The Health of Linn County, Iowa
A Countywide Assessment of Health Status and Health Risks

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Chapter 8 Healthcare Services

Introduction
Availability, accessibility, and affordability of healthcare services are essential for maintaining a healthy population. Access to health care affects overall health status, disease and disability prevention, quality of life, preventable deaths, and life expectancy. The distribution of medical facilities can affect residents’ ability to access healthcare services and may contribute to health disparities. Additionally, the number of providers, especially primary care providers who would serve as medical homes, may also affect the accessibility of healthcare. Lack of transportation to medical appointments can be a significant barrier to accessing healthcare. Finally, the affordability of healthcare services is an obstacle to healthcare access. People lacking adequate health insurance may not be able to afford healthcare services. Income, age, race, ethnicity, and gender are all factors that influence a person’s likelihood of being insured. The implementation of the Affordable Care Act and Medicaid expansion, also known as the Iowa Health and Wellness Plan, has made health insurance more available to Linn County residents and many enrolled during the 2016-2017 open enrollment period.

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https://www.uweci.org/events-blog/blog/affordable-care-act-enrollment/
Availability

Healthcare Infrastructure

Trends
In Linn County, there are two hospitals, one Federally Qualified Health Center, and two free clinics. Additionally, Linn County Public Health has a clinic with limited services and there are four WIC offices throughout Linn County (Table 8.1).

Table 8.1 Medical Facilities in Linn County, Iowa 2017

<table>
<thead>
<tr>
<th>Facility Type</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital</td>
<td>2</td>
</tr>
<tr>
<td>Federally Qualified Health Center</td>
<td>1</td>
</tr>
<tr>
<td>Free Clinics</td>
<td>2</td>
</tr>
<tr>
<td>Public Health Clinics</td>
<td>1</td>
</tr>
<tr>
<td>WIC offices</td>
<td>4</td>
</tr>
<tr>
<td>Veteran’s Services</td>
<td>1</td>
</tr>
<tr>
<td>Student services (k-12)</td>
<td>1</td>
</tr>
<tr>
<td>Home health agencies</td>
<td>7</td>
</tr>
<tr>
<td>Long-term care</td>
<td>14</td>
</tr>
<tr>
<td>Low Income Dental</td>
<td>3</td>
</tr>
</tbody>
</table>

Source: Linn County Resource Sheets and Iowa Department of Inspections and Appeals, Health Facilities Division

Additionally, residents with access to transportation may use the University of Iowa Hospitals and Clinics, a level 1 trauma center, in Johnson County. There is also the Iowa City VA Health Care System in Johnson County and veterans may receive free transportation there through Linn County Veteran Affairs.

Disparities
The majority of these healthcare facilities are located in the Cedar Rapids metro area. Thus, healthcare is less available and accessible to residents who live in other areas of Linn County.
Healthcare Providers

Linn County 2020 Goal
Increase the number of practicing medical doctors, nurse practitioners, physician’s assistants, and dentists. Healthy People 2020 has not yet determined a goal for this measure.

Trends
The number of primary care physicians and dental providers per 100,000 population has remained stable over time with a rate of 62.5 primary care providers per 100,000 population in 2014 and 68.7 dental providers per 100,000 population in 2015 (Figure 8.1). However, mental health providers increased from 102.2 providers per 100,000 population in 2013 to 142.3 providers per 100,000 population in 2016.

Figure 8.1 Healthcare providers Linn County, Iowa 2010-2016

Source: County Health Rankings, Robert Wood Johnson Foundation
Disparities

As with healthcare facilities, the majority of healthcare providers are located in the Cedar Rapids metro area, meaning that Linn County residents in other parts of the county may not have the same availability of care. In more rural parts of the county there are as few as 1-3 primary care physicians within 10 miles, so residents must drive further for care or have fewer options (Figure 8.2). Finally, Medical providers without appropriate cultural or religious sensitivities and competencies could be a significant barrier to access, as nationwide, less than 50% of minorities report that they were satisfied with their health care.54

Figure 8.2 Primary care physicians (count) within 10 miles by census tract, Linn County, Iowa, 2012

Source: Community Commons, Centers for Medicare and Medicaid Services 2012

Linn County residents in urban census tracts are in closer proximity to a primary care provider (Figure 8.2). Linn County has many urban and rural census tracts with no healthcare providers (Figure 8.3).

http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1071658/#ref6
**Figure 8.3 Primary Care Physicians (rate per 100,000) by census tract, Linn County, Iowa, 2008-2012**

Source: Community Commons, Centers for Medicare and Medicaid Services 2012

**Risk and Protective Factors**

If the healthcare workforce were to remain as it is today there will be a large shortage of primary care physicians by 2020. Additionally, the demand for primary care services is expected to increase as more people gain health insurance through the Affordable Care Act and with population growth. Physician assistants and advanced registered nurse practitioners may be able to help alleviate this demand if they are more integrated into the provision of primary care.  

Also, the University of Iowa Health Alliance which includes over 50 hospitals helps to connect patients with providers through referrals and care coordination.

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Accessibility

Transportation services

Trends

In Linn County, four services are available to assist seniors with transportation to medical appointments for free or at low cost. Additionally, one transportation service provider is available for people with disabilities, one specifically for veterans, and one specifically for cancer patients (Table 8.1).

Table 8.2 Low cost transportation options for medical appointments

<table>
<thead>
<tr>
<th>Program</th>
<th>Populations served</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aging Services</td>
<td>60 years and older</td>
<td>Free</td>
</tr>
<tr>
<td>American Cancer Society</td>
<td>Cancer patients</td>
<td>Free</td>
</tr>
<tr>
<td>Cedar Rapids Transit</td>
<td>All</td>
<td>$0.50-$1.25</td>
</tr>
<tr>
<td>Iowa Non-Emergency Medical Transportation (NEMT)</td>
<td>Recipients of Medicaid; coordinated by Iowa’s Managed Care Organizations.</td>
<td>Free</td>
</tr>
<tr>
<td>Linn County LIFTS</td>
<td>Elderly and persons with disabilities; all Linn County residents outside the metro area.</td>
<td>$3.00 each way</td>
</tr>
<tr>
<td>Linn County Veteran Affairs</td>
<td>Veterans with appoints at VA Medical Center</td>
<td>Free</td>
</tr>
<tr>
<td>Neighborhood Church</td>
<td>55 and older</td>
<td>Free</td>
</tr>
<tr>
<td>Neighborhood Transportation Service (Horizons/NTS)</td>
<td>Open for residents in Cedar Rapids, Marion, and Hiawatha for school or work transportation only. Must be scheduled</td>
<td>$5.00 per ride</td>
</tr>
<tr>
<td>Southeast Linn Community Center</td>
<td>60 years or older in Lisbon, Mt. Vernon and the surrounding areas</td>
<td>Free</td>
</tr>
</tbody>
</table>

Source: 365-Ride, Linn County

Disparities

These transportation services are only available to certain populations such as older residents and veterans. Recipients of the Iowa Health and Wellness Plan or Iowa Marketplace Choice are also ineligible for free transportation through TMS Management. Thus, some Linn County residents may be left without access to transportation to their medical appointments. Linn County LIFTS does offer transportation to Linn County residents outside of the metro area for a fee. However, most transportation services are concentrated in the Cedar Rapids Metro area, so rural residents may not have access to healthcare due to having few transportation options.
Affordability

Cost of Healthcare

**Linn County 2020 Goal**
Reduce the proportion of persons who are unable to obtain or delay in obtaining necessary medical care by 10% to 7.2%.

**Trends**
In 2016, 7.8% of adults in Linn County report that they did not see the doctor in the past 12 months due to cost. The price-adjusted Medicare spending per enrollee in 2014 was $8,419. Finally, the rate of preventable hospital stays per 1,000 Medicare patients decreased from 2009 to 2014 in Linn County and Iowa (Figure 8.4). Preventable hospital stays are defined as the hospital discharge rate for ambulatory care-sensitive conditions such as asthma, COPD, hypertension, diabetes, and dehydration.

**Figure 8.4 Preventable Hospital Stays (by discharge rate per 1,000 Medicare Enrollees), Linn County and Iowa, 2009-2011**

![Graph showing the trend of preventable hospital stays from 2009 to 2014 in Linn County and Iowa.]

**Source** County Health Rankings 2012-2017 Report

**Risk and Preventive Factors**
Being uninsured is a significant risk factor for not seeing a doctor due to cost. Thus, the Affordable Care Act is expected to help to decrease the proportion of Linn County residents who did not see a doctor related to the cost.

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Insurance, before implementation of the Affordable Care Act

**Linn County 2020 Goal**
All Linn County residents have medical insurance.

**Trends**
Based on census estimates, 6,412 out of 219,725 people in Linn County were uninsured as of January 1<sup>st</sup>, 2017. In 2016, 3.4% of Linn County residents under the age of 65 were uninsured. This was a 4.1% decrease in the proportion of uninsured people in Linn County from 2013. A similar decrease was noted in the state of Iowa over the same period (Figure 8.5). These estimates document change in uninsured percentage following open enrollment period for the Marketplace Exchange, which allowed people that signed up to receive health insurance effective January 1, 2014. While Linn County is moving in the right direction, the goal of having 100% of residents insured has yet to be obtained.

**Figure 8.5 Uninsured Population under 65, Linn County, Iowa and United States, 2010-2016**

![Uninsured Population Graph](source)

Source: *Small Area Health Insurance Estimates; U.S. Census Bureau, 2011-2015 American Community Survey 5-year estimates*

**Disparities**

**Income**
As would be expected, as income increases the proportion of individuals insured increases. Individuals with an income below 138% Federal Poverty Line (FPL) were more than 2 times as likely to be uninsured as those with an income 200 – 399% of FPL and 7.5 times as likely as those with an income of 400% or more FPL.
Figure 8.6).
Race
The highest proportion of uninsured individuals are those who identify as “Other” race (Figure 8.7). This was consistent in Linn County (27.7%), Iowa (24.3%), and the United States (28.9%). Alternately, only 5.4% of white residents in Linn County were uninsured. Approximately half that of black, Asian, and multiracial residents.

Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-year estimates
**Ethnicity**

Hispanics were nearly four times as likely to be uninsured as non-Hispanics in Linn County from 2011-2015. Among Hispanic or Latino residents in Linn County, 18.8% were uninsured compared to 5.3% of those who are not Hispanic or Latino. This gap was similar in Iowa and greater in the United States (Figure 8.8).

![Figure 8.8 Uninsured Population by Ethnicity, Linn County, Iowa, and United States 2011-2015](image)

*Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-year estimates*

**Age**

Age is also a factor that influences the likelihood of Linn County residents being insured. Individuals 65 years and over and children were least likely to be uninsured from 2011-2015, with 0.8% of those 65 years or older and only 2.9% of those under 18 uninsured. Overall, in Linn County 8.6% of those 18 to 64 years of age were uninsured, while 12.2% of Linn County residents ages 19-25 were uninsured. The percent uninsured in Iowa were around that of Linn County, while the percentage of uninsured residents of the United States was greater for every age group.
Figure 8.98.9).\textsuperscript{57}

**Education**

From 2011-2015 in Linn County, residents who have not finished high school were the most likely to be uninsured, with 17.7% of this group uninsured. As the level of education increased, the percentage of residents who were uninsured decreased. Thus, of Linn County residents with a bachelor’s degree or more only 2.5% were uninsured. Iowa and the United States followed a similar trend, with people who reached higher levels of education being the least likely to be uninsured (Figure 8.10).

**Figure 8.10 Uninsured Population by level of Education, Linn County, Iowa, and United States, 2011-2015**

Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-year estimates
The proportion of males who are uninsured slightly exceeds that of females in Linn County, Iowa, and the United States (Figure 8.11).

Figure 8.11 Uninsured Population by Gender, Linn County, Iowa, 2011-2015

Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-year estimates

From 2011-2015, employed Linn County residents were three times more likely to be insured than unemployed residents. Residents who worked full time were more likely to be insured than those who worked part time. This is in part because many employers offer insurance (Figure 8.12).

Figure 8.12 Uninsured Population by Employment, Linn County, Iowa, and United States 2011-2015

Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-year estimates
*Full-time and part-time status reflects individuals 18 to 64 years
**Location**

From 2011-2015, some census tracts in Cedar Rapids had higher percentages of uninsured residents compared to others. Specifically, tract 26 in the southwest side of Cedar Rapids with 23.2% of the population who are uninsured (Figure 8.13).

**Figure 8.13 Percent Uninsured Population by Census tract, Linn County, 2011-2015**

![Map showing the percentage of uninsured population by census tract in Linn County, Iowa, 2011-2015.](Source: American Community Survey 2011-2015)
**Risk and Protective Factors**

Risk factors for being uninsured in Linn County include lower levels of education, income, and age. With Medicaid expansion and the Iowa Health and Wellness Plan, the percentage of low-income residents with health insurance should naturally increase. Additionally, as of October 2010, young adults up to 26 years were eligible to enroll on their parent’s health insurance plans. Following implementation of the Affordable Care Act, an estimated 20,000 young adults gained health coverage in Iowa.\(^58\) The current removal of cost sharing subsidy payments to insurers under the Trump administration has led to an increase in premiums for some enrollees in 2018.\(^59\)

**Disparities**

One of the goals of the Affordable Care Act is to reduce disparities, especially those that are due to being uninsured. Still there are some gaps in insurance coverage especially for those who do not qualify for the Iowa Health and Wellness Plan or Marketplace subsidies. For example, recent lawful immigrants may still be ineligible for subsidies, and may be required to wait 5 years before being eligible for Medicaid. Additionally, undocumented immigrants do not have access to insurance.\(^60\)

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Summary
In Linn County, there are a number of medical facilities available to residents. The crude rate of primary care providers was 62.5 per 100,000 population in 2014. However, medical providers without appropriate cultural or religious sensitivities and competencies could be a significant barrier to access. There are also a number of transportation options, but consumers must fit certain requirements to access them and many people are excluded from their usage. Moreover, the medical facilities and providers are concentrated in the urban areas, making it more difficult for rural residents to access healthcare. A greater proportion of Linn County residents less than 65 years of age are insured as compared to Iowa and the United States. However, young adults and low-income residents are less likely to be insured. Additionally, those who are classified as “Some Other Race”, Hispanic, unemployed, work part-time, or who have attained a lower level of education are more likely to be uninsured. Gaps in health insurance coverage remain, including residents who did not qualify for any subsidies and undocumented immigrants.