COMMUNITY HEALTH ASSESSMENT

for north central Iowa

This Community Health Assessment (CHA) report is the result of a robust and cooperative process that took nine months and included stakeholders, community members, community focus group attendees, workgroup members, and those who completed community surveys. For this iteration of the CHA, a regional approach was taken to include multiple local public health agencies, organizations, stakeholders and citizens from various counties in north-central Iowa.

Welcome

The north central Iowa Community Health Assessment (CHA) along with the Community Health Improvement Plan (2020-2023) report provides guidance to community members and stakeholders who wish to become involved in or continue to engage in health and wellness improvement.

The CHA draws on data from the North Iowa area which has various capable programs and efforts already in place to address health from numerous perspectives – the CHA process confirmed this. The process also documented, however, that there are gaps in services and highlighted ways to build on and strengthen efforts. Insights from the CHA led to the identification of three priority areas for north central Iowa within each priority area:

1. Access to Care
2. Early Childhood Issues
3. Housing

These priority areas are the foundation of the goals and strategies outlined in the Community Health Improvement Plan (CHIP). While providing goals and strategies specific to each priority area, this report also proposes ways to move forward through collective impact work. Collective impact is the concept of sustained change in the way that we think about health and act to improve it. Such changes involve regular convening of diverse partners that work to align and build on one another's efforts by adopting a common agenda with shared goals and metrics to measure progress. Health is complex and affected by a variety of determinants such as access to healthcare, environment, culture, social support networks, literacy, education, housing, and employment. No single organization or program can alone solve a health problem, but together, through coordination and communication, we can each play a part in effecting change that collectively helps resolve issues.

The CHA is a starting point for work with a focus in the priority areas over the next three years. This report along with the CHIP are living documents, meaning that they will continue to be revisited, revised, and built upon as needed to assure progress in the priority areas. It is the hope of everyone involved in this process that interested stakeholders, community members, and all others will identify with the CHA/CHIP's findings and support the action steps and direction proposed for our community.

Each of us has a role in working to improve health and the quality of life in north central Iowa. What's your role?

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Introduction

History
The Cerro Gordo County Health Improvement partnership is comprised of 9 area organizations and residents. The formation of this collaborative officially in 2015 was an informal group of stakeholders for years prior. For this iteration of the community health assessment, the team was determined to fully collaborate, reduce duplication and merge cycles in some instances. The intent and effort of the individuals involved were to collectively examine regional health priorities. In addition to conducting a county-wide community health needs assessment, the collaborative allowed partners to dive deeper into health issues that they were addressing in common and offer cross-collaboration. Health problems and priorities do not change at county lines and working together collectively will broaden partnerships, strengthen resources and ultimately have more opportunity to impact health regionally.

The team expanded to participate in a collaborative approach that identifies community needs, assets, resources, and strategies towards assuring better health and health equity for all north-central Iowa residents. Each member recognized that the collective impact of working together could greatly exceed the work that any one agency could achieve on its own. This collaborative will eliminate duplicative efforts; lead to the creation of an effective, sustainable process; allow rural health departments to collect more robust local data; build stronger relationships among hospitals, public health and other agencies; and, identify opportunities for joint efforts to improve the health and well-being of our communities. This shared approach to assessing needs helps focus available resources to address the community's most critical health needs. Our vision and values are a result of this effort.

Vision
We are a united community building a healthy, safe, and accepting environment.

Values
We are a united community**:**

- That recognizes the connection between body, mind, & spiritual health.
- Where people have access to affordable resources.
- That provides the foundation for people to be self-sufficient.
- That embraces best practices, creativity, lifelong learning, advocacy, and peer support.
- With a commitment for clean, safe, healthy environments.
- Where working together is embraced.

Approach

Mobilizing for Action through Planning and Partnerships (MAPP) is a community-driven strategic planning process for improving community health. Facilitated by public health leaders, this framework helps communities apply strategic thinking to prioritize public health issues and identify resources to address them. MAPP is not an agency-focused assessment process; rather, it is an interactive process that can improve the efficiency, effectiveness, and ultimately the performance of local public health systems.

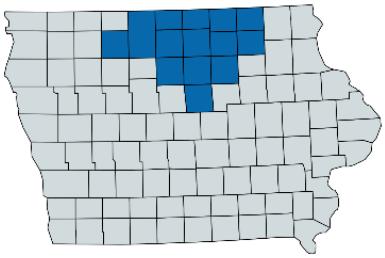
Purpose
This report documents the community health needs of north central Iowa and provides a foundation to meet the Affordable Care Act (ACA) and other requirements for non-profit hospitals to conduct a Community Health Assessment (CHA) every three years and for local public health departments to conduct a CHA every 5 years. The CHA will lead to the community health improvement plan.

Methods
Participants defined health broadly and used a population-based community health framework to identify health needs and establish criteria for selecting key indicators within each health topic. Social, cultural, and environmental factors that affect health were considered throughout the process. This joint CHA report provides baseline data on community health indicators for all agencies to use and import for their own CHA. While participants reached consensus on a core set of topic areas, each organization may also gather additional information specific to its service area. The mobilizing for action through planning and partnerships (MAPP) framework was used to guide data gathering through four assessments: community themes and strengths, local public health system, community health status and forces of change.

About Us

North Central Iowa Region
The north-central Iowa region that participated in this effort is shown in the map. Counties include Butler, Cerro Gordo, Chickasaw, Floyd, Franklin, Hancock, Hardin, Howard, Kossuth, Mitchell, Winnebago, Worth & Wright. This region has a population of approximately 200,000 with the largest county Cerro Gordo home to about 42,600 residents and the smallest county, Worth home to about 7,500. The region is nestled in agriculture, family-owned and corporate farms, and most counties are facing natural population decline. There are no metropolitan areas and one micropolitan area (Cerro Gordo & Worth Counties) that draws a regional workforce and those with retail, healthcare and entertainment needs.

Figure 1: region covered by this report



Regionally, the area is approximately 96% White alone, 1.8% Black alone and 4.6% Latino (state averages are: 90.7%, 4%, and 6.2% respectively). This area is among the least diverse nationally; however, in Iowa, racial and ethnic minority groups are increasing. Regionally, in each county between the 2000 and 2010 census, racial and ethnic minority groups increased. These groups comprise 2.1% of the population in Butler County (the lowest) to 12.6% in Franklin County (the highest).

Iowa has an older population that is among the highest in the nation. Regionally, individuals ages 65 years and older averages 21.8%. Persons under age 18 average 22.5% regionally; statewide the averages are 17.1% and 23.2% respectively. See table 1 for a breakdown of data.

Table 1 Population, Race, Ethnicity and Age by County

County	Population	White Alone	Black Alone	Latino/a	Persons 65+	Persons under 18
Butler	14,539	97.7%	<1%	1.4%	22.3%	22.5%
Cerro Gordo	42,647	94.8%	1.9%	4.9%	21.8%	20.7%
Chickasaw	11,964	97.9%	<1%	2.8%	20.8%	23.5%
Floyd	15,761	94.0%	2.7%	3.7%	21.8%	23.1%
Franklin	10,124	96.1%	1.2%	12.9%	21.0%	23.2%
Hancock	10,712	97.1%	1.0%	4.6%	22.5%	21.7%
Hardin	16,868	95.8%	1.5%	4.5%	22.0%	20.0%
Howard	9,187	97.8%	0.6%	1.6%	20.9%	24.8%
Kossuth	14,908	96.6%	1.1%	2.9%	23.7%	21.9%
Mitchell	10,569	97.9%	6.0%	1.4%	21.2%	23.6%
Palo Alto	8,929	95.5%	1.9%	3.1%	21.9%	22.8%
Winnebago	12,690	96.5%	1.0%	12.7%	22.7%	24.0%
Worth	10,518	95.4%	1.7%	4.6%	21.5%	22.0%
Wright	7,453	96.7%	1.0%	3.1%	20.5%	20.7%

Education matters here with 92% of the residents being high school graduates and nineteen percent have a bachelor's degree or higher. The unemployment rate is among the lowest in the nation, averaging 2.99% in the 14-county region yet many families are struggling to live. Iowa wages and incomes are not growing at a fast-enough rate to compensate for the cost of living needs and poverty rates persist, averaging 10% regionally.

Working Together

Over the past three years, a number of area initiatives have been implemented to address some of the key health challenges and disparities that face our communities. The last CHA and Community Health Improvement Plan identified the need for increased collaboration among community-based organizations, governmental agencies, advocacy organizations, hospitals and health systems, and the private sector. Several initiatives described below are notable as they are explicit in their engagement to assure cross-sector representation, where different stakeholders work collectively for a common purpose, commit to authentic community engagement, and strive to understand and support community-driven solutions.

1. Opioid and Substance Use Planning Grant. A collaborative of several area organizations has analyzed needs, resources and gaps in substance use disorder service and is in the process of developing a strategic plan and workforce development plan to dramatically advance understanding of policies, programs, and initiatives currently being undertaken while driving community organizations toward collaboratively addressing opioid and other substance misuse.

2. Regional hospital, public health, and EMS systems grant. This provides a foundation for system development in coordinating and advancing hospital and public health emergency preparedness, emergency medical service delivery, and trauma care in a twelve-county region in north central Iowa. Through collaboration local public health agencies, hospitals and emergency medical service providers prevent, prepare for, respond to, and recover from incidents that affect the health of the population to decrease mortality and morbidity.

3. The area has seen an increase in access to healthcare in some areas. An integrated healthcare system is one that is able to meet the physical and behavioral healthcare needs of an individual in a holistic, culturally responsive fashion where the individual is engaged in their care. Several agencies have moved toward this including the integration of oral health to offer more coordinated, whole-person care.
    a. Community Health Center (includes physical, behavioral & dental)
    b. Two urgent care clinics have opened
    c. MercyOne built a behavioral health unit
    d. Prairie Ridge expanded to become the state-designated mental health center, is using telehealth, combined physical and behavioral health and opened a pharmacy on-site

4. Justice and Mental Health Collaboration Planning Grant. This project brought together representatives from the Mason City Police Dept., Cerro Gordo County Sheriff's Office, and 19 local providers to increase communication between law enforcement and mental health providers. A self-assessment by over 100 law enforcement officers and front-line provider staff showed a significant increase in communication as a result of the project. A second project goal was to increase the number of mental health consumers linked to assistance through a new Justice Coordinator position established jointly by County Social Services and the Mason City Police Department. Tracking of outcomes for mental health calls for service to law enforcement showed 1,127 individual contacts were made by the Justice Coordinator between March 2018 and December 2019. A three-year implementation grant has recently been received to provide enhanced training for law enforcement and area providers and to increase and expand service to consumers with mental health and substance abuse disorders. Primary outcomes focus for the new grant are decreased recidivism and diversion from jail for mental health consumers in contact with law enforcement.

Community Input

Local community needs assessments, strategic plans, and reports from the past three years were reviewed to identify community health needs and to provide context to the quantitative data presented. Additionally, information was sought in a variety of ways to include surveys, focus groups, meetings, and interviews. Key themes that emerged from these assessments of community health are presented in the Community Identified Priorities section of the report.

Information from these data gathering includes common themes; the entire area is changing in population. Most counties are losing residents and the mean age of residents is getting higher. Rural hospitals are especially vulnerable to changes in reimbursement; this has a ripple effect on each community as they are often a large community employer and the only access to healthcare for miles. Specialty services are becoming more concentrated in more populated areas. Retail is closing in smaller communities as well.

Successes

- North Iowa has **a high percentage of high school graduation**; Iowa overall does well in this category at 91%, but North Iowa is at about 94%
- The area has **a low prevalence of low birthweight babies**, averaging a percent less than the state average at 7%
- Over the past decade, Iowa and north Iowa have seen a large **decrease in adult smoking prevalence**; the region averages 15% and the state is at about 17%.

Worsening Issues

Many indicators aren't showing improvement, but these, in particular, have relevance to health issues that are important to residents and stakeholders for health:

- Iowa continues to outpace the nation in **adult obesity**. The percent of adults obese has steadily increased over the past 15 years to 2018. Iowa is one of the most obese states; obesity is one of the leading causes of preventable life-years lost among Americans. Adults who have obesity compared with adults at a healthy weight are more likely to have a decreased quality of life and have an increased risk of developing serious health conditions including hypertension, type 2 diabetes, heart disease and stroke, sleep apnea and breathing problems, some cancers, mental illness such as depression and anxiety. Regionally, North Iowa's adult obesity averages 34% compared to the state's rate of 32%.

- **Substance use including excessive drinking** is another area where Iowa overall scores poorly; excessive drinking is a risk factor for a number of adverse health outcomes, such as alcohol poisoning, hypertension, acute myocardial infarction, sexually transmitted infections, unintended pregnancy, fetal alcohol syndrome, sudden infant death syndrome, suicide, interpersonal violence, and motor vehicle crashes. Alcohol-Impaired driving deaths remain high in north Iowa. Seven of the 14 counties have percentages of 30% or higher for this indicator. That means that of all crashes with deaths, 30% or more have alcohol involved. Substance use, especially meth, is still an issue in northern Iowa. The reward continues to outweigh the risk for substance users.

- **Housing affordability and availability** continue to plague North Iowa as an issue. North Iowa homes are older than in the rest of Iowa and many parts of the nation. Old homes have hazards like lead paint and safety issues. Quality affordable housing is inconsistent across the region and many areas are facing a rental unit shortage. Additionally, homelessness appears to be increasing within the student populations. On the other end, there is no high-end housing in the smaller areas to cater to top executives which leads to them living in more populated areas and commuting or living in other regions of the state or Midwest altogether.

Determinants of Health by Location

The largest issue determining health due to location is access to care and the use of preventive services. Cerro Gordo County is the hub for medical care and several counties have few or no health providers. Additionally, though there may be dentists in the area, access to dentists is often a barrier due to the cost and insurance acceptance. Locations in more populated areas sometimes higher rates of premature death and even within those counties, disparities by Census block showed as some blocks had lower life expectancy than neighboring areas.

Discrimination Affecting Health

Through collecting data, several groups were identified to be marginalized in north Iowa. The **elderly** suffers from mental health issues, loss of independence, isolation and induced poverty. Ageism may be the most common form of prejudice as society is incredibly youth-focused. This leads to unhealthy aging and unhealthy habits of the aged. North Iowa has a growing aging population that hovers around 22%. Twenty-two percent of the region's population is approximately 43,000 people.

Persons who use **Medicaid and who are low income** suffer from attitudes, policies, systems, and practices that benefit those of higher-wage classification. This is often a multi-generational problem where people have been denied access to opportunity for health care, education and/or employment. Children who grow up with a lack of opportunity have difficulty overcoming the systemic barriers. Access to care is different for this group as they may have to travel long distances or make multiple stops for preventive, primary and specialty care. Beyond lack of opportunities are the subtle discrimination attitudes faced by people.

Persons with **substance use disorder**, **mental health issues** or who may have a **criminal history** suffer from stigma. Those returning to society after incarceration are inadequately served and have little opportunity for gainful employment. Scientific studies have shown that addiction is a chronic medical illness and mental illness is essentially biological in nature. Both can be influenced by trauma; however, society often believes each is a moral or character failing. The exploitation of individuals suffering from substance use disorder or mental health issues is common and often they do not seek treatment.

Racism and discrimination are deeply ingrained in the social, political and economic societal structures nationally and in north Iowa. This results in unequal access to quality education, healthy food, livable wages, and safe housing; all of which can be seen. There is little representation on committees, boards, elected positions, etc. for any person who is not Caucasian. Language is another powerful tool from which to apply discrimination. Belittling, disqualifying or rejecting another person for their way of speaking or their **accent** is more common than thought. Discrimination in this manner is often ignored and is connected to racism and exclusion.

Summary of Health Topics

Access to Care & Preventive Services

Access to health insurance improved substantially after the implementation of the Affordable Care Act. The region averages 5% uninsured, but the area still is less than ideal for **percent of children vaccinated** and for **preventive cancer screenings** overall. **Access to primary care physicians** ranges from Cerro Gordo County at 630 patients to every provider to 7,400 patients to each provider in a smaller county (Butler); overall Iowa's average is 1,390:1. Dental providers vary from 1,300 patients to every provider (Cerro Gordo) to 4,870 patients to each provider (Butler); overall Iowa's average is 1,520:1. Mental health providers extend from 410 patients to every provider (Cerro Gordo) to 10,770 patients to each provider (Hancock); overall Iowa's average is 700:1. Overall, the more populated the area, the better the provider ratio to patients. **Privatizing Medicaid** has reduced access to services for those using it. Over the past few years, the average cost for each Iowan in Medicaid has increased dramatically and placed a heavy burden on agencies that serve Medicaid users. Nonpayment of services rendered, and a convoluted system of pre-authorization has resulted in agencies closing their doors or not accepting Medicaid patients.

Early Childhood Issues

Regionally, the area has a **low teen birth** rate. A couple of the counties have higher than state averages in teen births, children in poverty and children in single-parent households (Franklin & Wright Counties). Children in **poverty** range from 12% (Butler) to 18% (Floyd & Wright Counties) and the region averages 14%. **Participating in WIC** helps kids get a good start in life. Overall, the state averages 26% of kids on WIC; however, children 0-4 receiving WIC ranges from 9.1% (Worth) to 39.5% (Cerro Gordo). Another issue plaguing children is homelessness. Head Start children who are **homeless** range from 0% to 2.7%.

The **cost of childcare** is incredibly high in Iowa and can eat up more than 54% of annual household income. **Early literacy skills**, measured in kindergarten, are subpar in northern Iowa. Getting kids ready to read can influence the rest of their life.

Water & Air Quality

North Iowa is highly agricultural in a struggle between industrial farming and family farms and between traditional farming of soybeans and corn and new crop alternatives. Nearly 70% of Iowa land is in crop production and about 270,000 acres of cropland is in the 2-year floodplain statewide. Water runoff contributes to poor water quality. Iowa many people living in rural areas drink water from **private wells** where no regulation exists. Last year, 40% of wells tested had coliform bacteria and 12% had unsafe nitrate levels. Coliform bacteria are an indicator that the well may allow contaminants in and nitrate consumption is correlated with adverse health effects like blue-baby syndrome. **Surface water quality** in Iowa is poor with 57% of water segments (lakes, streams & rivers) tested met the federal standards for impairment. While outdoor air pollution is not as much of a concern as urban areas, rural areas still fight with humidity and allergens. The largest **indoor air quality** concern overall in Iowa is radon. Radon is the second leading cause of lung cancer and Iowa has the largest percentages of homes above the EPA action level.

Healthy Food, Obesity & Physical Inactivity

Overweight and obesity continues to be a problem in north Iowa. Statewide, **childhood obesity** is at 15.2% and 10-17-year-olds with obesity are at 16.4%. In North Iowa, **adult obesity** comes in at 34%. A combination of poor nutrition and physical inactivity contribute to this epidemic. **Physical inactivity** continues to rise in the region while access to exercise opportunities is about the same. Access to **healthy foods** especially in rural areas that do not have a grocery store contributes to weight gain, but the lack of knowledge of nutrition or how to cook is a large issue. All of these lead to chronic health issues.

Substance Use Including Alcohol & Nicotine

Cigarette smoking continues to decrease for teens and adults across the age groups. Ninety-one percent of students surveyed have never smoked/used any tobacco product (not including e-cigarettes); however, 20% of 11th-grade students reported they used **e-cigarettes** on one or more days in the past 30 days. Public health professionals do not yet know the health outcome of e-cigarettes as they are an emerging health issue. Adult **excessive alcohol use** is culturally acceptable in north Iowa and the higher the income, the higher the percentage of excessive drinkers. Alcohol use begins early as 14% of youth respondents stated they were 12 or younger when they first drank alcohol and 9% of 11th -grade responders had 5 or more drinks of alcohol in a row (binge drinking) on 1 or more days in the last 30 days. Alcohol-impaired driving deaths range from 6% (Floyd) to 45% (Butler).

With the rise in opiate use and overdose nationally, North Iowa has continued to struggle with **methamphetamine** (meth) use. Treatment data shows that people seek help for alcohol, marijuana, methamphetamine in descending order and drug seizure data shows that meth, heroin and marijuana seizures are increasing. **Child abuse** cases with the child being exposed to dangerous substances are increasing.

Health Outcomes

A child born in Cerro Gordo County can expect to live 78.3 years, and one county over in Hancock, a child can expect to live to 81.1 years. Differences in life expectancy can be tied to poverty, housing, and lifestyle choices. The **leading causes of death** across the region are:

1. Diseases of the heart
2. Cancer
3. Chronic lower respiratory disease
4. Accidents (unintentional injuries)
5. Alzheimer's disease
6. Cerebrovascular disease
7. Diabetes
8. Influenza & pneumonia

Heart disease and cancer continue to be **the leading causes of death** in the region.

Diabetes, Cardiovascular Disease & Cancer
The 14-county area had an average of 8% of adults aged 20 years and older who are diagnosed with **diabetes.** Statistics indicate that many areas in the region are home to people who live with uncontrolled diabetes as the hospitalization rate spikes. **Heart attacks** and heart failure are high in multiple counties in the region. Leading causes of **cancer deaths** include **lung, breast, colon/rectum,** pancreas, prostate & ovary.

Mental Health
The percent of self-reported poor mental health days is a problem across the region. That combined with the lack of access to providers can lead to poor outcomes. **Suicide death** rates in Cerro Gordo, Chickasaw, Hancock, Hardin, Palo Alto, & Worth Counties are all higher than the state average (rate per 100,000). According to the Iowa Youth Survey, the percent of students who have a plan to kill themselves almost doubled across all grade categories, and more than doubled specifically in 11th-grade respondents.

Injury Prevention
There are several areas in the region where the unintentional Injury emergency department visit rate is high; unintentional injuries are those caused by burns, falls, poisoning, road traffic, etc. This is a leading cause of morbidity and mortality especially among children nationally and in males, who have higher rates than females. In Cerro Gordo County, falls, suicide, road traffic, poisoning and suffocation in that order are the leading causes of injury death for children. Falls are a large factor in unintentional injuries for the older populations as well; for all ages, falls are the leading cause of deaths due to injury. Several north Iowa counties have unintentional injury death rates higher than the state average. In fact, only one of the fourteen counties had a rate lower than the state's average.

Community Identified Priorities

After the quantitative and qualitative data was gathered, community engagement verified these themes as priorities and the community priority session gauged several health issues and outcomes by the following factors.

1. Significant impact: this health issue is important in both scope (affects a large number of people within the population) and scale (has serious consequences for those affected)
2. Benchmark issue: North Iowa lags behind other areas on this health issue and/or is not on track to achieve Healthy People 2020 goal
3. Disparities in health status: this health issue disproportionately impacts the health status of one or more subpopulations
4. Links to chronic disease: this indicator is linked to chronic disease and related health outcomes. High morbidity/mortality/disability/suffering consideration. Does the issue have serious health consequences?
5. Potential for change: Local efforts are likely to result in a meaningful improvement in the scope and/or severity of this health issue
6. Prevention opportunity: this indicator represents a significant opportunity to improve health outcomes using prevention-focused approaches

Through data compilation, analysis and community engagement the following three priorities emerged.

Access to Care
Cerro Gordo County has an abundance of healthcare resources, especially when compared to the remainder of the region. Specifically, it is home to a high ratio of primary care, mental health and dental providers along with being home to a large hospital system and urgent care facilities. However, even residents in Cerro Gordo County marked access to healthcare as the number one health need. Barriers to care persist and include

- Access to specialty care services
- Getting an appointment and rushed appointments
- High cost of care and prescriptions
- Medicaid acceptance
- Transportation and requirement to travel to multiple provider sites for care
- No rural transportation, transportation ends at 5 pm.

Mental, behavioral, and addiction services were repeatedly cited as insufficient and difficult to access. There is also stigma and lack of confidentiality associated with accessing services. Mental health resources do not exist or are insufficient for school-aged children across the region.

Although more people have insurance through Medicaid expansion and the Affordable Care Act, problems persist for residents in rural areas and those of low income. Many face ongoing challenges with finding specialty care, adult dental care, and behavioral health services. High deductibles and co-pays still impede access to care when residents are forced to choose between healthcare and other basic needs.

Early childhood issues
Throughout focus groups, interviews and community meetings, there was a strong emphasis on providing services to children, especially for preventive and educational opportunities.

Breaking cycles of poverty to address access to healthy foods, safe housing, and positive influences were discussed repeatedly. Supporting youth to develop into productive and healthy adults included:

- Focusing on healthy development including nutrition, physical activity, mental, engagement, decision making, and skill-building
- Mental health screening and support
- Violence and substance use reduction
- Teaching about prevention instead of treatment

Housing
Nearly every area in the region discussed safe and affordable housing as a key issue to improve health. Older homes are prevalent in north Iowa which can lead to an inability to maintain a healthy home. Threats like lead poisoning, unsafe structures, overcrowding and inadequate facilities were paramount, especially for those who live in poverty and where housing codes are not enforced. Crucial conversations were held around housing stability and safety and how that contributes to the quality of life. Homelessness in north Iowa is a constant threat to children and adults. Despite being in an era of economic upturn, homelessness continues to burden society across rural and micropolitan areas. Another concern presented the lack of 'neighborhoods' with transient populations and social isolation increasing. Housing is a criterion for accessing benefits and if an address cannot be produced, benefits are withheld. Issues outlined include

- Addressing homelessness as a community of care
- Increase rental code existence and adherence for safety and health
- Reduce stigma and change process for those needing housing: background checks, credit score
- Decrease connection between address and access to benefits, services, etc.

Detailed Data

About the Community
Iowa is the 31st most populous state with about 35.7% classified as rural. In the North Iowa region, approximately 200,000 people reside. Cerro Gordo County is part of the Mason City micropolitan statistical area and is the 14th most populous county in Iowa. Many who live in the surrounding counties, work in Cerro Gordo County. **Top industries** in Iowa are healthcare and social services, wholesale and retail trade, manufacturing and education. Northern Iowa is primarily **Caucasian/White** alone with origin ethnicities of Norwegian, English, Irish and German represented. **Black/African American** percentage across the region is 1.8% and no other racial group has more than that percentage regionally. The region averages 4.6% of the population as **Latino/Latina**. Franklin and Wright counties have the highest representation in this ethnicity. Northern counties have a higher representation of **Mennonite communities** and there is a large **Filipino** population in Floyd County. On average, 5% of homes have a language other than English commonly spoken. **Spanish** is the second leading language spoken.

Figure 2 Population by County

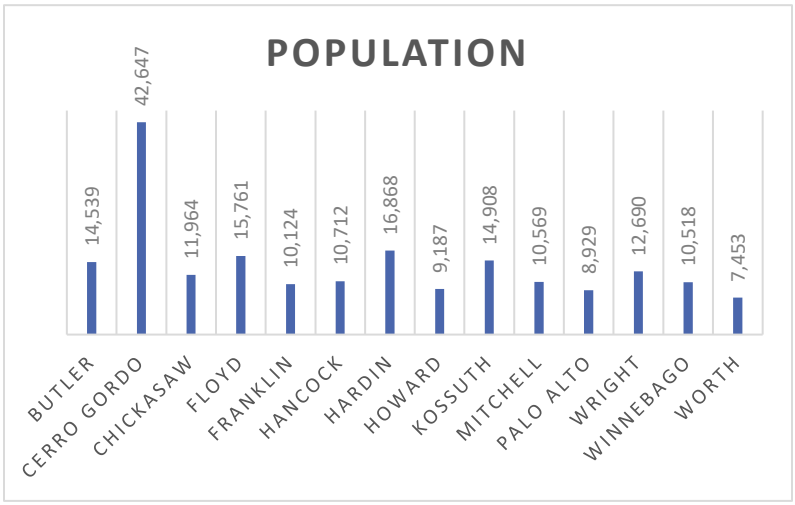
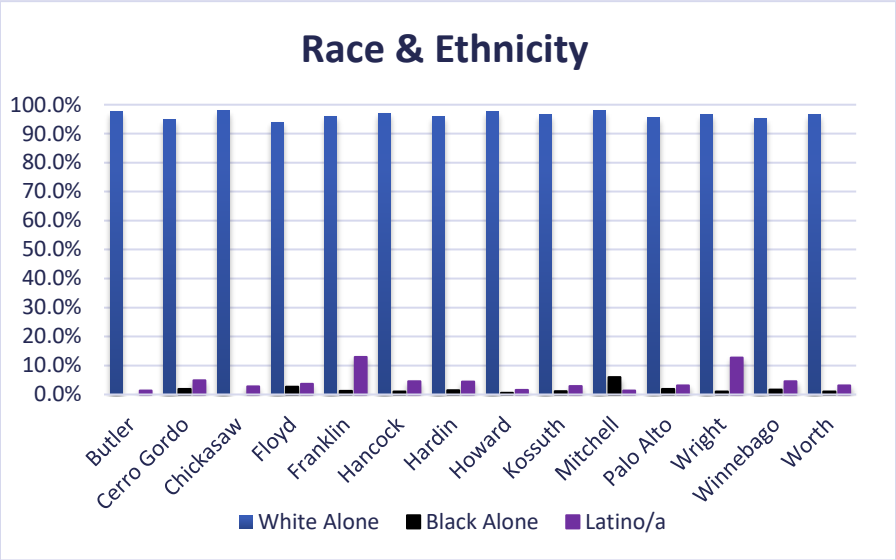


Figure 3 Race & Ethnicity Percentages by County



Food Insecurity and Poverty

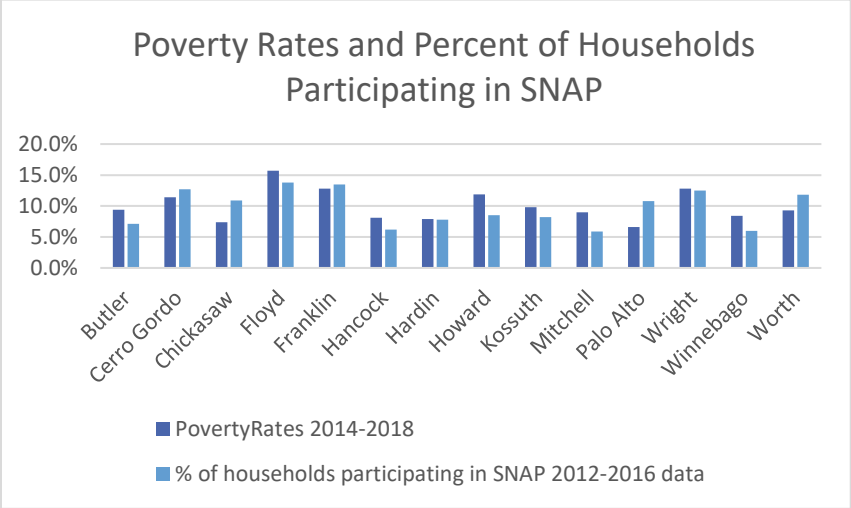
The overall **food insecurity** rate ranges from 8.9% to 12.3% throughout the North Iowa region; however, the child food insecurity rate fluctuates quite a bit more from 19.6% in Floyd County (darkest green) to 13.9% in Mitchell County. This means that the lowest child food insecurity percentage is higher than the highest overall percentage. Food insecurity refers to USDA's measure of lack of access, at times, to enough food for an active, healthy life for all household members and limited or uncertain availability of nutritionally adequate foods.

Figure 4 Food Insecurity Rates by County

The percent of households **participating in the SNAP** (Supplemental Nutrition Assistance Program) is shown in the graph below. More than 70% of SNAP participants are in families with children and more than 54% are in working families (this is 10% higher than the national average). In July 2019, 153,485 households and 318,106 individuals participated in Iowa's Food Assistance Program statewide. This represents a 6.7% decrease in individual participation since July 2018. The average benefit per individual is $109.95 per month.

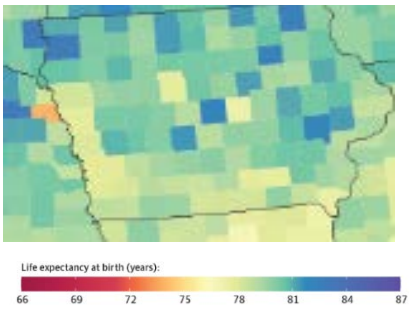
By many measures, the Iowa economy is doing well. The **unemployment rate** is among the lowest in the nation, averaging 2.99% in the 14-county region yet many families are struggling to live. Iowa wages and incomes are not growing at a fast-enough rate to compensate for the cost of living needs. **Poverty rates,** shown Figure 5, average 10% regionally. Low unemployment rates are fantastic economically speaking, but it hides that many people work low-wage jobs with no benefits or have multiple part-time jobs. Iowa hasn't raised its **minimum wage** in over 10 years and women and Iowans of color face additional hurdles. In Iowa, the average earnings for women are just 79% of men's earnings and barriers to equal access in employment, education continues to provide barriers to those of color in Iowa.

Figure 5 Poverty and Household Rate of SNAP Participation



The average **median household income** of this region is about $45,100; Iowa's is $58,570. Not one county reaches the state average. The closest is Worth County at $49,673. The lowest county in this region is Floyd County at $39,467. Although the region has a **high school graduation** rate at 92%, the average for a **bachelor's degree** or higher is 19%. Iowa's rate is 28.2% and the nation is 31.5%. This area lags in educational attainment according to the statistics. Higher education tends to lead to higher salaries, but college tuition has increased steadily over the past three decades. Disparities in education tend to parallel disparities in income.

Figure 6 Life Expectancy by County



Life Expectancy

Life expectancy at birth is the number of years a newborn can expect to live. This varies from county-to-county in north Iowa from about 78 to 84. In some areas, it exceeds the national average of 79.1 (as combined for both sexes). Geographic disparities in life expectancy among Iowa counties are increasing. Variation can be explained by a combination of socioeconomic and race/ethnicity factors, behavioral and metabolic risk factors, and health care factors.

Leading Causes of Death

Despite reductions in some unhealthy behaviors like cigarette smoking in Iowa, other risk factors like nutritional intake, obesity, sedentary lifestyle are increasing which contributes to heart disease and cancer as the top two causes of death in Iowa. North Iowa's statistics on leading causes of death mirror the state's (table 2).

Table 2 Leading Causes of Death in Iowa

IA Leading Causes of Death, 2017	Deaths	Rate	State Rank	U.S. Rate
1. Heart Disease	7,180	167.4	19th	165.0
2. Cancer	6,449	158.0	18th	152.5
3. Chronic Lower Respiratory Disease	1,939	46.5	20th	40.9
4. Alzheimer's disease	1,597	35.3	20th	31.0
5. Accidents	1,536	42.7	43rd	49.4
6. Stroke	1,416	32.8	39th	37.6
7. Diabetes	918	22.8	19th	21.5
8. Flu/Pneumonia	578	13.2	35th	14.3
9. Suicide	479	15.0	30th (tie)	14.0
10. Hypertension	399	9.1	16th (tie)	9.0

Many of these top causes of death have remained the same year after year. Males die at a higher rate than females from heart disease, cancer, chronic lower respiratory disease, unintentional injuries (accidents), and diabetes; however, females overall die at a higher rate from Alzheimer's disease, cerebrovascular disease (stroke), and influenza/pneumonia. Death from heart disease and cerebrovascular disease increase with age.

Overall, suicides are increasing in Iowa; suicide death rates in Cerro Gordo, Chickasaw, Hancock, Hardin, Palo Alto, & Worth Counties are all higher than the state average, see table 3.

Table 3 Suicide Death Rates by County

COUNTY	County Rate (per 100,000)	State Rate
Butler	10.81	13.28
Cerro Gordo	19.77	13.28
Chickasaw	15.35	13.28
Floyd	11.25	13.28
Franklin	12.83	13.28
Hancock	26.42	13.28
Hardin	17.52	13.28
Howard	*	13.28
Kossuth	12.73	13.28
Mitchell	*	13.28
Palo Alto	23.61	13.28
Winnebago	*	13.28
Worth	22.83	13.28
Wright	10.87	13.28
Total	16.73	13.28

*suppressed data

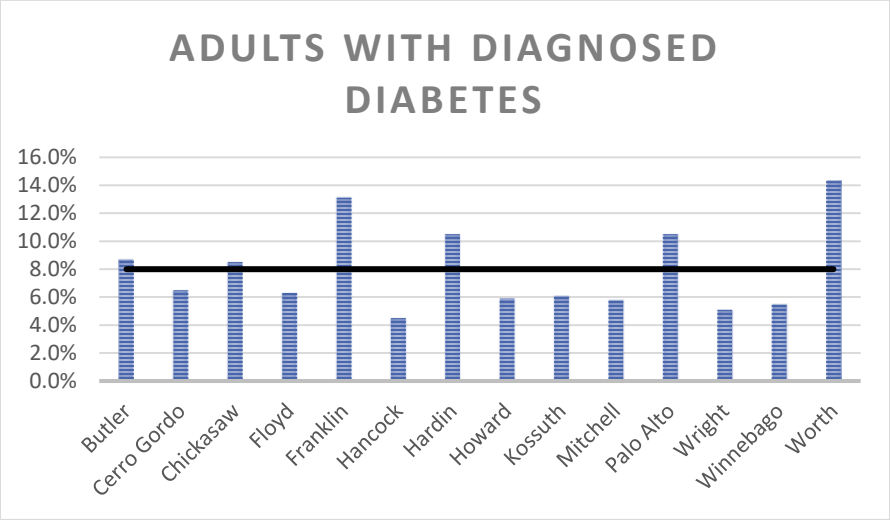
According to the Iowa Youth Survey, the percent of students who have a plan to kill themselves almost doubled across all grade categories, and more than doubled specifically in 11th-grade respondents.

Chronic illnesses are among the leading causes of death, disability, and hospitalization. These are common and costly. Targeted prevention and health promotion strategies are needed to slow the rates. Similar risk factors apply to the multiple conditions listed. Implementation of healthy lifestyle factors like regular physical activity and eating healthily could influence the rates of disease.

Diabetes

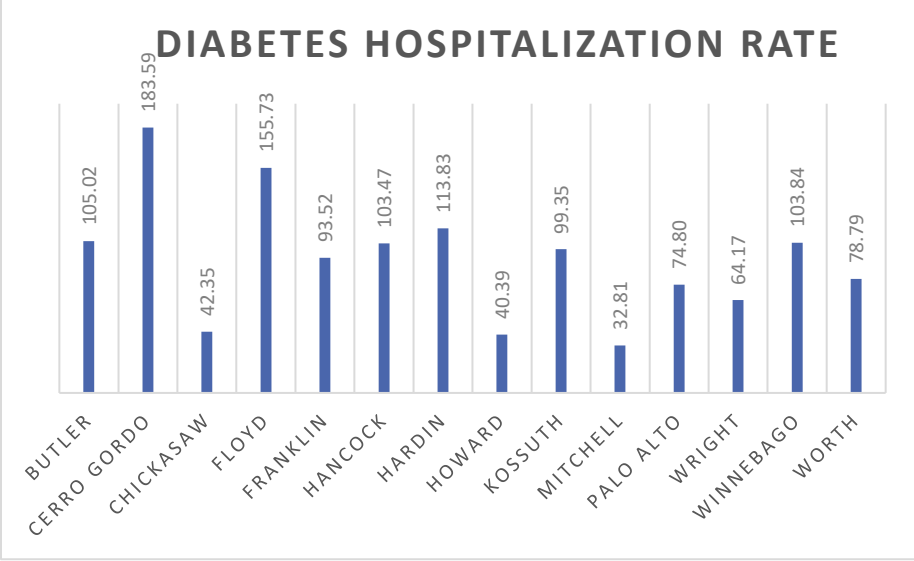
Diabetes is an endocrine disease; type two diabetes is the most common diagnosis accounting for 90-95% of adult diagnosed diabetes. This occurs when the body is unable to manage insulin properly. Six of the counties average higher than the state rate of 8% (denoted by the line).

Figure 7 By County, Adults with Diagnosed Diabetes as Compared to the State Rate



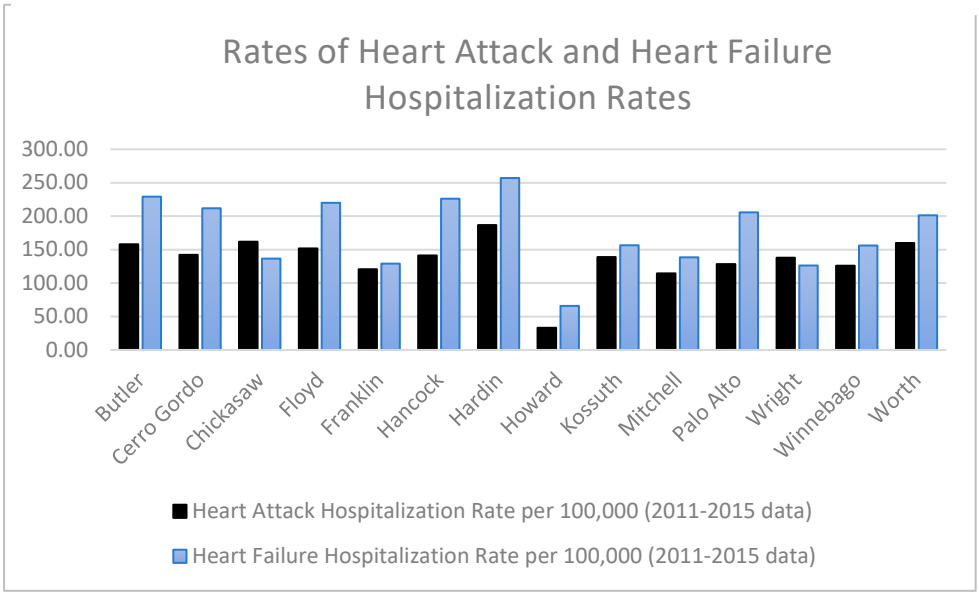
In our region, hospitalization rates fluctuate from 32.81/100,000 to 183.59/100,0000. Hospitalization inpatient care is costly and accounts for one-third of health care expenditures nationally. Often patients from communities with the lowest income levels have the highest rate of hospital stays. This can indicate a lack of primary care and the inability to afford medication.

Figure 8 Diabetes Hospitalization Rate by County



Heart disease

Figure 9 Heart Attack and Failure Hospitalization Rates by County



Coronary artery disease, the precursor to coronary heart disease (CHD) is the most common cause of a heart attack. CHD is characterized by a narrowing of blood vessels that supply the heart, usually from a buildup of plaque. CHD may progress into heart failure. Patients with heart failure experience symptoms as a disruption of their everyday lives and their ability to perform routine activities leading to frustration, loss of confidence and a reduction in self-esteem.

Cancers

For 2019, data will be collected on an estimated 18,100 new, invasive cases of cancers among Iowa residents and about 1,480 projected for the North Iowa region. The type of anticipated new cancers by gender and by percent of the total is indicated in table 4.

Table 4 Cancer Rates by Gender in Iowa

New Cancers in Females	Percent of total	New Cancers in Males	Percent of total
Breast	28.1%	**Prostate**	22.3%
Lung	12.4%	**Lung**	13.9%
Colon/rectum	8.8%	**Colon/rectum**	9.3%
Uterus	7.1%	**Bladder**	7%
Skin Melanoma	5.1%	**Skin Melanoma**	6.1%
Thyroid	4%	**Kidney & Renal Pelvis**	5.1%
Non-Hodgkin Lymphoma	3.7%	**Non-Hodgkin Lymphoma**	4.3%
Leukemia	3%	**Leukemia**	4.3%
Kidney & Renal Pelvis	2.9%	**Oral Cavity**	3.6%
Pancreas	2.8%	**Pancreas**	2.9%

Estimates for cancer deaths show that for females, lung, breast and colon/rectum cancer are the top three types and for males, the top three are lung, prostate and colon & rectum. Iowa has a significant

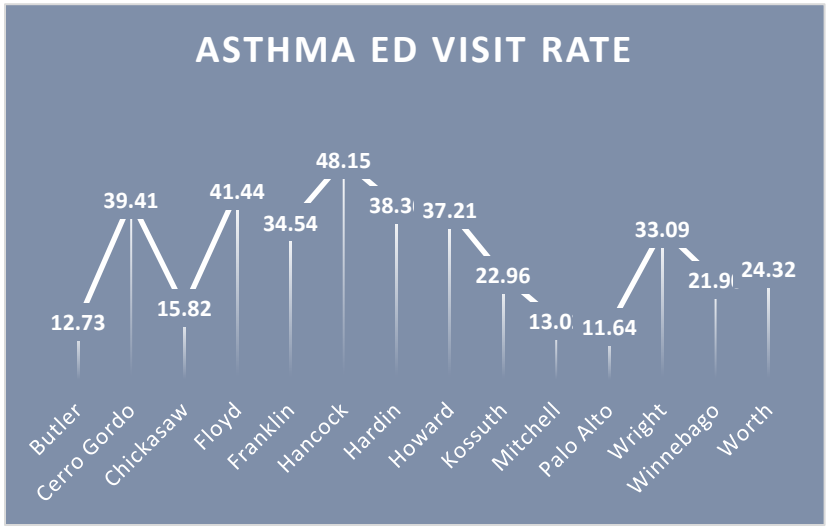
number of cancer survivors as well. Cancer can be prevented in some instances by not smoking or using tobacco products, living in a home without radon, maintaining a healthy weight, eating a healthy diet and being physically active, getting vaccinated and protecting yourself from the sun.

Chronic Lower Respiratory Disease

Chronic Lower Respiratory Disease (CLRD) comprises three major diseases, chronic bronchitis, emphysema, and asthma, that are all characterized by shortness of breath caused by airway obstruction. For all three, cigarette smoking is the major cause of these illnesses. However, exposure to pollutants in the home and workplace are also factors. Those exposed to dust like metal workers or grain handlers often develop CLRD.

Asthma is a serious chronic disease that affects the airways. It can cause wheezing, difficulty breathing and coughing. However, not everyone who has asthma has these symptoms and having these symptoms doesn't always mean someone has asthma. Asthma can be linked to exposure to cigarette smoke, living in a low-income environment or having allergies. Figure 10 shows the rate per 10,000 for each county in the region. The state's average is 31.34/10,000.

Figure 10 Asthma Emergency Department Visit Rate by County



Alzheimer's Disease

In North Iowa, like across the state, Alzheimer's disease (AD) is a leading cause of death. This progressive, age-related form of dementia is the loss of cognitive function such as memory, language skills, abstract thinking, and attention. The exact cause of AD remains uncertain, but a great deal of research has identified variants in the genetic makeup. If a family member had the disease, your chances of developing it are higher. Women are more likely to get AD than men.

There is growing evidence of a link between heart and blood disorders and dementia. Conditions that affect the quality of blood reaching the brain, such as smoking, high blood pressure, high cholesterol, and diabetes, greatly increase your chances of developing dementia. Additional risk factors are environmental. Some studies show a link between head injuries and the disease. Others show that your level of education could play a role in the development of AD. The more brain activity you have the less you may be at risk. People who get less sleep or have their sleep interrupted frequently by snoring may be at increased risk. Finally, people who get more exercise seem to be at a lower risk of developing AD or may develop the disease later and more slowly.

Access to Preventive Services and Healthcare

Access to health services includes and access to comprehensive, high-quality healthcare to prevent issues, detect disease early and to treat conditions; it is also timely access to services.

For all clinical care measures as noted by the County Health Rankings, Cerro Gordo County ranks second in Iowa for having the best access to clinical care. Also, in the region, Palo Alto is 79th of the 99 counties overall. Access to care requires not only financial coverage but also access to providers. The sufficient availability of primary care physicians is essential for preventive and primary care, and, when needed, referrals to appropriate specialty care. Primary care physicians are the ratio of the population to primary care physicians. The ratio represents the number of individuals served by one physician in a county if the population was equally distributed across physicians. For example, if a county has a population of 50,000 and has 20 primary care physicians, their ratio would be: 2,500:1

In the tables below are provider ratios for primary care physicians, dentists, and mental health providers. The lower the ratio, the higher the access. With the exception of Cerro Gordo County, no county has a ratio close to the state rate of 1,390 to one for primary care providers. For dentists, Winnebago, Hardin and Cerro Gordo Counties have rates better than the state. In each of the counties in the North Iowa region, there is at least one primary care physician and one dentist. There are two counties that have no mental health care providers and Cerro Gordo County is the only one with a better than state ratio. While the ratio is better than the state, these providers are serving large service areas, creating barriers for CG residents to get appointments or establish care.

Table 5 Provider Ratio: Primary Care Physicians, Dentists and Mental Health Providers

	Kossuth	Mitchell	Palo Alto	Worth	Winnebago	Wright	Butler
Primary care physicians	2,520	5,380	3,020	3,790	2,130	2,130	7,400
Dentists	1,870	2,130	4,550	3,730	1,510	2,560	4,870
Mental health providers	3,000	*	1,140	*	10,590	1,830	1,620

	Cerro Gordo	Chickasaw	Floyd	Franklin	Hancock	Hardin	Howard
Primary care physicians	630	1,500	2,650	3,390	3,610	2,150	2,330
Dentists	1,300	2,400	2,250	2,540	1,800	1,420	4,610
Mental health providers	410	2,400	7,870	10,160	10,770	2,130	4,610

Enough providers are only one measure of access to healthcare. **Health insurance coverage** is a key component to enter the healthcare system. The region averages 5% uninsured which is equal to the state's average; however, that still leaves about 10,000 people in the region without insurance. Generally speaking, these people receive less medical care and have worse health outcomes. Efforts through expanded Medicaid and the Affordable Care Act have helped, but it still isn't enough. For those with health insurance, it can still be costly to see a provider. Qualitative data showed that **cost is a barrier** and leads to unmet medical needs.

Despite improvements across the state, the region still does not meet standards for **optimal vaccination thresholds**. The number of Vaccine for Children providers (VFC) is low when compared to the children eligible for this service. The VFC program provides vaccines for approximately 44%, of Iowa's children from birth through 18 years of age. Eligible children include those who are enrolled in Medicaid, uninsured, underinsured, American Indian or Alaskan Native. These vaccines protect Iowa's children from 16 vaccine-preventable diseases like tetanus, diphtheria, pertussis, measles and more. In Floyd County, for example, the only VFC provider is the local public health department who provides vaccine services on limited days per month. That means that although a parent may take their child for a well-child visit at a primary care provider office, that child is not receiving vaccines there and the parent has to make an additional appointment to get the child vaccinated. For two-year-old children, not one county in the region has a 100% rate. The closest are Butler, Cerro Gordo, Hancock, Palo Alto, and Worth at 81.6% -85.7%. Winnebago County's rate is 57.9%. The adolescent completion rates are highest in the same counties that the 2-year old rates are and lowest again in Winnebago. The remaining counties fall in the middle. These basic prevention services are lacking.

Preventive screenings in Iowa are not achieving national benchmarks; in 2016, only 68.2% of age-eligible Iowa residents had a **colorectal cancer** screening. Colorectal cancer usually develops from abnormal growths known as precancerous polyps in the colon and rectum. In the early stages, there are often no symptoms. Some screening tests can detect polyps so they can be removed before they turn into cancer. In 2016, when asked if they had ever had a **mammogram**, 92 percent of all female Iowans ages 40 and older reported having one. For women ages 21 to 65, 81.6% had a **Pap test** in the last 3 years. Although there are several risk factors for cervical cancer, the most important risk factor is infection with the human papillomavirus (HPV). The principal screening test for cervical cancer is the Papanicolaou (Pap) test. This test allows the cellular changes in the cervix to be detected when they are precancerous or at an early stage. Early detection through Pap tests can dramatically lower the incidence of invasive disease and can nearly eliminate deaths from cervical cancer; however, optimal **vaccination could prevent HPV** altogether. Factors like poverty, educational level, and insurance status affect who gets screening tests. Timely access is another issue. Cerro Gordo County is the hub for medical care; with an influx of patients seeking care, appointments are limited. Mason City has two urgent care centers, but again, transportation to these sites is a barrier in rural areas.

Early Childhood Issues

Regionally, the area has a **low teen birth** rate with only four counties higher than the state average for those ages 15 to 19. Franklin and Wright Counties have the highest rates. There are strong ties between teen birth and poor socioeconomic, behavioral, and mental outcomes. Teenage women who bear a child are much less likely to achieve an education level at or beyond high school, much more likely to be overweight/obese in adulthood, and more likely to experience depression and psychological distress.

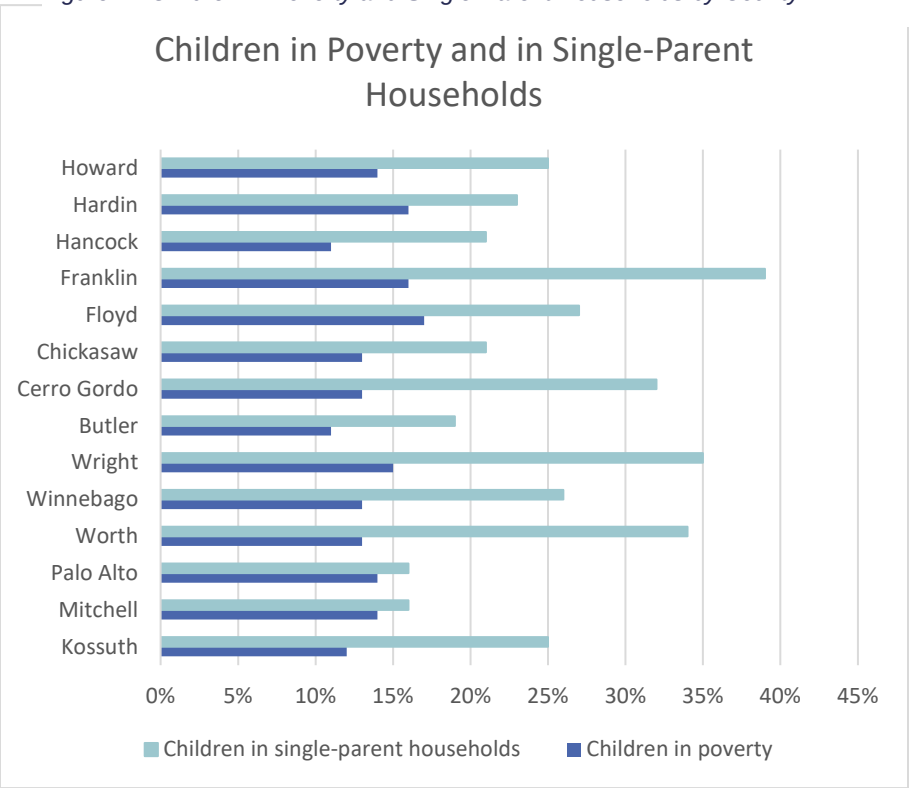
Table 6 Teen Birth Rate by County

County	*Rate per 1,000*		
Kossuth	12	*Cerro Gordo*	21
Mitchell	10	*Chickasaw*	13
Palo Alto	16	*Floyd*	21
Worth	15	*Franklin*	29
Winnebago	15	*Hancock*	14
Wright	27	*Hardin*	19
Butler	13	*Howard*	14

Children in **poverty** range from 12% (Butler) to 18% (Floyd & Wright Counties) and the region averages 14%. Children in poverty may experience lasting effects on academic achievement, health, and income into adulthood. Low-income children have an increased risk of injuries from accidents and physical abuse and are susceptible to more frequent and severe chronic conditions and their complications like asthma, obesity, diabetes, behavior disorders, and anxiety than children living in high-income households. Adults and children in **single-parent households** are at risk for adverse health outcomes, including mental illness (e.g. substance abuse, depression, suicide) and unhealthy behaviors (e.g. smoking, excessive alcohol use). Children in single-parent households are at greater risk of severe morbidity and all-cause mortality than their peers in a two-parent household.

Participating in WIC helps kids get a good start in life. Overall, the state averages 26% of kids on WIC; however, children 0-4 receiving WIC ranges from 9.1% (Worth) to 39.5% (Cerro Gordo). Another issue plaguing children is homelessness. Head Start children who are **homeless** range from 0% to 2.7%.

Figure 11 Children in Poverty and Single-Parent Households by County



The **cost of childcare** is incredibly high in Iowa and can eat up more than 54% of annual household income.

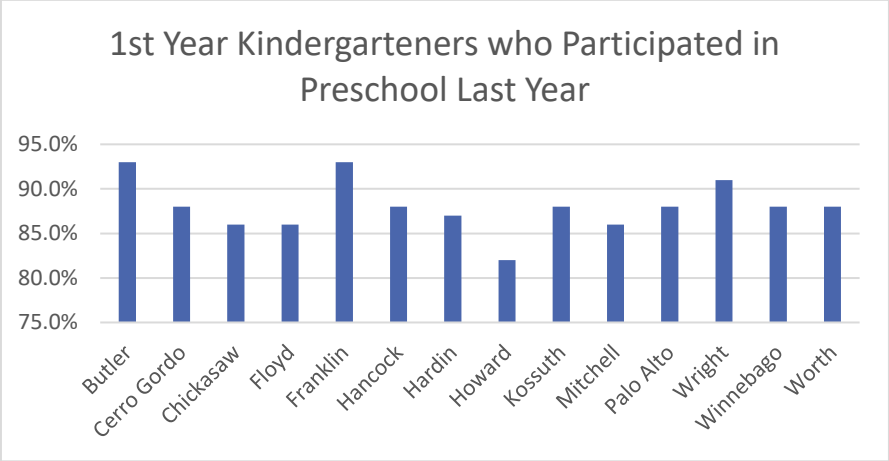
For an infant in a home, child care costs $7,200 per year and in a center, it is $10,700 per year. For an infant plus a four-year-old, in the home, it is $14,000 and nearly $20,000 per year in the center. Kids who attend public preschool programs are better prepared for kindergarten than kids who don't. While all kids benefit from preschool, poor and disadvantaged kids often make the most gains.

Figure 12 Iowa, Percent of Income Spent on Child Care

Percent of Income Spent on Child Care		
Center		Home
11.8%	Infant child care - married couple family	8.0%
21.6%	Two children - married couple family	15.5%
41.6%	Infant child care - single parent	28.0%
76.0%	Two children - single parent	54.6%
78.1%	Married family with two children at the poverty line	56.1%

Data from Early Childhood Iowa shows the rates of **preschool participation by county** in Figure 13. Franklin County followed by Butler County has the highest rates of participation. The lowest percentage is in Howard County at 82%. Preschool participation prepares children for grade school through instruction built on play, games, art, music, movement, and social and emotional skills which complement learning to count and reading in kindergarten. Early literacy skills measured in kindergarten are subpar in North Iowa. Getting kids ready to read can influence the rest of their life.

Figure 13 Kindergarten Students who Participated in Preschool the Prior Year, by County



Child Abuse

The child welfare system in Iowa has been under enhanced scrutiny in response to recent starvation deaths. Data for 2018 shows that in Iowa, **47% of abused or neglected children were age five or younger**; abuse involving children being exposed to dangerous substances is increasing. It's uncertain whether **sufficient treatment services are available** to meet the upsurge in drug-related cases. Across the region, child abuse rates range from 6.3% in Butler County to 15.8% in Cerro Gordo County (2017 data). The variation in the rates of child abuse among Iowa's counties raises concerns about the sufficiency of resources in parts of the state with notably higher rates of abuse. It also raises the question if there are enough prevention efforts in place.

Housing

Safe affordable housing is a need in North Iowa like in every community nationwide. Housing provides physical safety, protection and access to basic needs. A clean, dry, safe home reduces exposure to harsh weather, communicable diseases, infections, injury, harassment and violence; it provides a secure place to sleep and store food, clothing and medications; and it is essential to promoting personal hygiene and recuperation from illness. State data shows that the **Iowa real estate market** finished on a high note in 2019; sales rose 1.2% and median sales prices were 5% higher than the previous year. While this shows a healthy economy, it also contributes to lack of **affordable housing** available and contributes to the housing cost burden. Higher sale prices equal higher mortgage payments generally. Across North Iowa, many families are spending 20% or more of their income on housing.

There are only a handful of US Housing and Urban Development **(HUD) public housing developments** throughout the area; instead HUD **assisted housing** units are more prevalent in north Iowa. Qualifying families and individuals receive subsidies with this programming. Cerro Gordo County has 594 units while Butler has only 29 units. Floyd County and Cerro Gordo are the only ones in the second highest quartile for assistance. Quality affordable housing is difficult to come by in the region. There is also a **rental unit shortage**; the state vacancy rate for rentals is 5%, but in one county in the region, it is a 1.2%.

The age of housing in north Iowa is also an issue. For Iowa, the **median year built for housing is 1968** and in North Iowa it is lower across each county. Cerro Gordo County has a median year built of 1957. Older homes can have a variety of maintenance and health issues associated**. Lead-based paint** wasn't banned until 1978; many older homes have peeling lead paint that contributes to childhood lead poisoning. Other issues include outdated wiring, asbestos, pests and more. Iowa has a high rate of **owner-occupied housing** at 76%. The national rate is 63.8%. Having a high level of homeownership can foster neighborhood stability, permanency for children, and often increased property values.

Conclusion

North central Iowa is facing a changing landscape with reductions in population and a shifting racial and ethnic makeup. Much of this change bring rich cultures and traditions to add to the existing ones. The area varies between micropolitan and rural areas. Developing strategies to meet and improve the challenges posed by health disparities in north Iowa. This will be critical to future positive health changes. Findings from the assessments within this document, indicate solutions are within reach of our current resources, but will require collaboration at a level never seen before in the area. It will also take strong will and a change in mindset of residents. Personal decisions made about parenting, education, diet, and exercise will provide the energy to push forward initiatives in the community health improvement plan.

Data Resources

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