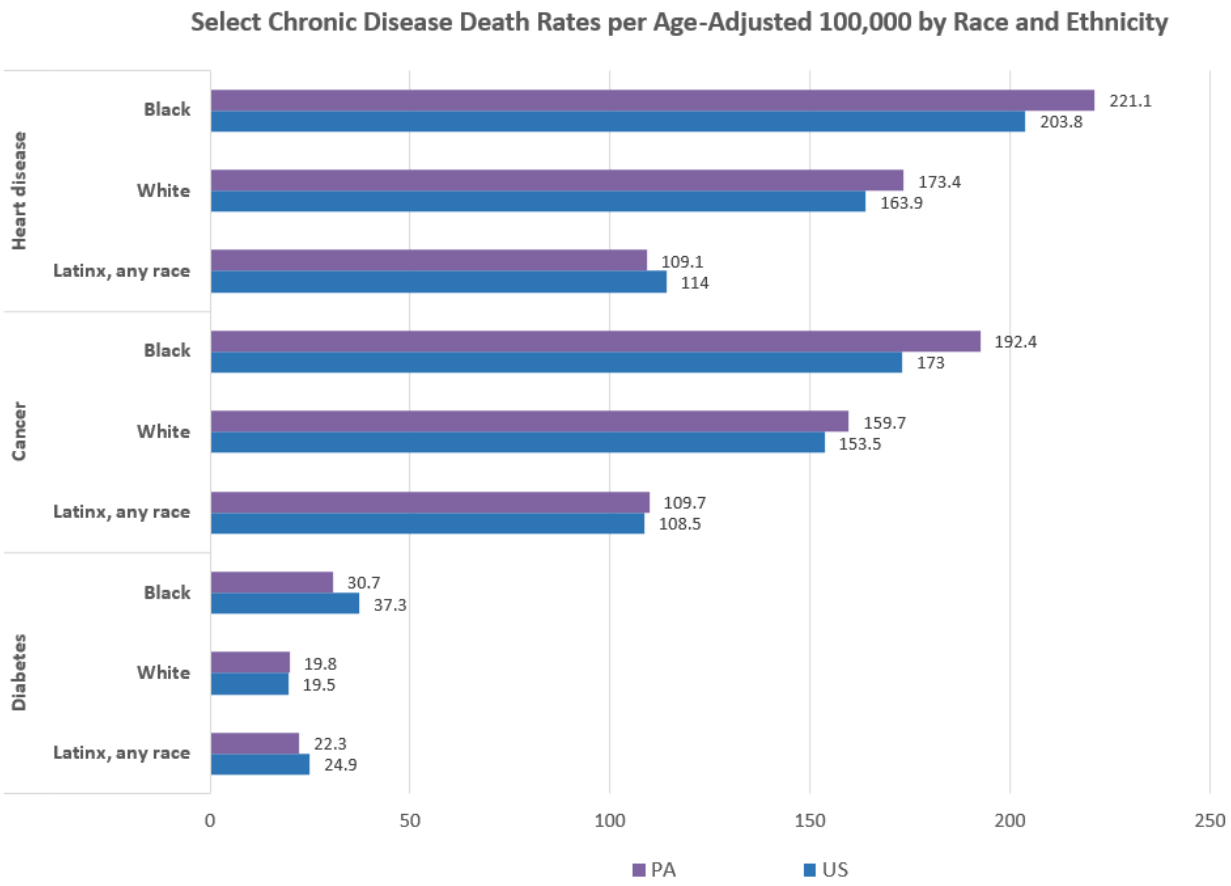
	Clinton County	Lycoming County	PA	US
Heart Disease				
2018	241.2 ▲	158.9 ▼	176.1	163.6
2017	213.4	150.7	176.0	165.0
2016	199.0	162.8	176.2	165.5
2015	197.0	169.2	177.8	168.5
2014	189.5	170.8	175.8	167.0
Cancer				
2018	178.7 ▼	166.2 ▼	156.6	149.1
2017	134.8	174.5	161.0	152.5
2016	193.4	165.2	164.7	155.8
2015	164.3	163.2	167.2	158.5
2014	187.6	185.2	169.6	161.2
Chronic Lower Respiratory Disease (CLRD)				
2016-2018	45.6	44.4 ▼	36.3	40.4
2015-2017	44.5	48.0	37.3	41.0
2014-2016	46.0	49.5	37.3	40.9
Stroke				
2016-2018	21.6 ▼	34.0 ▼	36.2	37.3
2015-2017	23.3	37.3	37.4	37.5
2014-2016	32.4	36.9	37.5	37.2
Diabetes				
2016-2018	25.9 ▲	29.7	20.5	21.3
2015-2017	20.5	27.6	21.1	21.2
2014-2016	20.2	31.2	21.5	21.1

Source: Centers for Disease Control and Prevention

*Death rates for CLRD, stroke, and diabetes are shown as a 3-year aggregate due to lower death counts.

**Green highlighting indicates a lower rate than the state and nation; red highlighting indicates a higher rate. Trending denoted as increasing (▲) or decreasing (▼) by ≥2 points since 2014/2014-2016.

Chronic Disease Data



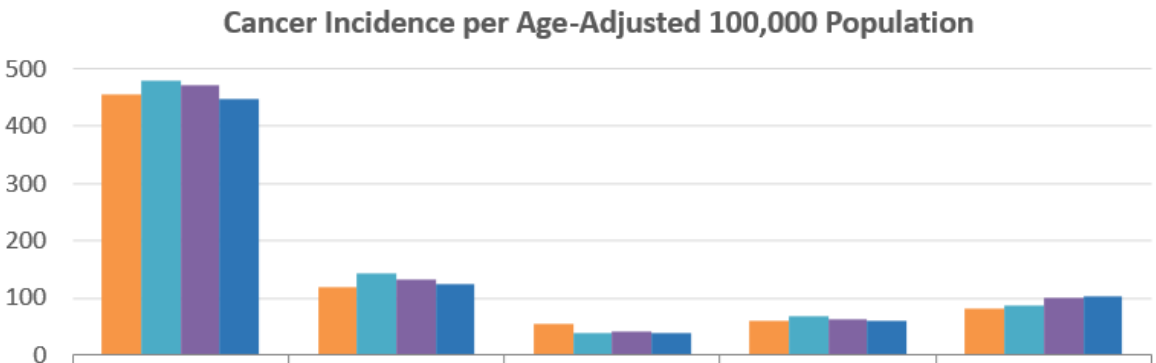
Source: Centers for Disease Control and Prevention, 2016-2018
*Data for North Central Region counties are not reported due to low death counts.

Youth Chronic Disease Prevalence

	Clinton County	Lycoming County	PA
Asthma			
Total students	277	1,333	206,712
Percent	4.9%	8.5%	11.3%
Type II Diabetes			
Total students	2	13	1,052
Percent	0.04%	0.08%	0.06%

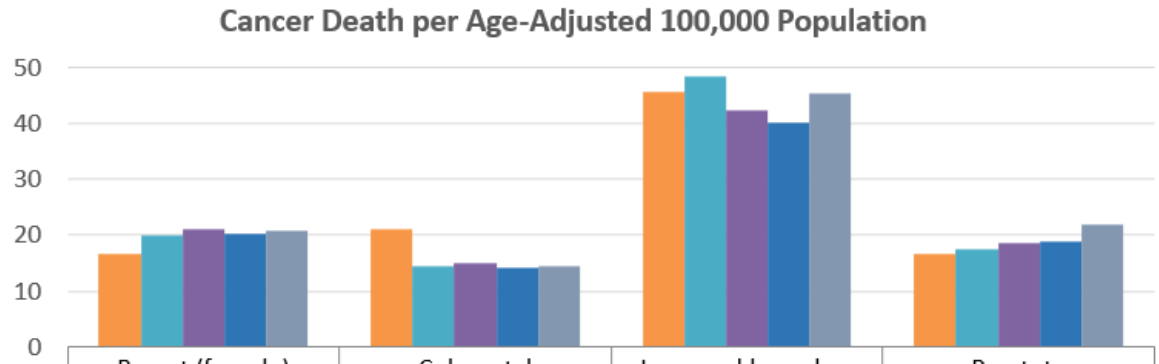
Source: Pennsylvania Department of Health, 2017-2018
*Green highlighting indicates a lower percentage than the state; red highlighting indicates a higher percentage.

Chronic Disease Data



	All Cancers	Breast (female)	Colorectal	Lung and bronchus	Prostate
Clinton	456.2	117.8	55.0	60.2	81.1
Lycoming	480.3	142.4	39.2	67.0	86.0
PA	470.8	131.6	40.9	63.1	101.4
US	448.0	125.2	38.7	59.2	104.1

Source: Pennsylvania Department of Health, 2013-2017; Centers for Disease Control and Prevention, 2012-2016 (most recent available)

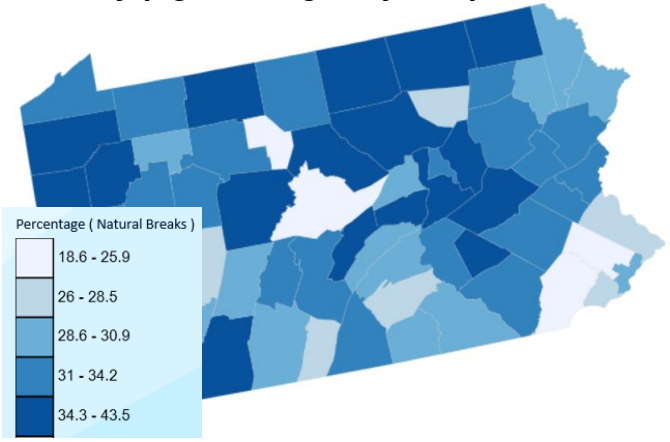


	Breast (female)	Colorectal	Lung and bronchus	Prostate
Clinton	16.8	21.2	45.7	16.8
Lycoming	20.0	14.4	48.3	17.4
PA	21.2	14.9	42.2	18.7
US	20.3	14.1	40.1	19.0
HP2020	20.7	14.5	45.5	21.8

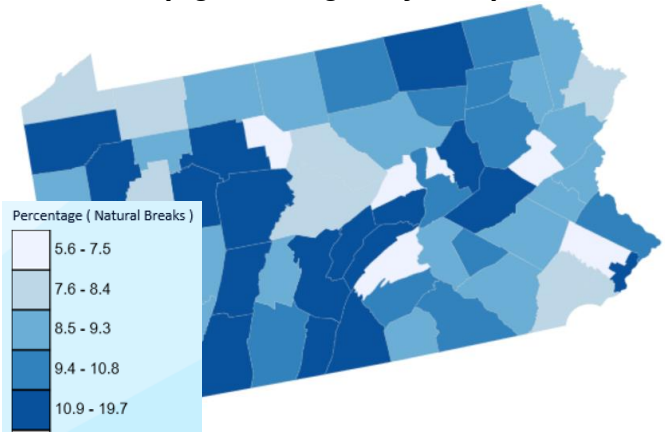
Source: Pennsylvania Department of Health, 2013-2017; Centers for Disease Control and Prevention, 2013-2017

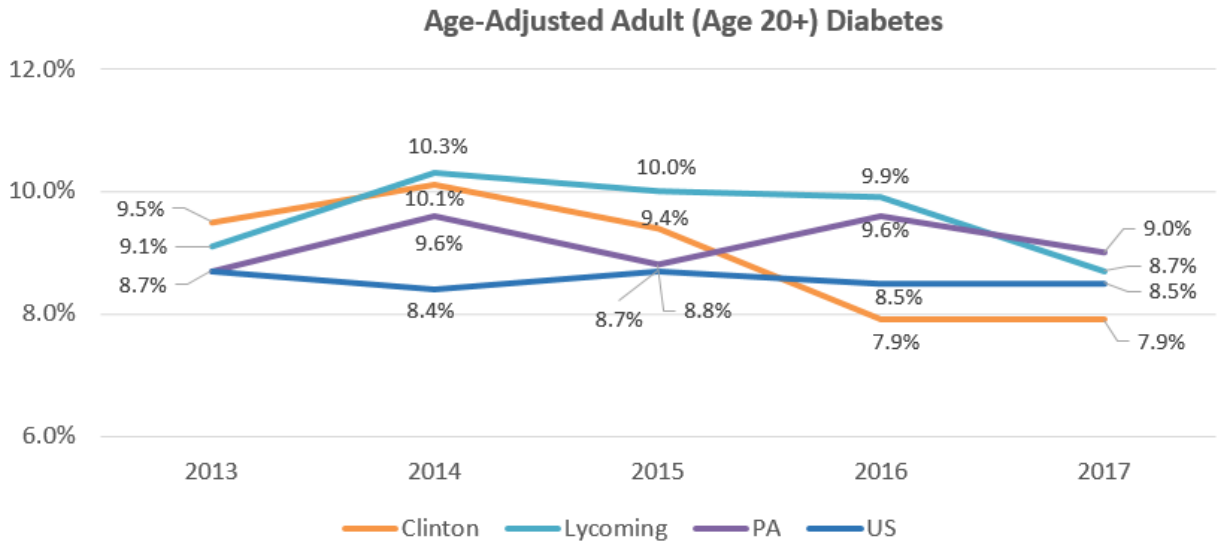
Chronic Disease Data

Obesity (Age 20+, Age-Adjusted), 2017



Diabetes (Age 20+, Age-Adjusted), 2017





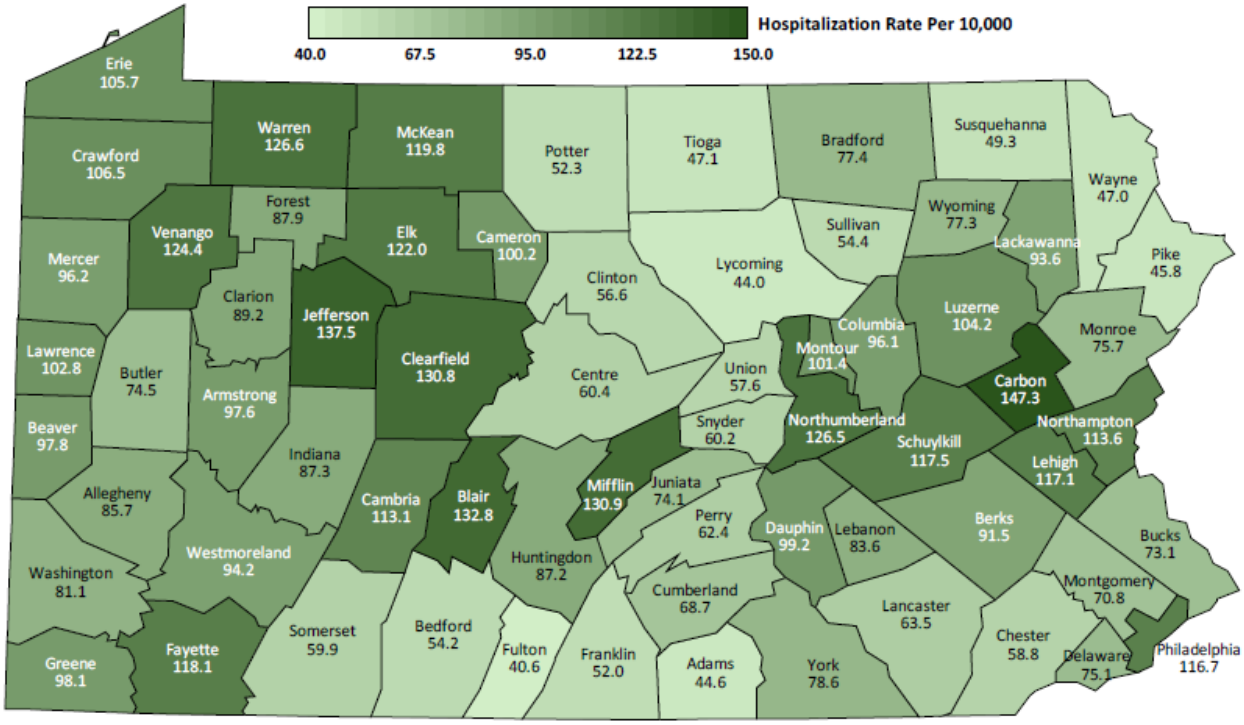
Source: Centers for Disease Control and Prevention

Behavioral Health Key Findings

- Across the state in 2018, there were 113,704 hospital stays for mental disorders for a rate of 88.8 per 10,000 residents. Clinton and Lycoming counties have a lower rate of hospitalizations than the state, but the Clinton County rate is nearly 13 points higher than the Lycoming County rate. Mental distress in Clinton County may be partially attributed to socioeconomic barriers. Statewide, mental disorder hospitalizations were approximately 3 times higher in areas of high poverty and low educational attainment.
- Across the state in 2018, depression diagnoses accounted for nearly 44% of all mental disorders hospitalizations. About half of all patients were between the ages of 18-44 and one-third were ages 45-64.
- The Lycoming County suicide death rate is more than 5 points higher than state and national rates and increasing. Suicide death data for Clinton County are limited due to low counts, but available data also indicate higher rates. This finding, coupled with an elevated mental disorders hospitalization rate in Clinton County and a mental health HPSA designation in both counties, indicate that residents likely do not receive the mental healthcare they need.
- The PA Health Care Cost Containment Council reports that across PA from 2016 to 2017, “the number of hospitalizations for opioid overdose increased from 3,342 to 3,500—a 4.7% increase. In 2018, the number dropped to 2,667—a 23.8% decrease from 2017.” The percentage of overdoses due to pain medication increased from 2017 to 2018, while the percentage due to heroin decreased. Opioid overdose hospitalizations were more prevalent in areas of socioeconomic distress.
- Overdose deaths dropped significantly in the past four years. In Lycoming County, deaths dropped from a high of 38 in 2017 to 3 as reported in August 2020. Clinton County dropped from 10 to 5 deaths during that time.
- As of June 2019, the rate of neonatal abstinence syndrome (NAS) per 1,000 births in Clinton (16.1) and Lycoming (18.8) counties was higher rate than the state (13.8), indicating a potentially at-risk demographic.
- The percentage of adults who report excessive drinking was consistent in Clinton and Lycoming counties from the FY2019 CHNA and similar to the state and nation.
- Driving deaths due to alcohol impairment declined in Clinton and Lycoming counties, but the Lycoming County continues to exceed state and national percentages.
- Lycoming County youth are more likely to report feelings of depression, attempted suicide, and substance use, including alcohol and marijuana, than youth statewide. Youth behavioral health findings for Lycoming County have been largely consistent since 2015. Clinton County data are limited, but indicate that mental health measures, including feelings of depression and attempted suicide, are also elevated.

Behavioral Health Data

Hospitalizations for Mental Disorders per 10,000 Residents, 2018
Statewide Rate: 88.8 per 10,000 Residents



Source: Pennsylvania Health Care Cost Containment Council (PHC4), 2018

Mental Disorders Hospitalizations per 10,000 by Socioeconomic Factors, 2018

	Pennsylvania
Poverty Rate	
Areas of high poverty (>25% of population)	163.3
Areas of low poverty (≤5% of population)	53.0
Education	
Areas of low education (≤10% with a bachelor's degree)	159.4
Areas of higher education (≥40% with a bachelor's degree)	58.4
Race/Ethnicity	
Black, Non-Hispanic	154.0
White, Non-Hispanic	81.7
Hispanic/Latinx	67.9

Source: Pennsylvania Health Care Cost Containment Council (PHC4), 2018

Behavioral Health Data

Mental Disorders Hospital Stays, 2018

	Pennsylvania (Total Hospital Stays: 113,704)
Treatment Setting	
Acute care hospital	56.4%
Psychiatric hospital	43.6%
Average Length of Stay	
Acute care hospital	8.6 days
Psychiatric hospital	12.3 days
Type of Mental Disorder	
Depression	44.0%
Schizophrenia	20.7%
Bipolar	20.2%
Other (conduct, anxiety, somatic, miscellaneous)	7.3%
Suicidal	4.2%
Trauma (adjustment, post-traumatic stress and dissociative disorders)	3.6%
Patient Age	
Under 18 years	14.8%
18-44 years	50.8%
45-64 years	27.2%
65-74 years	4.7%
75 years or over	2.6%

Source: Pennsylvania Health Care Cost Containment Council (PHC4), 2018

Suicide Death HP2020 Goal: 10.2

Suicide Death per Age-Adjusted 100,000 Population

	Clinton County	Lycoming County	PA	US
2016-2018	NA (n=19)	20.4 ▲	14.9	13.9
2015-2017	15.4 (n=20)	19.0	14.6	13.6
2014-2016	NA (n=11)	17.5	14.0	13.2

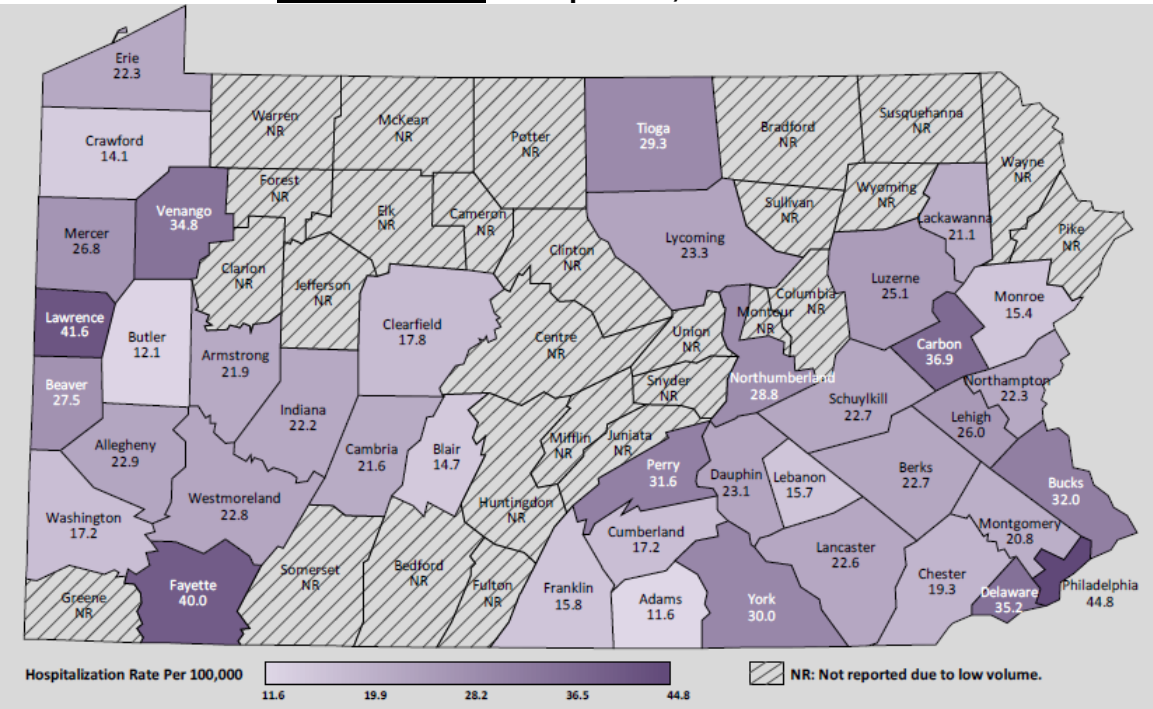
Source: Centers for Disease Control and Prevention

*Green highlighting indicates a lower rate than the state and nation; red highlighting indicates a higher rate. Trending denoted as increasing (▲) or decreasing (▼) by ≥2 points since 2014-2016.

Behavioral Health Data

Opioid Overdose Hospitalizations per 100,000 Residents, 2018

Statewide Rate: 25.1 per 100,000 Residents



Source: Pennsylvania Health Care Cost Containment Council (PHC4), 2018

Opioid Overdose Hospitalizations, 2018

	Pennsylvania
Total Hospitalizations	
2018	2,667
2017	3,500
2016	3,342
Heroin Overdose Admissions	
2018	1,115 (41.8%)
2017	1,753 (50.1%)
2016	1,555 (46.5%)
Pain Medication Overdose Admissions	
2018	1,552 (58.2%)
2017	1,747 (49.9%)
2016	1,787 (53.5%)

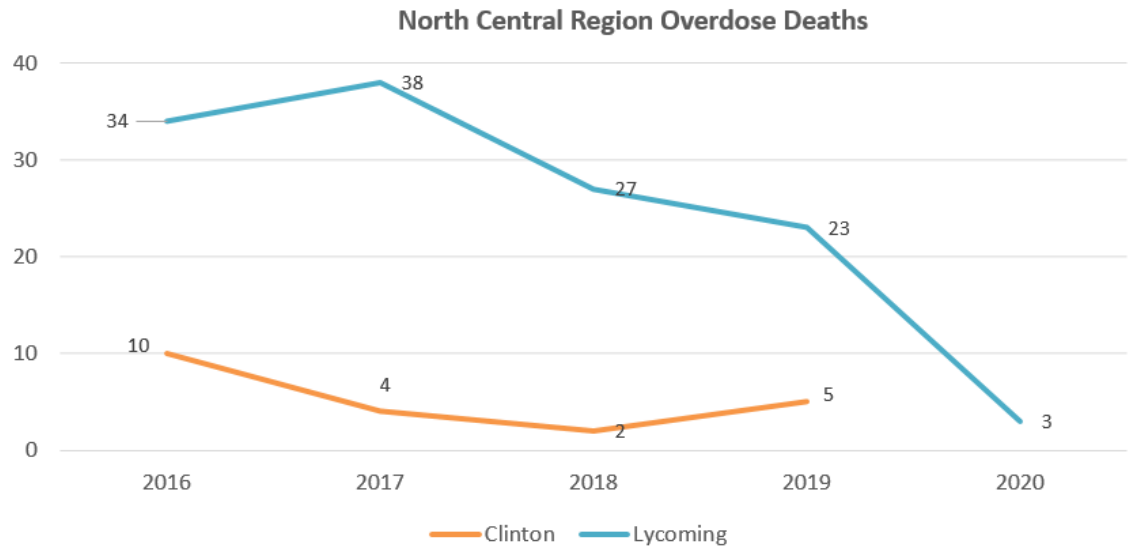
Source: Pennsylvania Health Care Cost Containment Council (PHC4), 2018

Behavioral Health Data

Opioid Overdose Hospitalizations per 100,000 by Socioeconomic Factors, 2018

	Pennsylvania
Income	
Low-income areas (avg. less than $30,000)	54.4
High-income areas (avg. $90,000 or higher)	17.3
Education	
Areas of low education (≤10% with a bachelor's degree)	46.2
Areas of higher education (≥60% with a bachelor's degree)	14.6
Race/Ethnicity	
Black, Non-Hispanic	28.9
White, Non-Hispanic	25.2
Hispanic/Latinx	20.0

Source: Pennsylvania Health Care Cost Containment Council (PHC4), 2018



Source: OverdoseFreePA

*Data are reported as available through 2020; 2020 counts reflect deaths reported as of August.

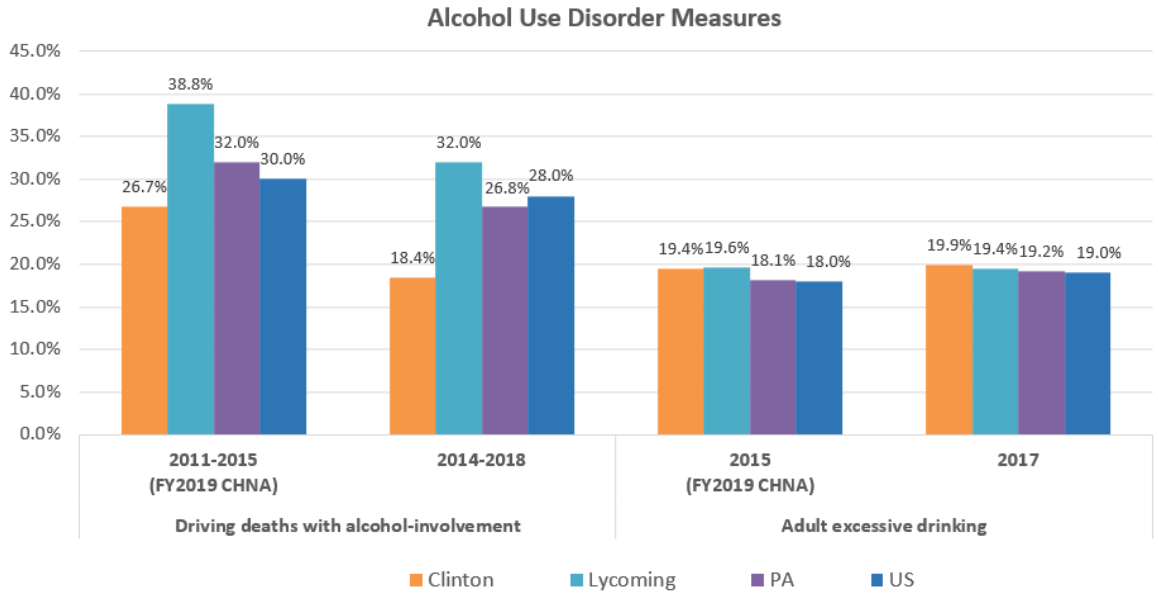
Neonatal Abstinence Syndrome (NAS), FY2019

	Clinton County	Lycoming County	PA
Number of NAS stays	NA	19	1,733
Rate per 1,000 newborn stays	18.8	16.1	13.8

Source: Pennsylvania Health Care Cost Containment Council (PHC4), July 1, 2018-June 30, 2019

*PHC4 defines NAS as "An array of withdrawal symptoms that develops soon after birth in newborns exposed to addictive drugs (e.g., opioids) while in the mother's womb."

Behavioral Health Data



Source: Centers for Disease Control and Prevention & National Highway Safety Administration

Youth Behavioral Health Measures (Grades 6, 8, 10, 12)

	Clinton County	Lycoming County	PA
Sad or Depressed Most Days in the Past Year			
2019	NA	42.7%	38.0%
2017	39.4%	42.1%	38.1%
2015	NA	42.3%	38.3%
Attempted Suicide			
2019	NA	11.6%	9.7%
2017	11.5%	10.6%	10.0%
2015	NA	10.9%	9.5%
Alcohol Use within Past 30 Days			
2019	NA	18.5%	16.8%
2017	11.3%	17.0%	17.9%
2015	NA	17.6%	18.2%
Marijuana Use within Past 30 Days			
2019	NA	9.8%	9.6%
2017	5.9%	9.6%	9.7%
2015	NA	10.2%	9.4%

Source: Pennsylvania Commission on Crime and Delinquency

*Green highlighting indicates a lower percentage than the state; red highlighting indicates a higher percentage. Trending denoted as increasing (▲) or decreasing (▼) by ≥2 percentage points since 2015.

**Clinton County data are limited due to low school district participation.

Maternal and Child Health Key Findings

- The birth rate continued to decline statewide, but remained relatively constant in Clinton and Lycoming counties. Both counties have a similar birth rate as the state. Consistent with current and projected county demographics, 87% of births in Lycoming County and 98% of births in Clinton County are to White mothers. Approximately 7% of births in Lycoming County are to Black mothers.
- The percentage of births to teens has historically been higher in Clinton and Lycoming counties compared to the state. As of 2018, teen births declined in Clinton County, but increased in Lycoming County. The increase in Lycoming County is of particular concern as teen births had previously been declining.
- The percentage of pregnant women receiving first trimester prenatal care has been consistent in Clinton and Lycoming counties since 2015 with 78%-80% of Lycoming County women and approximately 66%-67% of Clinton County women receiving early prenatal care. Lycoming County exceeds state and national benchmarks and findings are consistent across racial and ethnic groups, contrary to wide disparities reported statewide and nationally. Clinton County lags Lycoming County by 10 percentage points.
- The percentage of low birth weight and preterm births in Clinton and Lycoming counties has been variable, but both counties saw small increases from 2017 to 2018. Despite positive prenatal care findings, Lycoming County has a higher percentage of both low birth weight and preterm births than the state and nation; Black mothers are about 1.5 times more likely than White mothers to experience poorer outcomes for these metrics.
- More women in Clinton County (82.9%) are exclusively breastfeeding their infants at the time of hospital discharge than women in Lycoming County (79.4%). In Lycoming County, the percentage of White mothers who breastfeed (81%) is in line with Clinton County and the state, while disparity exists for Black (70%) and Latina mothers (65%). Of note, this indicator has been variable for both counties, with Clinton County dramatically outpacing the state and national averages before a 6-point decline in 2018.
- More women smoke during pregnancy in the North Central Region than across the state and nation. Trending for women who do not smoke during pregnancy steadily improved for the state and nation, but Clinton and Lycoming counties have seen moderate improvement on a variable trend line. In Lycoming County, Latina mothers (86%) are least likely to smoke, followed by Black mothers (82%), and White mothers (82%).
- Lycoming County saw poorer maternal and child health outcomes from 2017 to 2018. Consistent with these trends, the county's infant death rate increased after years of notable decline. Lycoming County's 2016-2018 infant death rate exceeds state and national rates. The opioid crisis may have contributed to this increase, as demonstrated by the increased number of infants that developed NAS.
- As demonstrated in these data, across PA and the nation, Black and/or Latina mothers experience notable maternal and child health disparities. Of grave concern, as a national average, Black mothers are more than 2.5 times as likely as White and/or Latina mothers to die due to pregnancy-related causes.

Maternal and Child Health Data

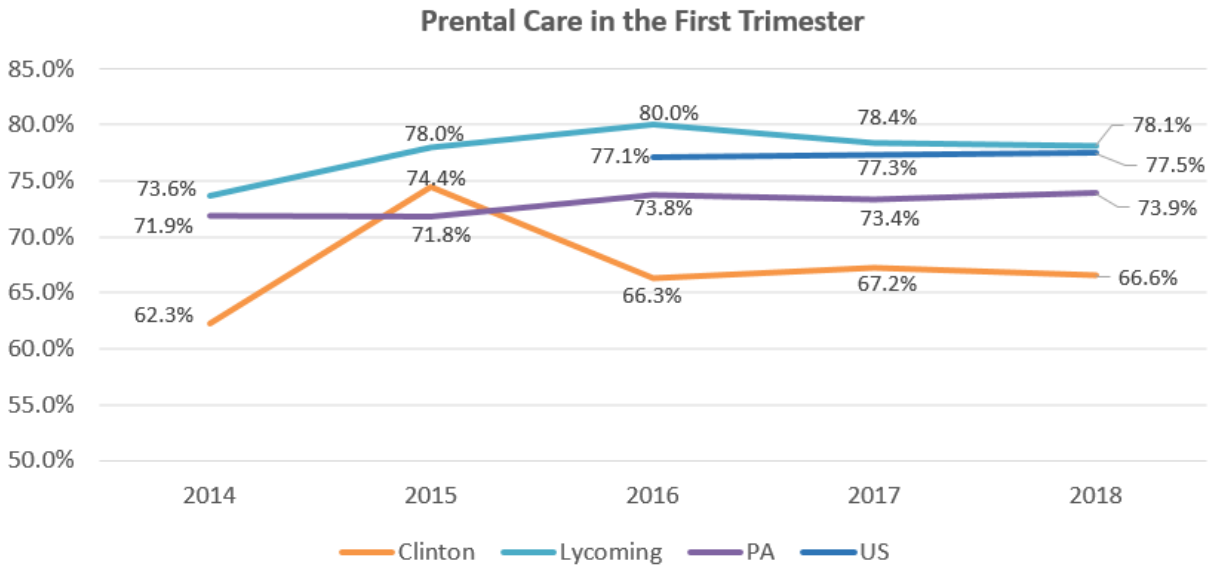
Total Births

	Clinton County	Lycoming County	PA
Birth Rate per 1,000			
2018	21.3	20.9	20.8
2017	19.7	20.1	21.1
2016	20.3	20.8	21.4
2015 (FY2019 CHNA)	21.0	20.4	21.5
2018 Births by Race and Ethnicity			
Total	419	1,210	135,677
Asian	0.5%	0.8%	4.6%
Black	0.0%	6.9%	13.9%
White	97.6%	87.1%	70.1%
Latinx	1.9%	1.7%	11.6%
Births to Teens			
2018	4.8% ▼	6.7%	4.1%
2017	6.9%	3.9%	4.3%
2016	6.4%	4.7%	4.6%
2015 (FY2019 CHNA)	6.9%	6.3%	5.1%

Source: Pennsylvania Department of Health

*Green highlighting indicates a lower percentage than the state; red highlighting indicates a higher percentage. Trending denoted as increasing (▲) or decreasing (▼) by ≥2 points since 2015.

Maternal and Child Health Data



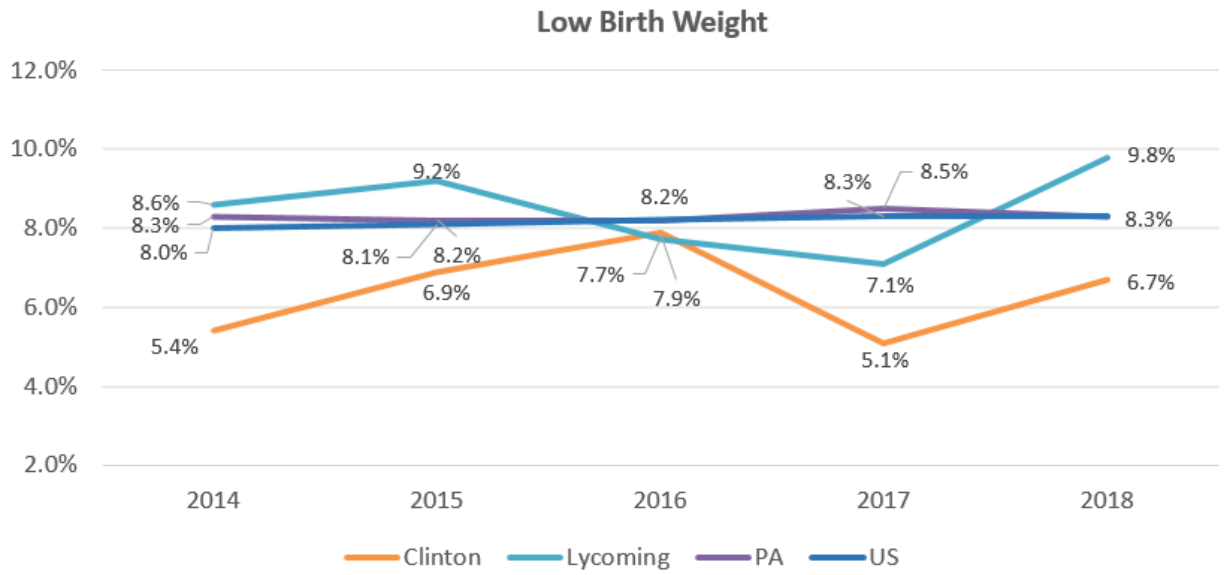
Source: Pennsylvania Department of Health & Centers for Disease Control and Prevention
*Starting in 2016, all of the US reported data based on the 2003 US Certificate of Live Birth, providing national indicators.

Prenatal Care in the First Trimester by Race and Ethnicity

	Total Births	Asian	Black	White	Latina
Clinton County	66.6%	NA	NA	66.1%	NA
Lycoming County	78.1%	NA	76.6%	78.8%	76.2%
PA	73.9%	73.0%	64.6%	77.3%	65.3%
US	77.5%	81.8%	67.1%	82.5%	72.7%
HP2020	77.9%	--	--	--	--

Source: Pennsylvania Department of Health, 2018 & Centers for Disease Control and Prevention, 2018
*Green highlighting indicates a higher percentage than state and national benchmarks; red highlighting indicates a lower percentage.

Maternal and Child Health Data



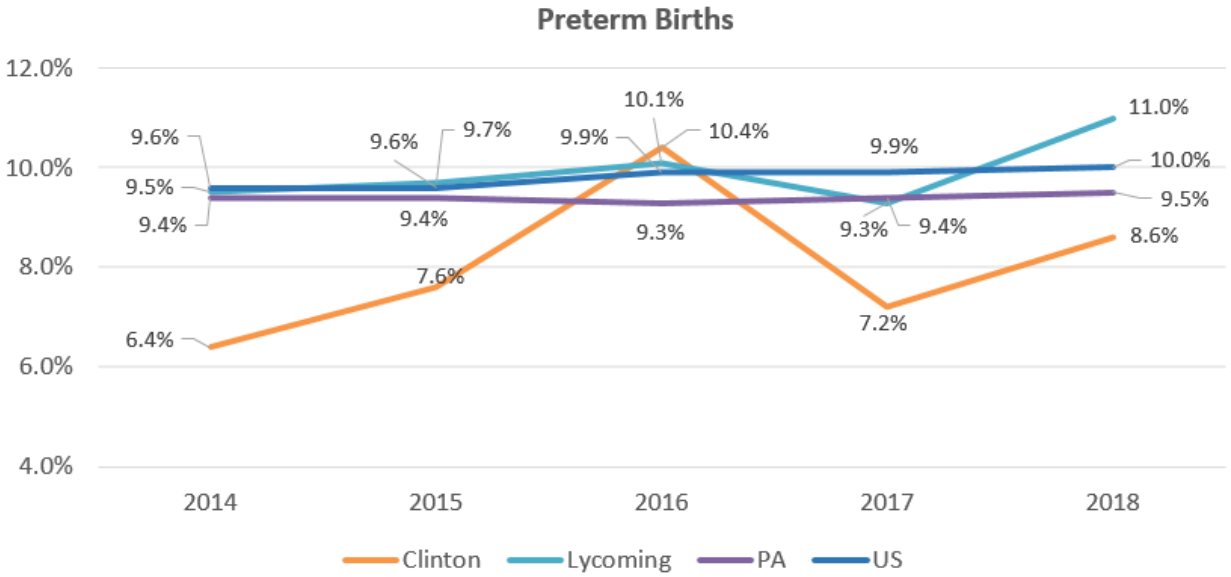
Source: Pennsylvania Department of Health & Centers for Disease Control and Prevention

Low Birth Weight by Race and Ethnicity

	Total Births	Asian	Black	White	Latinx
Clinton County	6.7%	NA	NA	6.6%	NA
Lycoming County	9.8%	NA	15.7%	9.5%	NA
PA	8.3%	8.8%	13.9%	7.0%	9.0%
US	8.3%	8.6%	14.1%	6.9%	7.5%
HP2020	7.8%	--	--	--	--

Source: Pennsylvania Department of Health, 2018 & Centers for Disease Control and Prevention, 2018
*Green highlighting indicates a lower percentage than state and national benchmarks; red highlighting indicates a higher percentage.

Maternal and Child Health Data



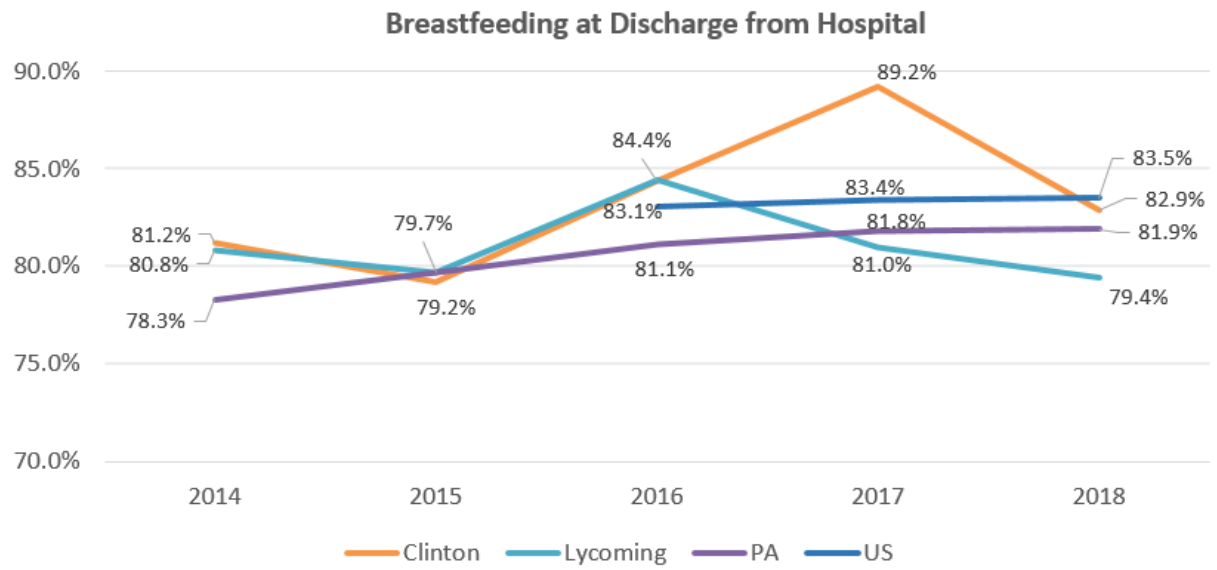
Source: Pennsylvania Department of Health & Centers for Disease Control and Prevention

Preterm Births by Race and Ethnicity

	Total Births	Asian	Black	White	Latinx
Clinton County	8.6%	NA	NA	8.3%	NA
Lycoming County	11.0%	NA	14.5%	10.7%	NA
PA	9.5%	8.1%	13.6%	8.7%	10.0%
US	10.0%	8.6%	14.1%	9.1%	9.7%
HP2020	9.4%	--	--	--	--

Source: Pennsylvania Department of Health, 2018 & Centers for Disease Control and Prevention, 2018
*Green highlighting indicates a lower percentage than state and national benchmarks; red highlighting indicates a higher percentage.

Maternal and Child Health Data



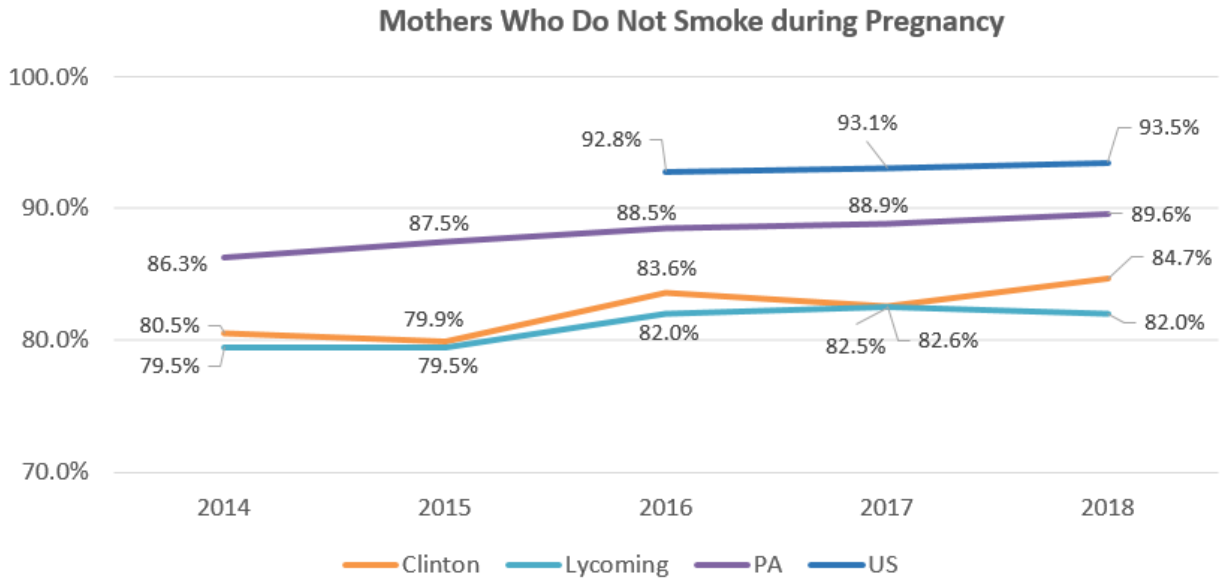
Source: Pennsylvania Department of Health & Centers for Disease Control and Prevention
*Starting in 2016, all of the US reported data based on the 2003 US Certificate of Live Birth, providing national indicators.

Breastfeeding at Discharge from Hospital by Race and Ethnicity

	Total Births	Asian	Black	White	Latina
Clinton County	82.9%	NA	NA	83.4%	NA
Lycoming County	79.4%	NA	69.6%	80.7%	65.0%
PA	81.9%	92.1%	76.7%	82.4%	80.6%
US	83.5%	90.9%	72.3%	84.9%	87.1%
HP2020	81.9%	--	--	--	--

Source: Pennsylvania Department of Health, 2018 & Centers for Disease Control and Prevention, 2018
*Green highlighting indicates a higher percentage than state and national benchmarks; red highlighting indicates a lower percentage.

Maternal and Child Health Data



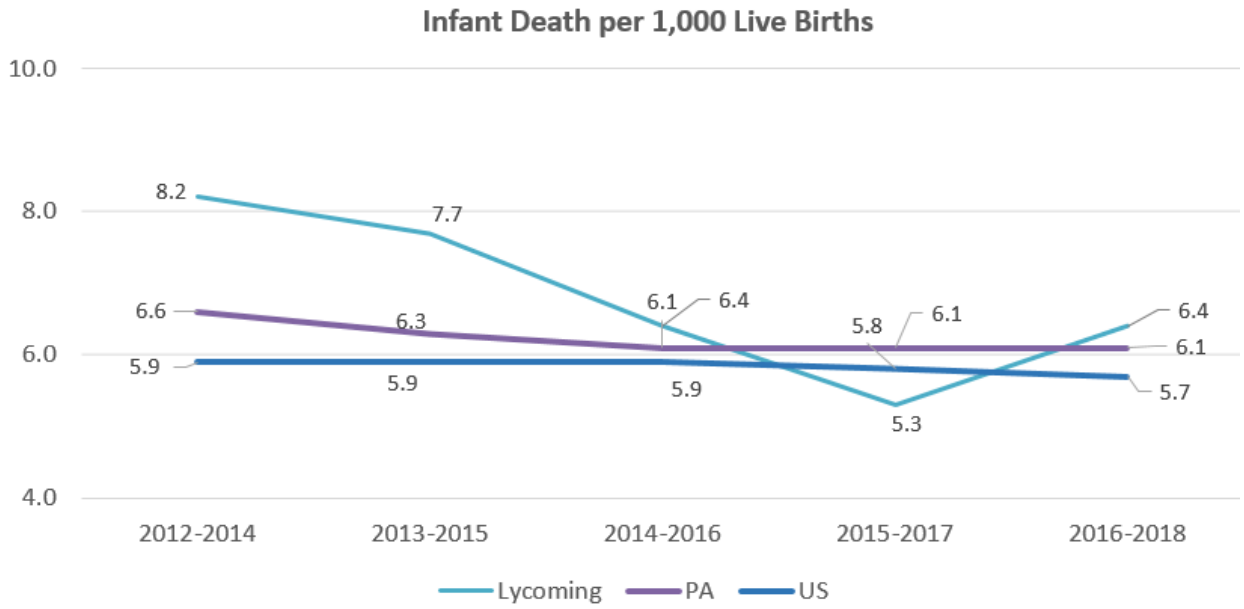
Source: Pennsylvania Department of Health & Centers for Disease Control and Prevention
*Starting in 2016, all of the US reported data based on the 2003 US Certificate of Live Birth, providing national indicators.

Mothers Who Do Not Smoke during Pregnancy by Race and Ethnicity

	Total Births	Asian	Black	White	Latina
Clinton County	84.7%	NA	NA	84.8%	NA
Lycoming County	82.0%	100%	81.9%	82.2%	85.7%
PA	89.6%	99.2%	91.8%	88.1%	94.6%
US	93.5%	99.5%	94.8%	90.5%	98.3%
HP2020	98.6%	--	--	--	--

Source: Pennsylvania Department of Health, 2018 & Centers for Disease Control and Prevention, 2018
*Green highlighting indicates a higher percentage than state and national benchmarks; red highlighting indicates a lower percentage.

Maternal and Child Health Data



Source: Pennsylvania Department of Health & Centers for Disease Control and Prevention
*Clinton County data are not reported due to low death counts.

Maternal Death per 100,000 Live Births

	Total Deaths	Total Death Rate	Black Death Rate	White Death Rate	Latina Death Rate
PA	19	14.0	NA	NA	NA
US	658	17.4	37.1	14.7	11.8

Source: Pennsylvania Department of Health, 2018 & Centers for Disease Control and Prevention, 2018
*Maternal deaths include deaths of women while pregnant or within 42 days of termination of pregnancy, from any cause related to pregnancy or its management.

Aging Population Key Findings

- Clinton and Lycoming counties are aging faster than the population statewide and nationally, and seniors are less healthy overall. Both counties exceed national benchmarks for multiple chronic conditions among senior Medicare beneficiaries. Clinton County also has a higher, increasing percentage of beneficiaries with 4 or more chronic conditions.
- Seniors spend more money on healthcare than any other age group, and spending increases with a higher reported number of chronic conditions. Within the North Central Region, senior Medicare beneficiaries with 6 or more chronic conditions have more than $25,000 in annual expenses, with the highest spending in Clinton County.
- Across both counties, senior Medicare beneficiaries have a lower prevalence of asthma, cancer, and ischemic heart disease compared to the state and nation, but a higher prevalence of Alzheimer's disease, COPD, depression, and high cholesterol. Chronic conditions, particularly related to heart disease, are generally more prevalent among senior Medicare beneficiaries in Clinton County.
- Alzheimer's disease death rates among seniors increased statewide and nationally before leveling off in recent years. Some of the increase in death rates may be due to reclassification of cause of death to Alzheimer's disease as the primary cause of death rather than the resulting acute condition e.g. pneumonia or heart failure. The Alzheimer's disease death rate for Clinton and Lycoming counties declined in recent years, but the Clinton County rate remains notable higher than both the state and nation.
- As seniors age, they are at risk for isolation due to physical limitations and decreasing social circles. One indicator of isolation is the percentage of seniors who live alone. The percentage of seniors living alone increased statewide and nationally with a higher percentage in PA (13%) versus the US (11%). More Clinton County seniors live alone compared to Lycoming County, PA, and the national averages. This finding is of particular concern due to the prevalence of chronic disease among Clinton County seniors. The percentage of Lycoming County seniors living alone has been stable and similar to the statewide percentage.

Aging Population Data

2017 Chronic Conditions among Medicare Beneficiaries 65 Years or Over

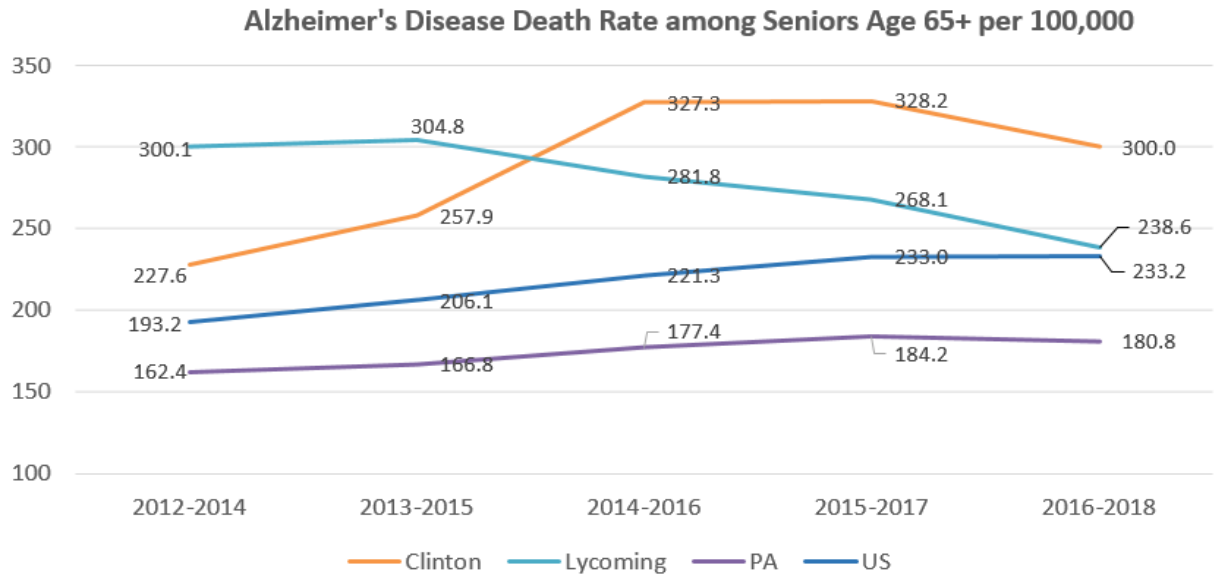
	Clinton County	Lycoming County	PA	US
Multiple Chronic Conditions (Comorbidities)				
2 to 3 Conditions	31.8% ▼	32.8% ▼	31.1%	29.6%
2015 (FY2019 CHNA comparison)	34.1%	34.4%	31.1%	30.0%
4 to 5 Conditions	24.9% ▲	22.9%	22.9%	21.8%
2015 (FY2019 CHNA comparison)	23.6%	23.2%	22.9%	21.6%
6 or More conditions	18.5% ▲	18.0% ▲	18.2%	17.4%
2015 (FY2019 CHNA comparison)	16.7%	16.3%	17.6%	16.2%
Per Capita Standardized[1] Spending				
2 to 3 Conditions	$4,739	$4,736	$5,141	$5,392
4 to 5 Conditions	$8,645	$9,504	$10,117	$10,475
6 or More conditions	$27,815	$25,656	$29,184	$29,004
Chronic Condition Prevalence by Type				
Alzheimer's Disease	12.4%	13.4%	12.2%	12.1%
Arthritis	37.0%	33.6%	36.1%	34.2%
Asthma	4.1%	4.1%	4.9%	4.6%
Cancer	8.6%	9.1%	10.1%	9.2%
COPD	14.0%	12.2%	11.2%	11.6%
Depression	16.6%	16.8%	16.1%	15.4%
Diabetes	26.9%	27.6%	26.6%	27.4%
Heart Failure	17.9%	14.5%	14.4%	14.5%
High Cholesterol	53.4%	50.3%	47.6%	43.0%
Hypertension	64.6%	62.3%	62.3%	59.9%
Ischemic Heart Disease	26.7%	26.5%	29.9%	28.8%
Stroke	4.2%	3.6%	4.6%	4.0%

Source: Centers for Medicare & Medicaid Services, 2015 & 2017

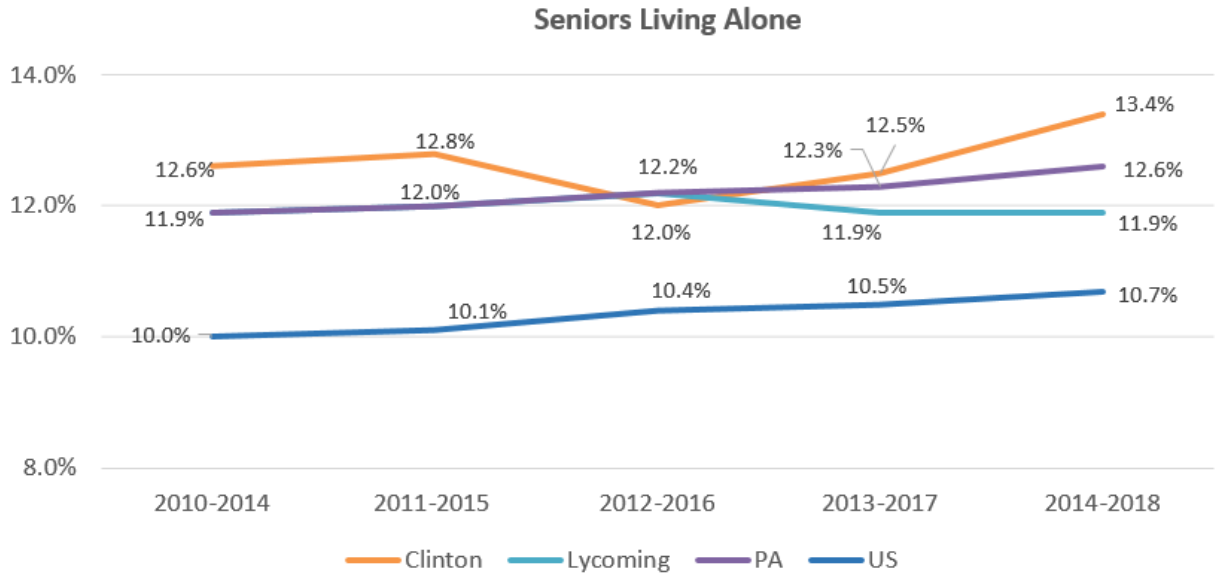
*Green highlighting indicates a lower burden of disease than the state and nation; red highlighting indicates a higher burden. Trending denoted as increasing (▲) or decreasing (▼) by ≥1 percentage point since 2015.

[1] Standardized spending takes into account payment factors that are unrelated to the care provided (e.g. geographic variation in Medicare payment amounts)

Aging Population Data



Source: Centers for Disease Control and Prevention



Source: US Census Bureau

Key Informant Survey Findings

Background

A Key Informant Survey was conducted with community representatives of the North Central Region to solicit information about health needs among residents. A total of 27 individuals responded to the survey, including health and social service providers; community and public health experts; civic, religious, and social leaders; policy makers; and others representing diverse populations including minority, low-income, and underserved residents. A list of the represented community organizations and the key informants' respective titles is included in Appendix C. Key informant names are withheld for confidentiality.

These key informants were asked a series of questions about their perceptions of community health including health drivers, barriers to care, community infrastructure, and needed services within the community. Following is a summary of findings from their responses.

Summary of Findings

- Key informants identified the North Central Region's top community strengths as access to healthcare services (48%) and safe neighborhoods (41%).
- A similar percentage of key informants identified overweight/obesity (59%) and mental health conditions (56%) among the region's top community health concerns. Thirty-seven percent (37%) of key informants identified aging-related problems among the top three health concerns, followed by diabetes and substance use disorder, each chosen by one-third of respondents.
- Diet and physical activity and drug/alcohol ranked as the top contributors to community health concerns with 41%-44% of key informants confirming these factors. Health literacy and lack of transportation were chosen by 30% of respondents, and ability to afford healthcare by 18.5% of respondents.
- Mental health services were seen as the top missing resource, indicated among the top three by 63% of respondents. Transportation options were the second ranked missing health resource with 44% of informants choosing it as a needed service.
- While overweight/obesity was the top ranked health need and health habits was the top ranked contributing factor, only one-third of informants identified health and wellness education and programs as missing resources within the community.
- Overall quality of life in the North Central Region was largely seen as stagnant (63%) or improving (18.5%) over the past 3-5 years. Social determinants of health (SDoH) are key indicators of quality of life. Informants perceived the greatest improvement in "health and healthcare" and the greatest decline in "economic stability" and "social and community context." These findings may be indicative of the economic impact of COVID-19 and the acknowledgement of historical and systemic racial inequities.

- Approximately 85% of informants “agreed” or “strongly agreed” that health and social service providers welcome partnership opportunities with area hospitals, and 81% of informants “agreed” or “strongly agreed” that they regularly partner with hospitals on health improvement initiatives. Some informants commented that more work is needed to ensure effective collaboration to address health needs and to engage residents when developing health initiatives.
- Key informants viewed the top perceived barriers to health and social service partnerships as the ability to demonstrate outcomes (46%) and lack of shared data or measurement tools (42%).
- Key informants were “somewhat” to “moderately” worried about the long-term impact of COVID-19 on communities and residents. They were most concerned about the well-being of the elderly, the mental and emotional health of residents, and the well-being of healthcare workers.
- When asked to share how their organization is effectively engaging community residents during COVID-19, many informants spoke to the increased use of technology and social media to provide virtual learning and service environments, town halls and other forums to increase community awareness of COVID-19, more programs and services offered within the community, and cross-sector partnerships to better understand COVID-related needs and disseminate available information and resources.

Survey Participants

Twenty-seven (27) key informants represented diverse organizations and populations across the North Central Region. Nearly all key informants indicated that they served residents of Lycoming County, and two-thirds of informants indicated that they served residents of Clinton County. More than 50% of key informants served all populations. The most commonly served special population groups were seniors/elderly, children/youth, and families.

North Central Region Counties Served by Key Informants

	Percent of Informants*	Number of Informants
Lycoming County	96.3%	26
Clinton County	66.7%	18

*Key informants were able to select multiple counties. Percentages may not add up to 100%.

Populations Served by Key Informants

	Percent of Informants*	Number of Informants
Not Applicable (serve all populations)	55.6%	15
Seniors/Elderly	40.7%	11
Children/Youth	37.0%	10
Families	37.0%	10
Low-Income/Poor	33.3%	9
Women	25.9%	7
Black/African American	18.5%	5
Emotionally or Physically Disabled	18.5%	5
Hispanic/Latinx	18.5%	5
LGBTQ+	18.5%	5
Men	18.5%	5
Uninsured/Underinsured	18.5%	5
Homeless	14.8%	4
Asian/Pacific Islander	11.1%	3
Veteran	11.1%	3
American Indian/Alaska Native	7.4%	2
Immigrant/Refugee	7.4%	2
Other**	3.7%	1

*Key informants were able to select multiple populations. Percentages do not add up to 100%.

**Other populations included: Plain community

Community Health and Well-Being

An asset-based approach to health improvement planning acknowledges and makes visible the strengths, resources, and potential in communities. This approach helps community planners to identify the existing factors that support resident health and well-being to better mobilize stakeholders.

Community Strengths

Choosing from a wide-ranging list of environmental, health, and social resources, key informants were asked to select the top three strengths in the communities they serve. An option to “write in” any resource not included on the list was provided. The top responses are depicted in the table below. The table is rank ordered by the percentage of respondents that selected the resource as a top three community strength.

Access to healthcare services and safe neighborhoods were identified as the top strengths in the North Central Region by 41%-48% of key informants. Nearly one-third of respondents saw good schools as a key community strength, followed by available social services, chosen by about one-quarter of respondents. Five or fewer key informants selected the other available options as community strengths.

Top Community Strengths

Ranking	Community Strength	Informants Selecting as a Top 3 Community Strength	
		Percent*	Count
1	Access to healthcare services	48.2%	13
2	Safe neighborhoods	40.7%	11
3	Good schools	29.6%	8
4	Available social services	25.9%	7
5	Recreation resources	18.5%	5
6	Community connectedness	14.8%	4
6	Strong family life	14.8%	4
6	Resources for seniors	14.8%	4
6	Walkable, bike friendly communities	14.8%	4
10	Access to healthy foods	7.4%	2
10	Available public transportation	7.4%	2
10	Affordable housing	7.4%	2

*Key informants were able to select up to three community strengths. Percentages do not add up to 100%.

Health Concerns

Key informants were asked to similarly select what they perceived as the top three health concerns and contributing factors impacting the population(s) they serve. An option to “write in” any health issue or contributing factor not included on the lists was provided. The top responses are depicted in the tables below. The tables are rank ordered by the percentage of respondents that selected the issue or contributing factor as a top three concern.

Most survey participants agreed on the top two health concerns affecting residents. Nearly 60% of key informants chose “overweight/obesity” among the top three community health concerns and approximately 56% chose mental health conditions. There was less agreement on the third and lower ranking issues. Thirty-seven percent (37%) acknowledged aging-related problems as a top issue while about one-third each chose diabetes and substance use disorder among their top three concerns.

Top Health Concerns Affecting Residents

Ranking	Health Concern	Informants Selecting as a Top 3 Health Concern	
		Percent*	Count
1	Overweight/Obesity	59.3%	16
2	Mental health conditions	55.6%	15
3	Aging-related problems	37.0%	10
4	Diabetes	33.3%	9
4	Substance use disorder	33.3%	9
6	Heart disease and stroke	14.8%	4
7	Dental problems	11.1%	3
7	Tobacco use	11.1%	3
8	Cancers	7.4%	2
8	Respiratory disease	7.4%	2
8	Vaping/E-cigarette use	7.4%	2

*Key informants were able to select up to three health concerns. Percentages do not add up to 100%.

Key informants' responses relevant to the top contributing factors are consistent with their responses for the top health concerns. Forty-four percent (44%) of key informants included health habits related to diet and physical activity as one of three top contributing factors to health concerns. Forty-one percent (41%) listed drug and alcohol use. This consistency between health concerns and contributing factors suggests an understanding of the importance to address these issues. Agreement on other significant factors was similarly less consistent for the third and lower rankings. About 30% each ranked health literacy and lack of transportation as a top need; followed by 18.5% for ability to afford care and poverty.

Top Contributing Factors to Community Health Concerns

Ranking	Contributing Factor	Informants Selecting as a Top 3 Contributor	
		Percent*	Count
1	Health habits (diet, physical activity)	44.4%	12
2	Drug/Alcohol use	40.7%	11
3	Health literacy (ability to understand health information)	29.6%	8
3	Lack of transportation	29.6%	8
5	Ability to afford healthcare	18.5%	5
5	Poverty	18.5%	5
7	Lack of social support (family, friends, social network)	14.8%	4
8	Availability of healthcare providers	11.1%	3
8	Food insecurity	11.1%	3
8	Lack of preventive healthcare (screenings, annual check-ups)	11.1%	3
8	Stress (work, family, school, etc.)	11.1%	3

*Key informants were able to select up to three contributing factors. Percentages do not add up to 100%.

Missing Resources

Key informants were asked what resources are missing in the community that would help residents optimize their health. Respondents could choose as many options as they saw as needed. An option to "write in" any resource not included on the list was provided.

More than 60% of key informants chose mental health services among the top three missing resources within the community. Transportation—also identified as a top contributor to regional health concerns—was the second ranked missing resource with almost 45% of respondents choosing it. Consistent with other top ranked health needs, substance use disorder services and health and wellness education and programs were both indicated as missing services by one-third of respondents.

Top Missing Resources within the Community to Optimize Health

Ranking	Resource	Percent of Informants	Number of Informants
1	Mental health services	63.0%	17
2	Transportation options	44.4%	12
3	Health and wellness education and programs	33.3%	9
3	Substance use disorder services	33.3%	9
5	Social services assistance (housing, electric, food, clothing)	25.9%	7
6	Adult education (GED, training, work force development)	22.2%	6
6	Community health screenings (blood pressure, cancer risk, stroke, etc.)	22.2%	6
6	Dental care	22.2%	6
6	Healthy food options	22.2%	6
10	Community support groups	18.5%	5

Social Determinants of Health

The US Department of Health and Human Services' Healthy People initiative defines social determinants of health (SDoH) as, "The conditions in the environments where people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality of life outcomes and risks."

Informants were asked to rate select SDoH dimensions, as well as overall quality of life, based on perceived trends in the community over the past 3-5 years. Statements were rated on a scale of (1) "declined" to (3) "improved." Key informants' responses are outlined in the table below; SDoH are rank ordered by mean score.

According to survey responses, overall quality of life in the North Central Region has been largely consistent (63%) over the past 3-5 years; similar percentages of informants indicated it improved (18.5%) or declined (15%). Related to SDoH, informants perceived the greatest progress in "health and healthcare" with just over one-quarter of respondents indicating that this dimension improved over the past 3-5 years. Other SDoH dimensions were largely seen as

remaining the same or declining. “Social and community context” and “economic stability” were seen as declining by 41% and 44% of informants, respectively. This finding may be indicative of the economic impact of COVID-19 and recent emphasis on historical and systemic racial inequities. Twenty-six percent (26%) of key informants saw housing opportunities were as declining.

Quality of Life and Social Determinants of Health: Perceived Trends

	Improved (3)	Stayed the Same (2)	Declined (1)	Don’t Know/NA	Mean Score
Quality of Life, defined as the general well-being of individuals and communities	18.5%	63.0%	14.8%	3.7%	1.96
Social Determinants of Health					
Health and healthcare (access, cost, availability, quality)	25.9%	66.7%	3.7%	3.7%	2.15
Neighborhood and built environment (access to healthy foods, sidewalks, open spaces, transportation)	14.8%	70.4%	7.4%	7.4%	1.93
Education (high school graduation, enrollment in higher education, language/literacy, early childhood education and development)	7.4%	70.4%	18.5%	3.7%	1.81
Housing opportunity (quality, cost, availability)	3.7%	55.6%	25.9%	14.8%	1.48
Social and community context (social cohesion, civic participation, perceptions of discrimination and equity, incarceration/ institutionalization)	3.7%	44.4%	40.7%	11.1%	1.41
Economic stability (poverty, food security, employment, housing stability)	3.7%	40.7%	44.4%	11.1%	1.37

Informants were asked to share open-ended feedback regarding community health and well-being for the populations they serve. Verbatim comments by key informants are included below.

- *“Outreach and expansion from local health care systems has increased access to specialty providers. The COVID pandemic has stalled or pushed back gains in other areas.”*
- *“The opioid epidemic has stunted efforts being made to improve health and wellness in our region. Mental health services are a huge gap. We continue to struggle with that on a daily basis, particularly with respect to children, adolescents, and geriatric patients.”*

Community Engagement and Partnerships

Key informants were asked to rate their agreement to statements pertaining to community partnerships and engagement of diverse stakeholders and residents. Statements were rated on a scale of (1) “strongly disagree” to (5) “strongly agree.” Key informants’ responses are outlined in the table below in rank order by mean score.

Approximately 85% of informants “agreed” or “strongly agreed” that health and social service providers welcome partnership opportunities with area hospitals, and 81% of informants “agreed” or “strongly agreed” that they regularly partner with hospital providers on health improvement initiatives. These factors received the highest mean scores by key informants.

Approximately 54% of key informants “agreed” or “strongly agreed” that health and social service providers effectively collaborate to address health needs, while 23% of informants “disagreed” that providers effectively collaborate. Similarly, 19% of informants “disagreed” that partners garner resident feedback or engage residents when developing health improvement initiatives. These factors received the lowest mean scores by key informants.

Community Engagement and Partnership Indicators in Descending Order by Mean Score

	Strongly Disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly Agree (5)	Mean Score
Health and social service providers in the community I serve welcome partnership opportunities with surrounding hospital(s)/health system(s).	0.0%	0.0%	15.4%	57.7%	26.9%	4.12
My organization regularly partners with the local hospital(s)/health system(s) on health improvement initiatives.	0.0%	3.9%	15.4%	53.9%	26.9%	4.04
The hospital(s)/health system(s) located in the community I serve welcome partnership opportunities with surrounding health and social service providers.	0.0%	11.5%	15.4%	46.2%	26.9%	3.88
If I want to collaborate with the hospital(s)/health system(s) located in the community I serve, I know who to contact.	0.0%	15.4%	15.4%	34.6%	34.6%	3.88
Health and social service partners in the community I serve effectively collaborate to address health needs.	0.0%	23.1%	23.1%	50.0%	3.9%	3.35
Health and social service partners in the community I serve garner resident feedback or engage residents when developing health improvement initiatives.	1.7%	28.3%	36.7%	31.7%	1.7%	3.03

Key informants were asked what they perceived as barriers to health and social service partnerships within their communities. Respondents could choose as many barriers as applied. The following were the top identified barriers, selected by 42%-46% of informants: Ability to demonstrate outcomes and lack of shared data or measurement tools. Inconsistent service areas or geographic boundaries was the third ranked barrier (35%).

Top Perceived Barriers to Community Collective Impact Partnerships

Ranking	Barrier	Percent of Informants	Number of Informants
1	Ability to demonstrate outcomes	46.2%	12
2	Lack of shared data or measurement tools	42.3%	11
3	Inconsistent service areas or geographic boundaries	34.6%	9
4	Lack of consistent or timely communication	30.8%	8
5	Lack of operating support	26.9%	7
6	Lack of agreement on the functions or management of the partnership	23.1%	6
7	Ability to get local leaders to work together (competition, varying agendas)	19.2%	5
7	Don't know/Not sure	19.2%	5
9	Lack of backbone structure or leadership	15.4%	4
9	Lack of agreement on partnership structure or roles	15.4%	4

Informants provided the following comments related to community partnerships and engagement:

- *"I have been working with and trying to create partnerships and cooperative efforts with health care providers, social service organizations, and educational institutions for years. What I have witnessed is too many meetings and discussions that either allow a concept to die before it's born or no one to take ownership and continue the program after its inception or trial run. There is no one willing to be held accountable for long-term commitment for change."*
- *"I think with better communication among agencies, access to services would increase. I see many agencies operating in "silos," not aware of what others are doing."*
- *"Partnership for true community based quality improvement issues is vital. Often that is challenged by the ability of partners and providers to have the structure and resources necessary to do so effectively. Within our scope of focusing on those 65+ and particularly those with cognitive concerns, we know there are well-documented challenges in detection and diagnosis, particularly in primary care and community settings. Geisinger's Memory Clinic staff have been incredibly engaged leaders and partners but overall sites and departments throughout the system are not and quite often any willingness or responsiveness to further discussions is met with silence or significant institutional barriers that make true partnerships difficult to advance."*

COVID-19 Response and Recovery

COVID-19, named as a novel coronavirus discovered in Wuhan China in December 2019, caused a worldwide pandemic, resulting in nearly one million deaths worldwide (as of the printing of this report) and global economic impact. New insights are derived daily during this dynamic situation and the CHNA partners will continue to learn from data collected throughout the pandemic.

Key informants were asked to rate the extent to which their organization is worried about the long-term impact of the COVID-19 health crisis on communities and residents. Ratings were based on a scale of (1) "not at all worried" to (5) "very worried." Key informants' responses are outlined in the table below in rank order by mean score.

Mean score findings indicate that key informants were "somewhat" to "moderately" worried about the long-term impact of COVID-19 on communities and residents. Key informants were most concerned about the impact of COVID-19 on the well-being of the elderly (88% moderately or very worried), mental and emotional health of residents (85% moderately or very worried), and well-being of healthcare workers (81% moderately or very worried).

Perceived Level of Worry for the Long-Term Impact of COVID-19 on Communities and Populations in Descending Order by Mean Score

	Not At All Worried (1)	Slightly Worried (2)	Somewhat Worried (3)	Moderately Worried (4)	Very Worried (5)	Mean Score
Well-being of the elderly	0.0%	3.9%	7.7%	26.9%	61.5%	4.46
Mental and emotional health of residents	0.0%	3.9%	11.5%	26.9%	57.7%	4.38
Well-being of healthcare workers	0.0%	7.7%	11.5%	23.1%	57.7%	4.31
Community financial health	0.0%	3.9%	23.1%	23.1%	50.0%	4.19
Well-being of racial and ethnic minority groups	7.7%	3.9%	11.5%	38.5%	38.5%	3.96
Well-being of young people	0.0%	7.7%	30.8%	26.9%	34.6%	3.88
Trust in public health institutions and information	19.2%	26.9%	19.2%	15.4%	19.2%	2.88

COVID-19 has created new challenges for engaging residents in their health and well-being, and has highlighted longstanding inequities that perpetuate disparities among people of color and within vulnerable communities. Health and social service providers have the opportunity to apply lessons learned from COVID-19 to future efforts to better engage residents and promote sustained changes for community health.

Key informants were asked to share how their organization is effectively engaging community residents during COVID-19. Many informants spoke to the increased use of technology and social media to provide virtual learning and service environments, town halls and other forums

to increase community awareness of COVID-19, more programs and services offered within the community, and cross-sector partnerships to better understand COVID-related needs and disseminate available information and resources.

- *"Clinics, testing sites, media, social media, providers, etc."*
- *"Launched several initiatives aimed at helping businesses, schools, and community organizations reopen, as well as served as the trusted healthcare partner to disseminate info on COVID."*
- *"Over the summer we did a lot of virtual programming for our campers to increase engagement."*
- *"Providing programming and services to help meet the needs of patients, members, and communities to help them successfully navigate through this challenging time. Engaging with CBOs and forming partnerships and formalized referral options in conjunction with newly introduced tech support (Neighborly). Doing "check in" appointments and making sure we are embedding questions during appointments to better understand if any concerns or issues."*
- *"Providing town hall meetings to update on recent issues and future plans."*
- *"Public awareness, open access meetings for the community, signage in medical practices and facilities, public access to COVID-19 hotline. Health and wellness coaches engaging community residents. Mobile bus bringing services to the community (lab testing, flu vaccine, diabetes screening)."*
- *"Testing staff and students. Education on COVID and prevention."*
- *"Using CDC guidelines, we continue our efforts of support."*
- *"Utilization of media with discussions regarding safe practices when out and about."*
- *"We are doing everything we can at the Miller Center to provide a clean and safe environment for members to exercise while COVID-19 is still very present in our communities. Exercise is an extremely important part of well-being and it is important for local gyms, fitness, and recreation centers to stay open to provide safe opportunities for people to get out of their homes and exercise."*
- *"We are performing screening checks on all people entering our facility. We are using social media and our website to communicate education and awareness."*
- *"We are working on developing programs that can provide hope for a brighter future and prosperity for our region as a whole. Trying to get the right people at the table to seriously address the mental and psychological treatment that is and will be needed long term. Trying to create alternatives for employers to hire and retain employees that either have skills and/or get the necessary skills while employed."*
- *"We collaborate with all of our community partners to provide as many services as possible. We take the programs and services to the individuals."*
- *"We pivoted to offer more virtual content. We also increased no-cost outreach programming."*

Additionally, informants were asked to share how hospitals and community partners can effectively collaborate to address health and social disparities highlighted by COVID-19. Informants provided the following suggestions:

- *"As a leader of a facility that is owned by two separate hospital systems, we find regular meetings to be an extremely effective way to collaborate. In these meetings we share with the healthcare teams what is going on in the Center and they share with us their challenges and opportunities to collaborate. For example, blood donations are in high demand right now. Due to restrictions in hospitals on visitation they cannot host blood drives. However, in a recreation center we are able to host such an event and help meet this demand."*
- *"Available education to community groups, public access to COVID-19 hotline, availability of testing centers on public transportation routes."*
- *"Continued synergy is critical as we look to continue to provide services and programs to meet the needs for our communities."*
- *"Geisinger launched Neighborly is an easy-to-use social care platform that can help connect our neighbors to free and reduced-cost programs and services in the community. Since March 2020, over 600 people from various community organizations participated in training regarding the platform."*
- *"I feel that telehealth is key for our communities in this period of time. It allows access to healthcare without risk to others."*
- *"It would be beneficial to attend schools and provide information at student levels. It would be important to get involved with churches, work-out groups, or social committees to share information regarding CDC guidelines, misconceptions, and importance of social practices to maintain health and wellness of all community members."*
- *"More indigent care, outreach and collaboration/support of human services."*
- *"Offer testing and education."*
- *"Recognize needs and work together to develop strategies to meet the needs in the community."*
- *"Structure needed to better develop accountability."*
- *"The partners need to provide the education and PPE needed in the communities."*
- *"There needs to be open and constant communications between hospitals and regional agencies to ensure each entity is aware of what the other is doing and to identify any areas of potential collaboration with the intent of bolstering each other's services."*

Evaluation of Impact from Prior CHNA Implementation Plan

Background

In FY2019, GJSH completed a CHNA and developed a supporting Implementation Plan to address identified health priorities. The strategies implemented to address the health priorities reflect Geisinger's mission and commitment to improving the health and well-being of the community.

Guided by the findings from the FY2019 CHNA and input from key community stakeholders, Geisinger leadership identified the following priorities to be addressed by the Implementation Plan:

- Access to Care
- Behavioral Health (to include substance abuse and mental health strategies)
- Chronic Disease Prevention and Management (with a focus on increasing healthy habits)

Geisinger Jersey Shore Hospital focused its Implementation Plan on the priorities of access to care and chronic disease prevention and management. The hospital did not include behavioral health strategies in its plan based on existing expertise and available resources. Behavioral health initiatives in the North Central Region are supported by the larger Geisinger health system. An example of this support is the opening of a medication-assisted therapy clinic in Williamsport in 2019.

Geisinger's timeline for completing the FY2019 CHNA was consistent with their fiscal tax year, beginning July 1 and ending June 30. Starting in 2021, Geisinger will transition its year-end to a calendar year. Due to the change in year-end, the Implementation Plan initiated by GJSH was in effect from July 1, 2018 to December 31, 2020. The hospital's new Implementation Plan will be effective January 1, 2021 through December 31, 2023.

FY2019-CY2020 Evaluation of Impact

Geisinger Jersey Shore Hospital developed and implemented a plan to address community health needs that leverages resources across the health system and the community. The following section highlights the status and outcomes from the implemented strategies.

Access to Care

Goal: Ensure residents have access to quality, comprehensive health care close to home.

Objective #1: Increase the number of residents who have a regular primary care provider (PCP).	
Strategies	**Status**
1. Screen patients who access services at the ED to determine if they have medical home and assist those that do not in finding a PCP.	Achieved
Additional Information	
• GJSH provides Case Management services in the ED to assist individuals without a PCP to obtain a medical home. Case Managers are also responsible for making appropriate community resource referrals, such as Geisinger at Home services, behavioral health resources, durable medical equipment supply coordination, skilled nursing, and home health nursing to include outpatient therapies. • As of September 2020, the Case Management team completed 293 patient encounters. Of the patients seen, nine did not had a PCP. Case Managers were able to assist one patient in connecting with a medical home; other patients refused assistance.	

Objective #2: Promote awareness of available options for assistance to pay for health care needs.	
Strategies	**Status**
1. Develop a communication strategy to promote awareness of the Financial Assistance Policy.	Active
Additional Information	
• Geisinger offers payment plans and financial assistance to eligible patients who are struggling financially or who are uninsured. Geisinger's financial assistance application, brochures, policy, and participating provider list are available in the following languages: English, Spanish, Arabic, Chinese, Nepali, and Vietnamese. The brochure is written at a fifth-grade reading level. Financial counselors are available to assist patients with payment options. • GJSH has a dedicated phone line for its financial counselor, and every Revenue Management staff member at GJSH is educated on the various financial assistance options available to patients.	

Objective #3: Reduce barriers to receiving care for residents without transportation.	
Strategies	**Status**
1. Offer a monthly GYN clinic at the hospital to serve local residents without transportation to access services outside of the community.	Achieved
2. Explore telemedicine options to address transportation barriers to care.	Achieved
Additional Information	
• GJSH offered a monthly GYN clinic at the hospital to provide local services for patients unable to travel outside of the region. In fall 2019, this service was expanded to include a new women's health clinic located at 1020 Thompson Street in Jersey Shore. In fall 2020, the clinic began offering GYN services several days per week with the hiring of a new provider.	

Objective #4: Increase access to primary and specialty care physicians practicing within MUAs or HPSAs.	
Strategies	**Status**
1. Continue efforts to recruit primary and specialty care providers to the region, targeting Health Professional Shortage Areas in Clinton and Lycoming Counties.	Active
2. Explore telemedicine options to provide services to MUAs and HPSAs.	Achieved
Additional Information	
• GJSH added providers specializing in the following medical fields in 2019 and 2020: Endocrinology, gastroenterology, general surgery, musculoskeletal, pediatrics (including endocrinology and rehab), podiatry, sleep lab, and women's health. • GJSH recruited two primary care doctors each for Clinton and Lycoming counties in 2020. • In 2019, GJSH added Telestroke and Teleneurology to optimize timely care for emergency room, critical, and acute care patients. Telestroke allows GJSH ED doctors to quickly connect with neurologists at Geisinger Medical Center to help diagnosis and begin treatment for patients suffering from stroke. According to the American Stroke Association, 120 million brain cells die every hour during a stroke, so receiving prompt care is essential for a better outcome. Through Teleneurology, GJSH physicians connect and consult with Geisinger neurologists, including specialists in movement disorders and general neurology. • GJSH added inpatient telemedicine for cardiology, pulmonology, and infectious disease. The hospital is in the process of planning for an outpatient telehealth hub to serve individuals without home internet or computer access. • In July 2020, GJSH was approved to begin construction on a heliport above the hospital's ED ambulance entrance. Heliport access will dramatically decrease the time to transport patients by air ambulance from the Jersey Shore area for higher-level care. • GJSH collaborates with the Geisinger Commonwealth School of Medicine to enroll medical students in the Abigail Geisinger Scholars Program. The program aims to help students achieve their professional goals without financial burden, while promoting needed medical specialty areas, including primary care and psychiatry. Participant scholars graduate from medical school without tuition debt and receive a $2,000 monthly stipend. Upon completion of residency training, scholars become Geisinger-employed physicians with a two-year minimum employment requirement.	

Chronic Disease Prevention and Management

Goal: Reduce risk factors and premature death attributed to chronic diseases.

Objective #1: Encourage community initiatives that support access to and availability of healthy lifestyle choices.	
Strategies	**Status**
1. Participate in free community health fairs targeting diverse populations.	Active
Additional Information	
• GJSH is an active partner in the community. The hospital offers no-cost health education and programming events to diverse communities and populations within Clinton and Lycoming counties. These events included health and wellness fairs, Stop the Bleed training, wellness screenings, flu shots, diabetes and skin cancer screenings, and senior expos. Note: Several events were cancelled in 2020 due to COVID-19. Geisinger was able to transition most evidence-based programs to a virtual setting. • In summer 2019, GJSH participated in the Lycoming County Fair over a 10-day period, offering blood pressure screenings, children's activities, and information by the pediatric dentistry team.	

Objective #2: Initiate early stage interventions for individuals at high risk for chronic disease.	
Strategies	**Status**
1. Promote and support local food initiatives.	Active
2. Provide an education, management, and peer support group for COPD.	Active
Additional Information	
• GJSH partners with The New Love Center in Jersey Shore to address food insecurity in Western Lycoming County and Eastern Clinton County. The New Love Center recently moved to a new facility that combined their café and food pantry to better serve residents. In 2019, The New Love Center helped serve over 4,700 households. Food distribution is available on the second and fourth Fridays of the month. The café is open Monday through Friday with lunch from 11-12:30pm or a cup of coffee after 8am. GJSH provides financial, volunteer hours, and material support to The New Love Center. • GJSH offers a monthly Better Breathers Support Group. Sessions were cancelled in March 2020 due to COVID-19; sessions will be reevaluated for 2021.	

Board Approval and Next Steps

The GJSH 2021 CHNA final report was reviewed and approved by the Geisinger Board of Directors in December 2020. Following the Board's approval, the CHNA report was made available to the public via the Geisinger website at https://www.geisinger.org/about-geisinger/in-our-community/chna.

Questions or comments regarding the 2021 CHNA or Geisinger's commitment to community health can be directed to Allison Clark, Community Benefit Coordinator, Strategy & Market Advancement, Geisinger at aclark1@geisinger.edu.

Geisinger is committed to our not-for-profit mission and an evolution of caring. Everything we do is about caring for our patients, our members, our students, our Geisinger family, and our communities. Founded more than 100 years ago by Abigail Geisinger for her central Pennsylvania community, Geisinger has expanded and evolved to meet regional needs and developed innovative, national programs in the process.

The organizations throughout northeast and central Pennsylvania are strong representations of what makes our community unique. We are proud to foster partnerships that focus on strengthening our communities - whether directly health care related or not. We welcome community organizations to engage with us as we work to address the region's top health issues and implement a plan for community health improvement.

Appendix A: Public Health Secondary Data References

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Appendix B: Public Health Data Summary

The following table highlights key public health data findings for the North Central Region. A "red" finding indicates an area of opportunity, while a "green" finding indicates an area of strength, in comparison to state and national benchmarks. Arrows indicate increasing (▲) or decreasing (▼) trends, as demonstrated in this report.

Public Health Data Summary

	Clinton County	Lycoming County	PA	US
Access to Healthcare (**FY2019 CHNA Priority Area**)				
Total Uninsured (2014-2018)	7.9% ▼	5.9% ▼	6.2%	9.4%
Black uninsured	3.7%	9.7%	8.7%	10.8%
Latinx uninsured	3.1%	9.6%	14.4%	19.2%
Medicaid insured (2014-2018)	22.3%	21.4%	18.9%	20.1%
Primary care providers per 100,000 (2017)	51.3 ▼	79.1 ▲	80.8	75.2
Dentists per 100,000 (2018)	43.9	50.1 ▲	69.0	69.0
Potentially Preventable Hospitalizations per 10,000 (FY2019)	145.1	117.5	150.8	NA
Chronic Disease and Health Risk Factors (**FY2019 CHNA Priority Area**)				
Adult smoking (2017)	18.6% ▲	19.3% ▲	18.8%	17.1%
Adult obesity (2017)	38.9% ▲	38.9% ▲	30.8%	31.3%
Adult physical inactivity (2017)	16.5%	20.3%	23.9%	25.6%
Adult diabetes (2017)	7.9% ▼	8.7% ▼	9.0%	8.5%
Heart disease death[1] (2018)	241.2 ▲	158.9 ▼	176.1	163.6
Black (2016-2018)	NA	NA	221.1	203.8
Latinx (2016-2018)	NA	NA	109.1	114.0
Cancer death[1] (2018)	178.7 ▼	166.2 ▼	156.6	149.1
Black (2016-2018)	NA	NA	192.4	173.0
Latinx (2016-2018)	NA	NA	109.7	108.5
CLRD[2] death[1] (2016-2018)	45.6	44.4 ▼	36.3	40.4

[1] Death per age-adjusted 100,000.
[2] Chronic Lower Respiratory Disease (e.g. asthma, COPD, emphysema).

Public Health Data Summary, cont'd

	Clinton County	Lycoming County	PA	US
Behavioral Health (**FY2019 CHNA Priority Area**)				
Mental health providers per 100,000 (2019)	113.7 ▲	164.5 ▲	206.5	250.0
Mental disorders hospitalizations per 10,000 (2018)	56.6	44.0	88.8	NA
Suicide death[1] (2016-2018)	NA	20.4 ▲	14.9	13.9
Adult excessive drinking	19.9%	19.4%	19.2%	19.0%
Opioid overdose hospitalizations per 10,000 (2018)	NA	23.3	25.1	NA
Maternal and Child Health				
Teen births (2018)	4.8% ▼	6.7%	4.1%	4.7%
First trimester care (2018)	66.6%	78.1%	73.9%	77.5%
Black	NA	76.6%	64.6%	67.1%
Latina	NA	76.2%	65.3%	72.7%
Low birth weight (2018)	6.7%	9.8% ▲	8.3%	8.3%
Preterm births (2018)	8.6%	11.0% ▲	9.5%	10.0%
Breastfeeding (2018)	82.9% ▼	79.4% ▼	81.9%	83.5%
Non-smoking during pregnancy (2018)	84.7% ▲	82.0%	89.6%	93.5%
Aging Population Age 65 or Over				
Two or more chronic conditions (2017)	75.2%	73.6%	72.2%	68.8%
Alzheimer's disease	12.4%	13.4%	12.2%	12.1%
Depression	16.6%	16.8%	16.1%	15.4%
Diabetes	26.9%	27.6%	26.6%	27.4%
High cholesterol	53.4%	50.3%	47.6%	43.0%
Hypertension	64.6%	62.3%	62.3%	59.9%
Living alone (2014-2018)	13.4% ▲	11.9%	12.6%	10.7%
Youth Health				
Obesity (Grades 7-12, 2017-2018)	29.1%	26.3% ▲	19.5%	NA
Asthma diagnosis (2017-2018)	4.9%	8.5%	11.3%	NA
Sad or depressed most days (2019)	NA	42.7%	38.0%	NA
E-cigarette use (2019)	NA	23.4% ▲	19.0%	NA
Alcohol use (2019)	NA	18.5%	16.8%	NA

[1] Death per age-adjusted 100,000.

Appendix C: Key Informants

A Key Informant Survey was conducted with 27 community representatives. The organizations represented by key informants, and their respective role/title, included:

Key Informant Organization	Key Informant Title/Role
Allied Services Integrated Health System	Assistant Vice President, In-Home Care
Allied Services Integrated Health System	Vice President, Home Care Services
Alzheimer's Association	Executive Director
Benton Area Rodeo Association, Inc.	Chairman
Berwick Industrial Development Association	Executive Director
Camp Victory	Camp Director
Evangelical Community Hospital	Director of Quality, Patient Safety, & Risk Mgmt.
Evangelical Community Hospital	Manager, Community Health and Wellness
Evangelical Community Hospital	President/Chief Executive Officer
Family Services Association	Chief Executive Officer
Geisinger Health Plan	Senior Director, Health and Wellness
Geisinger Health System	Chief Administrative Officer
Geisinger Health System	Community Benefit Coordinator
Geisinger Health System	Community Specialist
Geisinger Health System	Director, Tax Services
Geisinger Health System	Marketing Specialist
Geisinger Health System	Vice President, Health Innovation
Geisinger Jersey Shore Hospital	Associate Vice President, Nursing and Clinic Operations
Geisinger Jersey Shore Hospital	RN Case Manager
Harrisburg Area YMCA	Executive Director of Chronic Disease
Jersey Shore Borough	Borough Manager
Lock Haven University	Director of Workforce Development and Continuing Education
Miller Center for Recreation and Wellness	Director, Miller Center Joint Venture
Penn State Extension	Extension Educator
Penn State Extension/Nutrition Links	Nutrition Education Adviser
Pennsylvania Office of Rural Health	Director and Outreach Associate Professor of Health Policy and Administration
The Children's Museum	Director