

SNAPSHOT OF RURAL HEALTH IN COLORADO

- 2018 -

 **OLORADO
RURAL HEALTH
CENTER**

The State Office of Rural Health

COLORADO RURAL HEALTH CENTER

The State Office of Rural Health

The Snapshot of Rural Health is prepared as a resource to highlight and advance interest in the rural health issues in Colorado.

Our Organization

The Colorado Rural Health Center (CRHC) was established in 1991 as Colorado's State Office of Rural Health. As a 501(c)(3) nonprofit organization, CRHC serves dual roles as the State Office of Rural Health with the mission of assisting rural communities in addressing healthcare issues; and as the State Rural Health Association, advocating for policy change on behalf of its members and all rural healthcare providers.

Mission & Vision

Our mission is to enhance healthcare services in the state by providing information, education, linkages, tools, and energy toward addressing rural health issues. Our vision is to improve healthcare services available in rural communities to ensure that all rural Coloradans have access to comprehensive, affordable, high quality healthcare.

Contact Us



Michelle Mills, Chief Executive Officer
mm@coruralhealth.org



Kelly Erb, Policy Analyst
ke@coruralhealth.org

@CORuralHealth

COLORADO RURAL HEALTH CENTER | *The State Office of Rural Health*

3033 S Parker Rd., Ste. 606 | Aurora, CO 80014 | P: 303.832.7493 | F: 303.832.7496 | info@coruralhealth.org | www.coruralhealth.org



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Definitions

Federally Certified RURAL HEALTH CLINICS

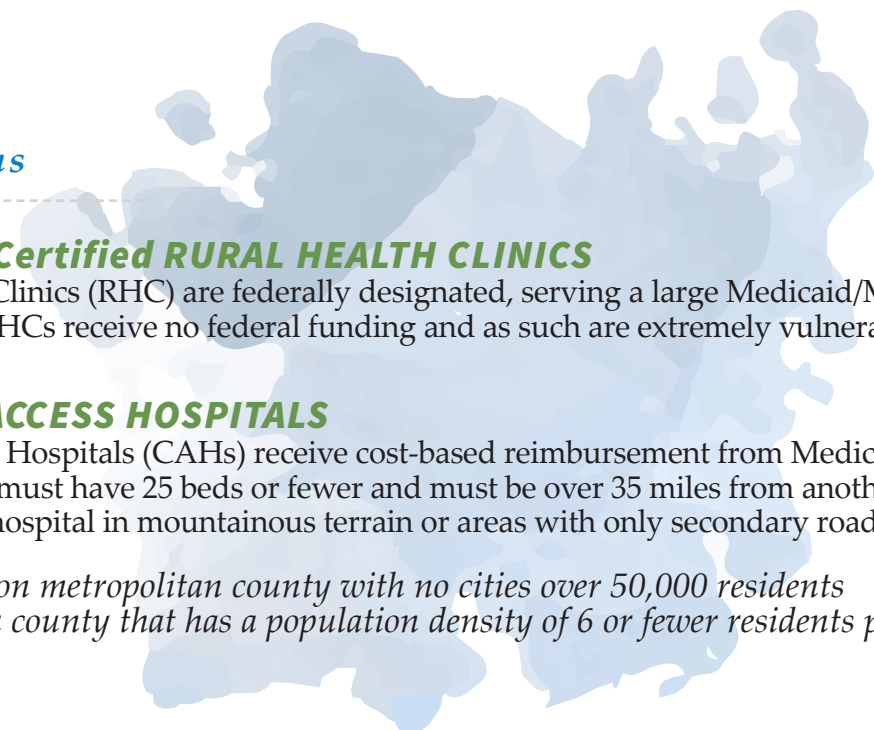
Rural Health Clinics (RHC) are federally designated, serving a large Medicaid/Medicare population in a rural area. RHCs receive no federal funding and as such are extremely vulnerable to local and state funding cuts.

CRITICAL ACCESS HOSPITALS

Critical Access Hospitals (CAHs) receive cost-based reimbursement from Medicare. CAHs must be located in rural areas, must have 25 beds or fewer and must be over 35 miles from another hospital or 15 miles from another hospital in mountainous terrain or areas with only secondary roads.

“Rural” - a non metropolitan county with no cities over 50,000 residents

“Frontier” - a county that has a population density of 6 or fewer residents per square mile





Demographics

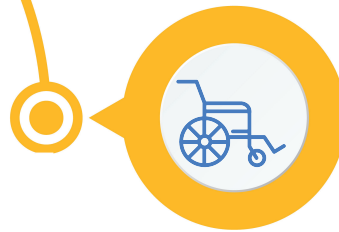
PEOPLE

The People of Rural Colorado

750,230 Coloradans live in a rural or frontier county.

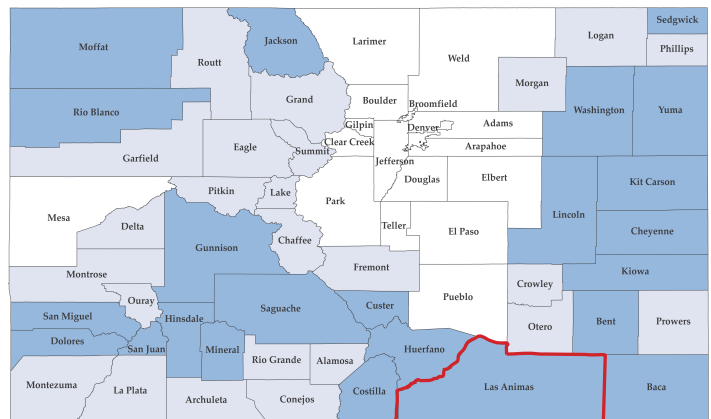
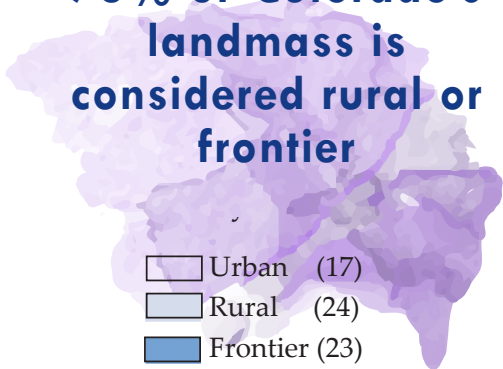


The median projected age in rural Colorado in 2019 is 44, versus 40 in urban counties.



The state's 10 oldest counties are rural with a median age of at least 50.

73% of Colorado's landmass is considered rural or frontier



Rural Las Animas County is roughly the size of Connecticut, yet has only 1 hospital

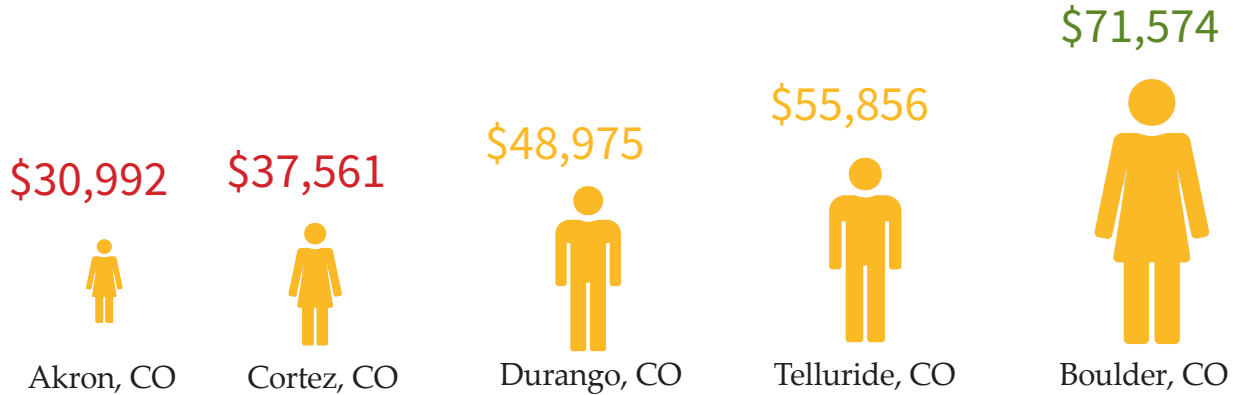
47 of Colorado's 64 counties are rural or frontier (24 rural, 23 frontier)

"Rural" - a non metropolitan county with no cities over 50,000 residents
"Frontier" - a county that has a population density of 6 or fewer residents per square mile

EDUCATION

Average Teacher Salaries 2015-2016

The average teacher salary in Colorado's rural schools is \$22,700, a figure that is \$14,000 less than the state average for teachers. Teacher pay has declined 7.7% in Colorado over the past decade.

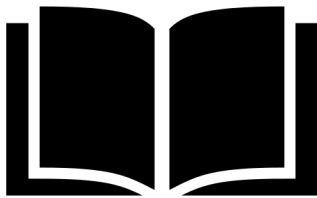


High School Graduation Rates*

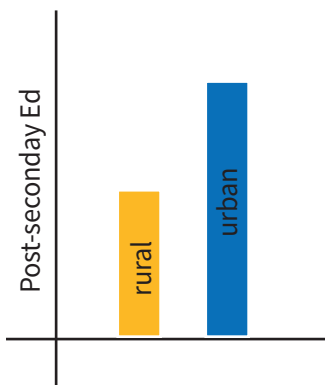


The high school graduation rate in rural Colorado is 80%, compared to the overall state average of 77%. The highest high school graduation rate in rural Colorado was observed in **Pitkin County** at 98% while the lowest rate in rural Colorado was observed in **Sedgwick County** at 40%.

**April, 2017*



12% of adult rural Coloradans lack basic literacy skills compared to 8% in urban (a 40% difference).



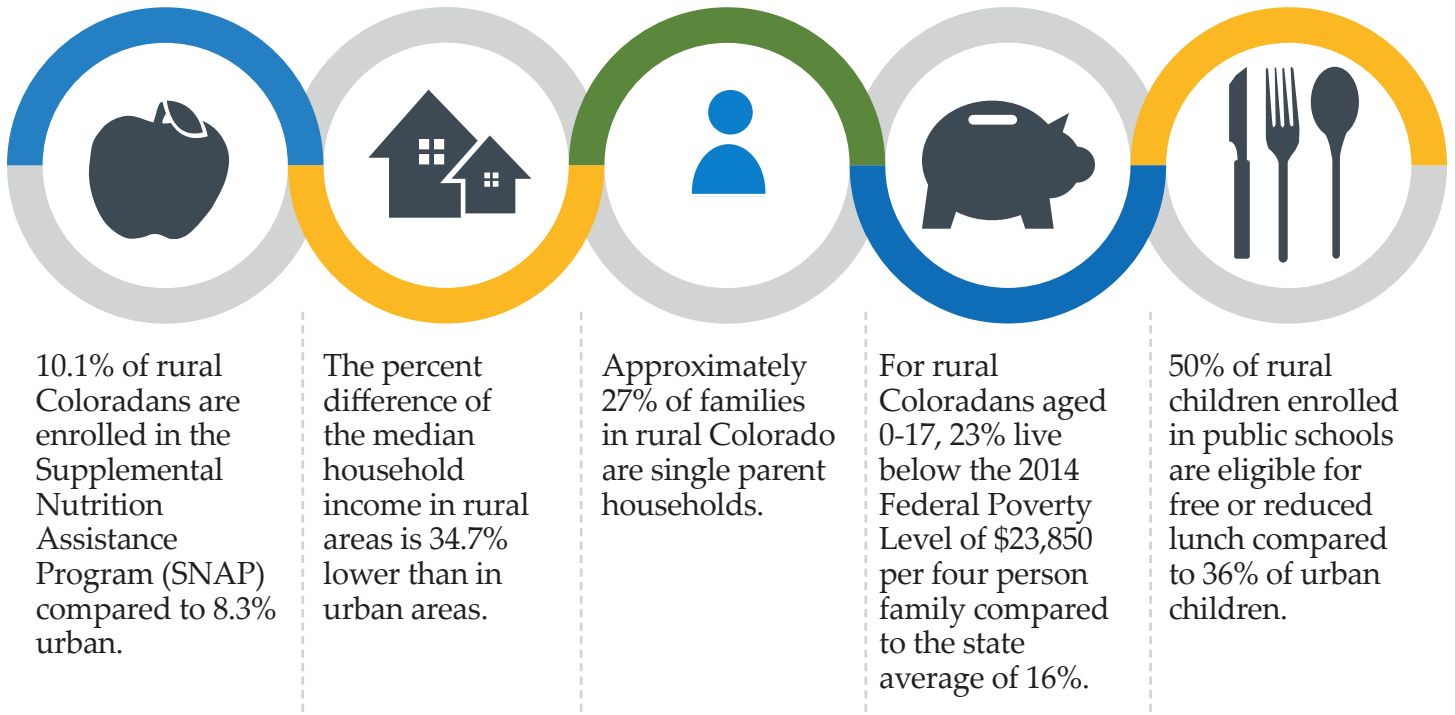
59% of rural Coloradans attend some type of post-secondary education, compared to 73% of urban Coloradans.



From data reported in 2016 and 2017, rural Colorado observed a 2% increase in the percentage of graduates in public schools that graduated from high school in four years, compared to urban counties that observed a 1% decrease.

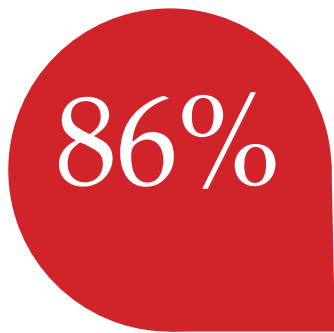
Demographics

INCOME AND POVERTY



Saguache County: A Rural Case Study

Rural residents tend to be poorer. On average, per capita income in rural areas is \$9,242 lower than the average per capita income in the United States, and rural Americans are more likely to live below the poverty level.



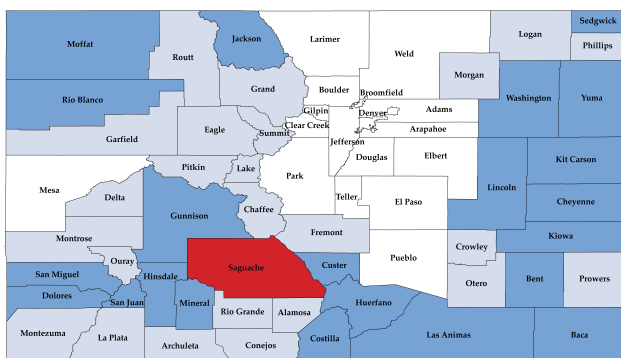
of kids in Saguache County are eligible for Free or Reduced lunch.



of kids in Saguache County are living in poverty compared to the state average of 15%. Saguache County has the highest child poverty percentage in the state.



Saguache and nearby Costilla counties have the lowest Food Environment Index of all counties at 3, indicating that they have very limited access to healthy foods and are highly food insecure. The lowest score in urban Colorado for any county was 7.



THE RURAL ECONOMY



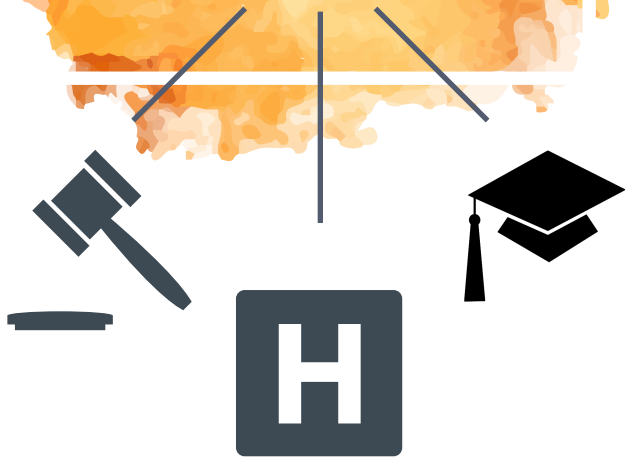
Agriculture is a significant economic driver in the state, contributing \$41 billion to the Colorado economy and employing nearly 173,000 people, according to the Colorado Department of Agriculture.

Each year, 2.3 million people participate in hunting, fishing and wildlife watching in Colorado, contributing an estimated \$3 billion to the Colorado economy.

The oil and gas industry in Colorado today supports over 213,000 jobs and contributes more than \$25 billion to the state's economy, representing 9.1% of the state's Gross Domestic Product.



Healthcare is one of the top 3 industries in rural Colorado



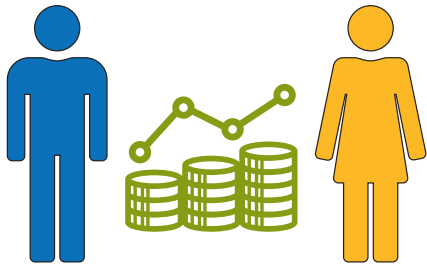
Colorado has over 314,900 health and wellness workers across the state and a \$16.5 billion annual payroll. The industry has a compelling impact.

1 in 16

jobs in Colorado is in the healthcare sector

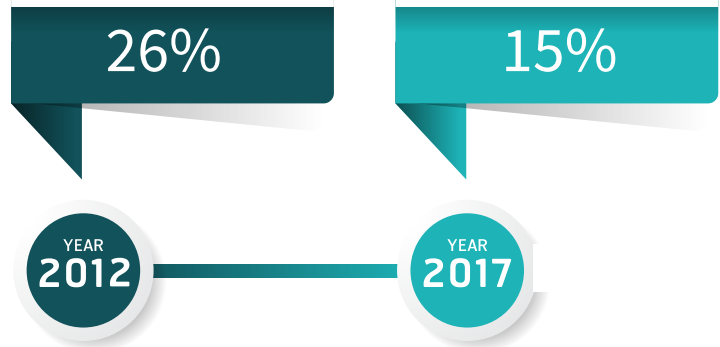


Demographics



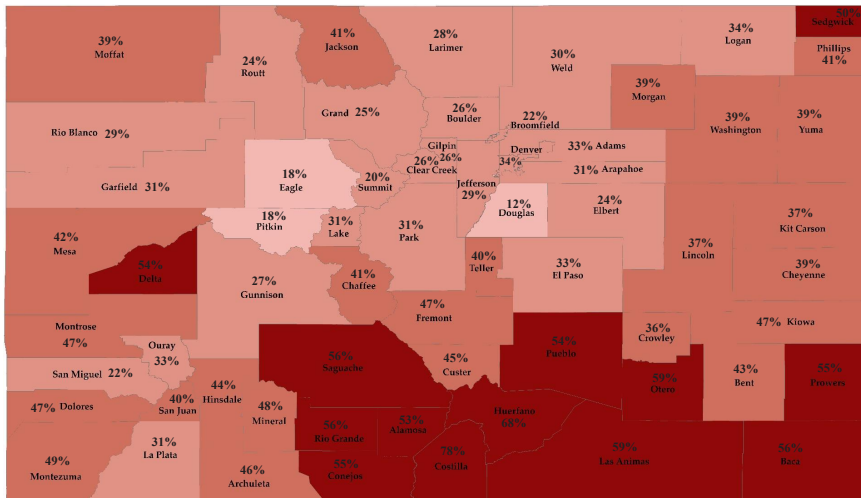
Rural, privately covered residents, have out-of-pocket costs about 10% higher than urban residents

HEALTHCARE COVERAGE



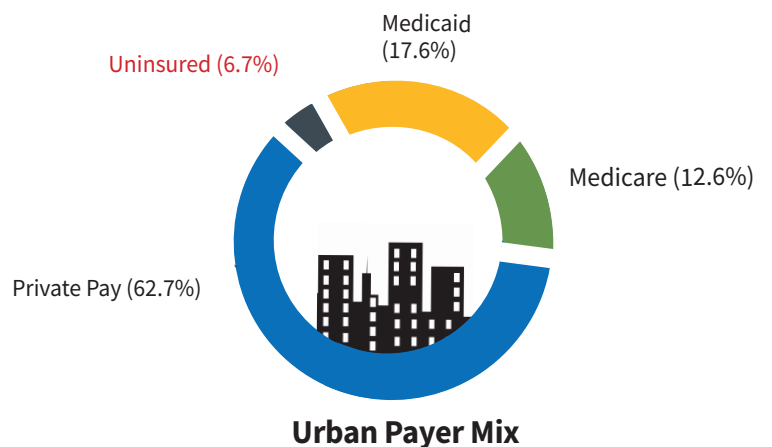
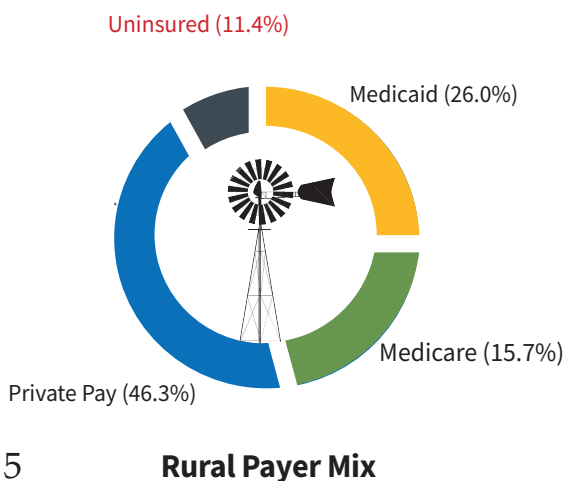
The percent of rural Coloradans without insurance decreased over the past 5 years from approximately 26% to 15%, a percent change of 42%.

Combined Medicaid (2016) and Medicare (2015) Enrollment by County



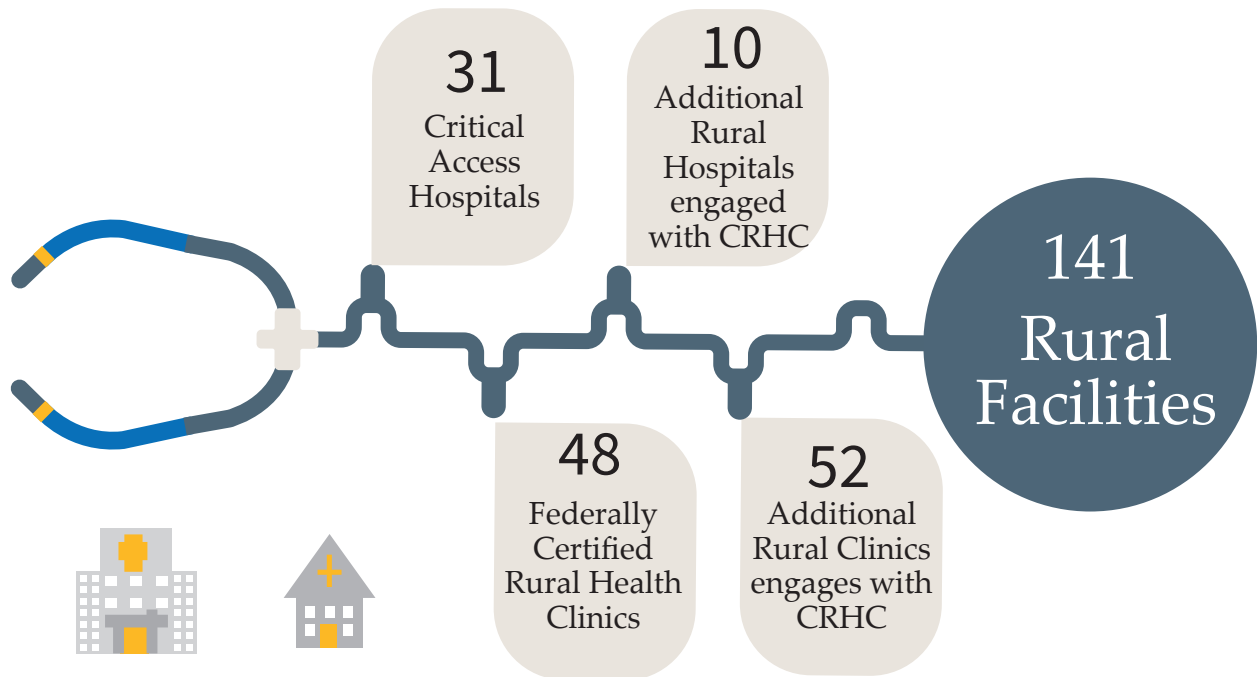
Costilla County has the highest Medicaid rate of all Colorado counties at 78%, while the top 5 counties with the highest Medicaid enrollment in the state are rural or frontier.

Rural Colorado has higher rates of public insurance (a 32% difference) when compared to urban Colorado





The number of healthcare facilities in rural Colorado by designation type:



Rural Health Information Technology

The adoption of Health Information Technology (HIT) has proven to be a costly step on the road towards a fully electronic healthcare system. Obstacles in paying for and implementing HIT directly corresponds to access to care for millions of Americans.



Roughly 1 in 4 rural households in the state do not have access to broadband today (25 megabits per second download and 3 mbps upload).



Approximately 50% of Colorado's CAHs have partnered with CORHIO to connect to the HIE, with 27% actively connected and 23% with a signed agreement.



Implementing an Electronic Medical Record (EMR) could cost a single provider approximately \$163,765 with roughly 52% of costs applied to software and maintenance.



100% of rural hospitals in Colorado have adopted an EMR System. From 2014-16 in Colorado, 100% of rural hospitals demonstrated Meaningful Use of Certified Health Information Technology.

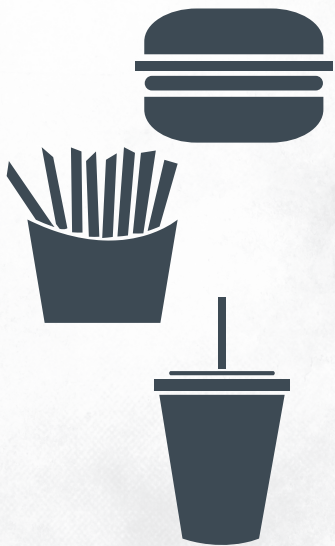


“The Worst Internet in America!”

In July, online publication fivethirtyeight.com pegged Saguache county as having “the worst internet in America,” with only 5.6% of adults estimated to have broadband.

On the other side of the spectrum, Pioneers Medical Center in Meeker, CO benefits from municipal broadband, cutting times to send mammography images from 4 hours to 20 minutes.

Obesity and Diabetes



Approximately 21% of adult rural Coloradans are considered obese with a distinct difference between the eastern plains (Yuma 25%) and some mountain areas of the state (Eagle 12%). The highest rate of adult obesity was observed in Kit Carson County at 28%.

84 million Americans have prediabetes and are at risk for developing type 2 diabetes. Of those, 90% of them don't know they have it.



Over 7% of adult rural Coloradans have diabetes. **People with diabetes have health care costs 2.3 times greater than those without diabetes.**



During 2016, nearly 1 in 4 children (or 22.3%) in Colorado were overweight or obese which equates to about 145,500 children ages 5-14 years.



Heart disease alone accounted for \$4.4 billion in annual costs associated with cardiovascular disease in Colorado in 2010, with \$549 million (\$618 million present day) of the direct costs attributed to Medicaid.

Approximately 1 person dies from cardiovascular disease every hour in Colorado.

Alcohol and Cigarettes



- Approximately 28% of motor vehicle crash deaths in rural Colorado involve alcohol.
- 17% of adult rural Coloradans report drinking excessively.
- 16% of rural adults report smoking regularly.

Pregnancy

9.93% of rural children are born at low birth weight.

Rural Colorado has a 38.71% higher teen pregnancy rate than the urban parts of the state





MENTAL HEALTH

22 Rural Colorado counties do not have a licensed psychologist

- Suicide remains disproportionately higher for rural Coloradans. The northwest and central mountain regions have a significantly higher than state average suicide rate at more than 38 suicide deaths per 100,000 people compared to the state average of 20 (a 62.1% difference).
- In 2012, farming, fishing and forestry had the highest rate of suicide of all industry sectors, at nearly 85 per 100,000 population.



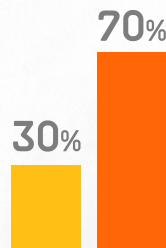
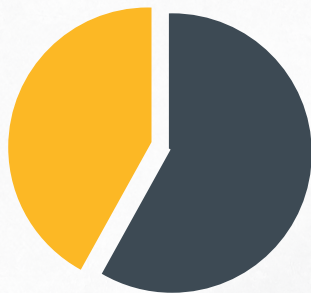
- 51% of all rural counties do not have an active, licensed addiction counselor (27 of 47 counties).
- There is only 1 urban county that does not have an active, licensed addiction counselor (Park).
- Prior to August 2017, Colorado was 1 of only 6 states in America that continued to jail people experiencing a mental health episode.
- **Eleven counties in Colorado have no hospital at all, let alone any mental health beds.**



ORAL HEALTH



42% of adults in Colorado do not have dental insurance.



70% of seniors age 65 and over do not have any type of dental insurance.



- Adults in rural areas have almost twice the prevalence of tooth loss vs. urban adults
- Cavities are the most common disease in children
- In Colorado, an estimated 7.8 million hours of school are lost annually due to oral pain and suffering from untreated diseases which affect children's ability to concentrate and learn.
- Tooth decay, the most prevalent chronic childhood diseases in American today, is 100 percent preventable. Yet, many parents in Colorado have trouble finding or affording dental care for their children.
- Oral health is 1 of 10 focus areas of Colorado's Winnable Battles.





The Health of Rural



A total of 912 people in Colorado died from overdoses in 2016. Of those deaths, 300 were caused by opioids while 228 were caused by heroin.



Among the 47,055 drug overdose deaths that occurred in 2014 in America, 28,647 (60.9%) involved an opioid.

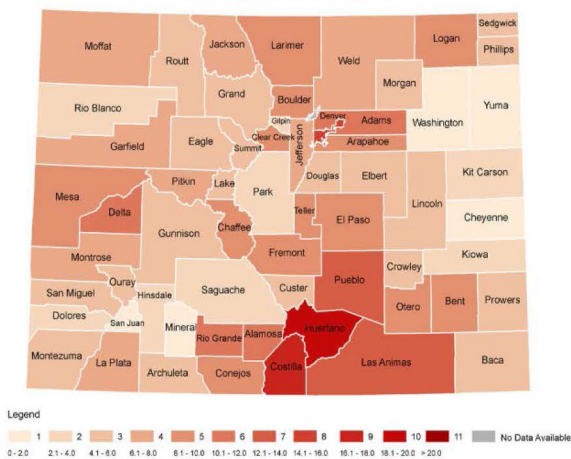


In 2014, almost 2 million Americans abused or were dependent on prescription opioids.

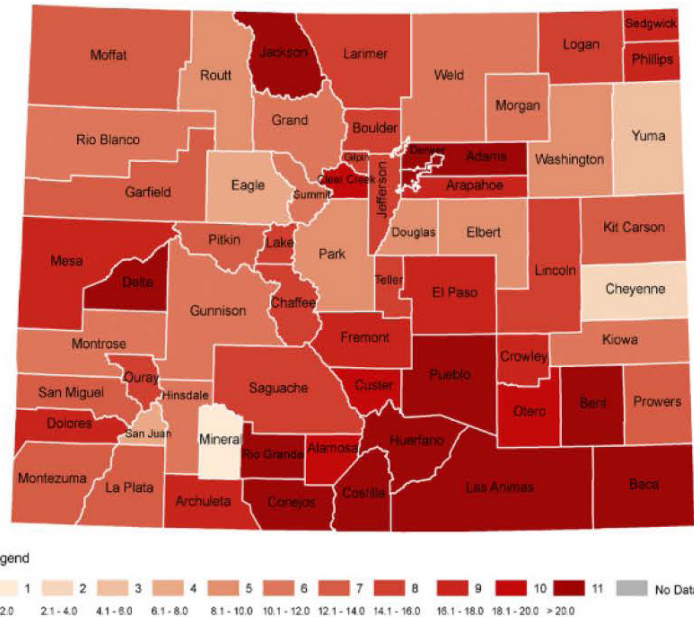
Between 2002-2014, rural Colorado saw a **140% increase** in drug overdose deaths, compared to a 96% increase in urban areas during the same time frame.

A legislative panel met for four months through the summer to craft a package of six bills to address the state's opioid crisis, which kills one person in Colorado about every nine hours and 36 minutes.

Colorado Drug Overdose Death Rate, 2002



Colorado Drug Overdose Death Rate, 2014



Washington County saw the biggest increase, with a 400% increase in opioid overdose deaths between '02-14.



The Health of Rural

WORKFORCE SHORTAGES

- Recruitment for an advanced practice nurse or physician assistant takes 6 months on average.
- The need will continue to be significant, as less than 40% of rural primary care providers* remain in the same rural community for 5 consecutive years. *Indicates providers placed and surveyed by the CRHC.
- 82 additional rural primary care preceptors are needed annually to train new Colorado medical school graduates.

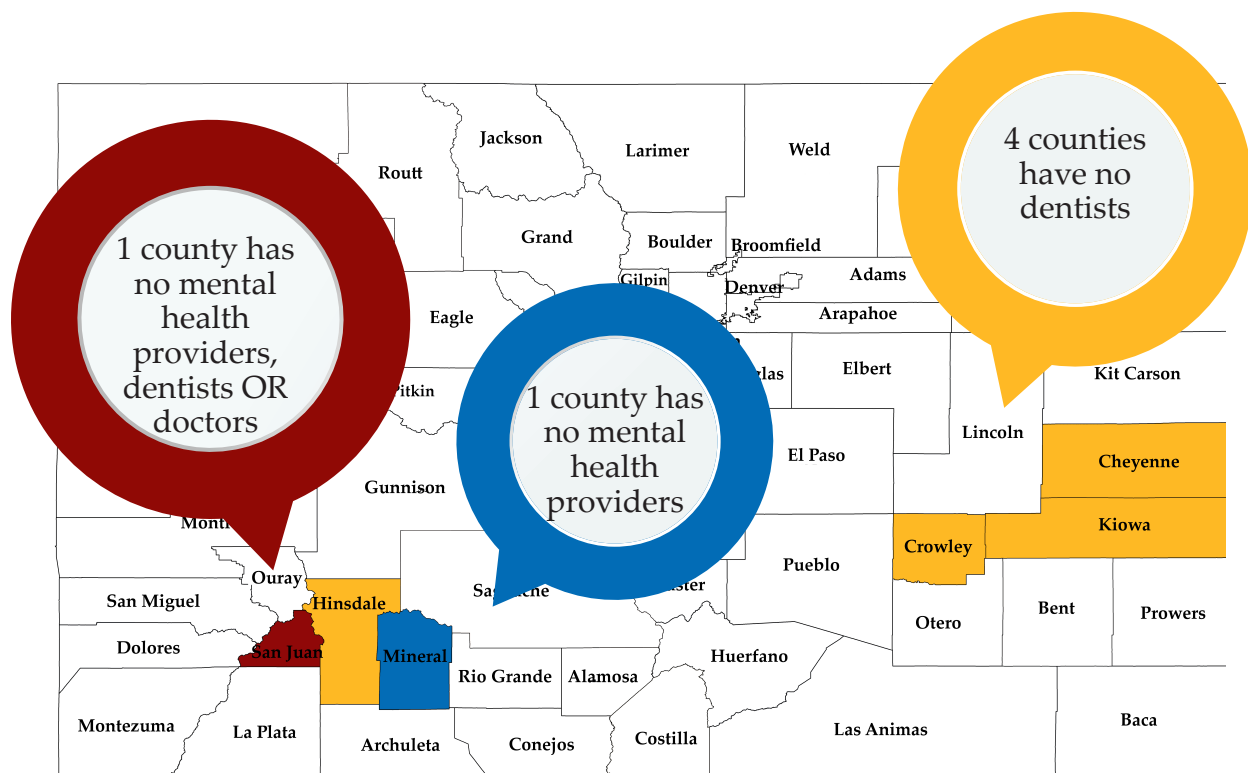
On average, how long does it take to recruit a physician for rural Colorado?

1 to 3 years





Data for the following map is sourced from the Colorado Health Institute in collaboration with the Department of Regulatory Agencies. Providers are counted once based on the address in their licensure file, though it is unknown whether that address is a home residence or a practice location and providers often work in more than one county. On occasions where CRHC has been able to verify that a provider is practicing in a county where data indicates otherwise, the county has not been highlighted in the shortage map.



Patients per Rural Provider



Rural Dentists: 1:2751
Urban Dentists: 1:2342

Rural Physicians: 1:1766
Urban Physicians: 1:1713

Rural Mental Health Providers: 1:1282
Urban Mental Health Providers: 1:755

- Rural Colorado has fewer physicians when compared to urban Colorado with a 3% difference, indicating reduced access to care.
- Of all Colorado counties*, only 2 rural counties do not have a physician: Dolores and Hinsdale. *Counties who reported on this measure.
- Rural Colorado has fewer mental health providers when compared to urban Colorado with a 52% difference, indicating reduced access to care in mental health.

- 1 rural physician's employment creates approximately 26 additional jobs and nearly \$1.4 million in income from the clinic and hospital
- The total annual impact of a Critical Access Hospital (CAH) in a rural community includes 170 jobs and \$7.1 million in wages, salaries, and benefits from hospital operations.

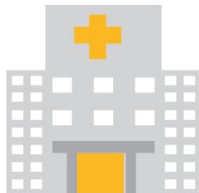
Improving Communication and Readmission Program

Avoidable readmission rates and transitions in care have come under close scrutiny by payers and policymakers because of the potential of high savings associated with them. Tackling this issue is an opportunity to improve quality and reduce costs in the health care system. Although readmission rates among Colorado Critical Access Hospitals (CAHs), by virtue of their volume, may be small, there is opportunity for our state to stay ahead of national trends, spotlight the great services Colorado's CAHs and rural clinics are providing, make improvements in processes that will help maintain low readmission rates and continue to showcase the hospital and clinic's status as a leader in their community.

Cost of Readmissions
Nationally:
\$41.3 Billion

Diabetes
Complications Account
for 31.6% of Total
Readmissions

Estimated Excess
Cost of Uncoordinated
Care is \$74 million or
\$7,340 Per Patient



51

Rural health facilities from more than 22 rural counties in CO participate in program activities

PROGRAM ACTIVITIES

- Bimonthly data review and coaching
- Monthly educational webinars and networking
- Quarterly EHR user group calls
- Technical assistance from quality improvement specialist staff

iCARE OUTCOMES

Through the Colorado Rural Health Center's Improving Communication and Readmission (iCARE) program, CAHs and rural clinics are participating in a statewide effort to better the patient experience by improving communication in transitions of care and clinical processes, and reducing avoidable hospital readmission rates. Staff from both the hospitals and the rural clinics form project teams consisting mostly of quality directors, clinic managers, nursing staff, and care coordinators.

READMISSIONS

From 2016-2017, iCARE CAHs reported an average 3% readmission rate, a 35% decrease since 2013

QUALITY OF CARE

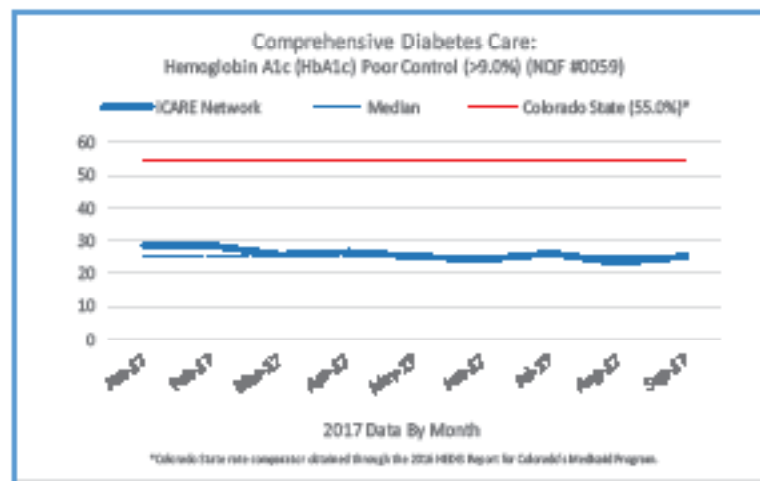
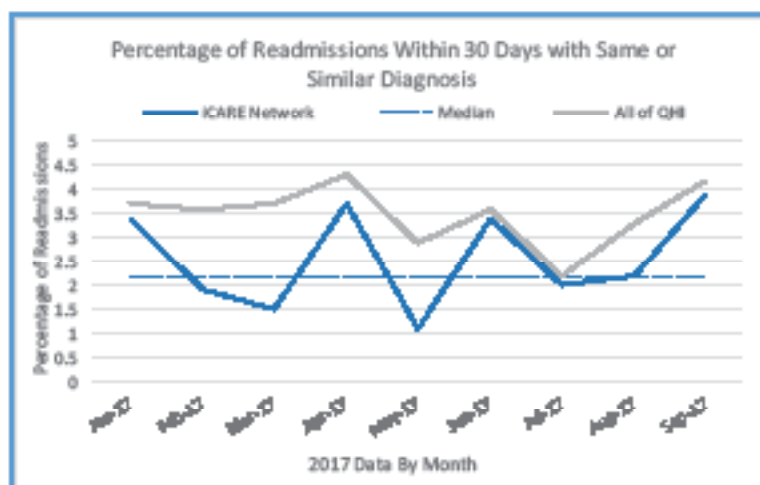
74.5% of diabetic patients who receive care at iCARE participating clinics demonstrate good control of blood glucose levels. Nationally only 55% of diabetic patients with Medicaid, have good control.

COMMUNITY COLLABORATION

100% of clinic/hospital teams are working together with their community to address specific needs that will improve the quality of care for residents; for example, offering community health fairs, healthy eating classes and weight loss challenges

Data for Hospitals and Clinics

Activities



58
Focus Team
Calls

180
participants on
8
webinars

41
EHR User
Groups

County Health Rankings: Average

Preventable Hospital Stays*

Preventable Hospital Stays
(Hospital discharge rate for ambulatory care-sensitive conditions per 1,000 fee-for-service Medicare enrollees).

46 per 1,000 compared to
32 State Average

Diabetic Monitoring*

Diabetes Monitoring
(Percentage of diabetic Medicare enrollees ages 65-75 that receive HbA1c monitoring).

82% compared to
84% State Average

HCAHPS: Discharge Information*

Educating patients on the steps they need to take during their recovery at home reduces the chances that a patient will need to be readmitted to the hospital.

90% compared to
89% State Average

*Source: County Health Rankings (www.countyhealthrankings.net)

+Source: HCAHPS. Raw Data: Composite 6 (2Q2016-1Q2017) (www.hcahpsonline.org)



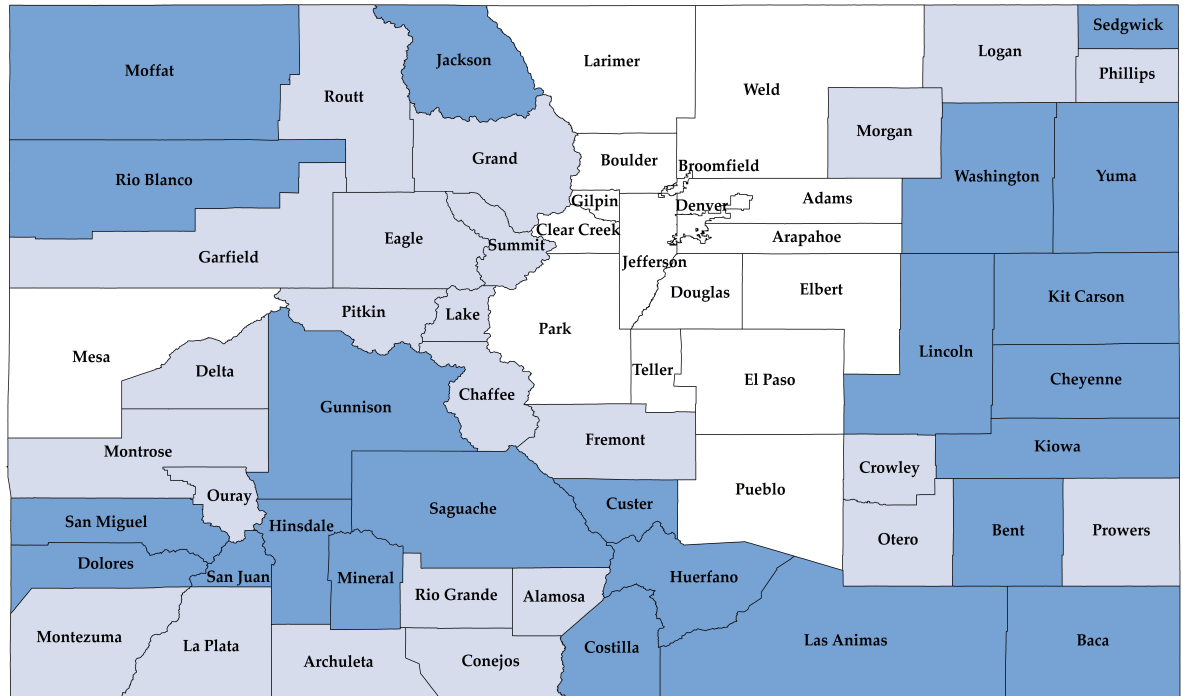
Colorado: County Designations, 2017

County Classifications

- Urban (17)
- Rural (24)
- Frontier (23)

0 25 50 miles

Data Source Information:
Site addresses were collected and geocoded by the State Office of Rural Health, current as of January 2016.



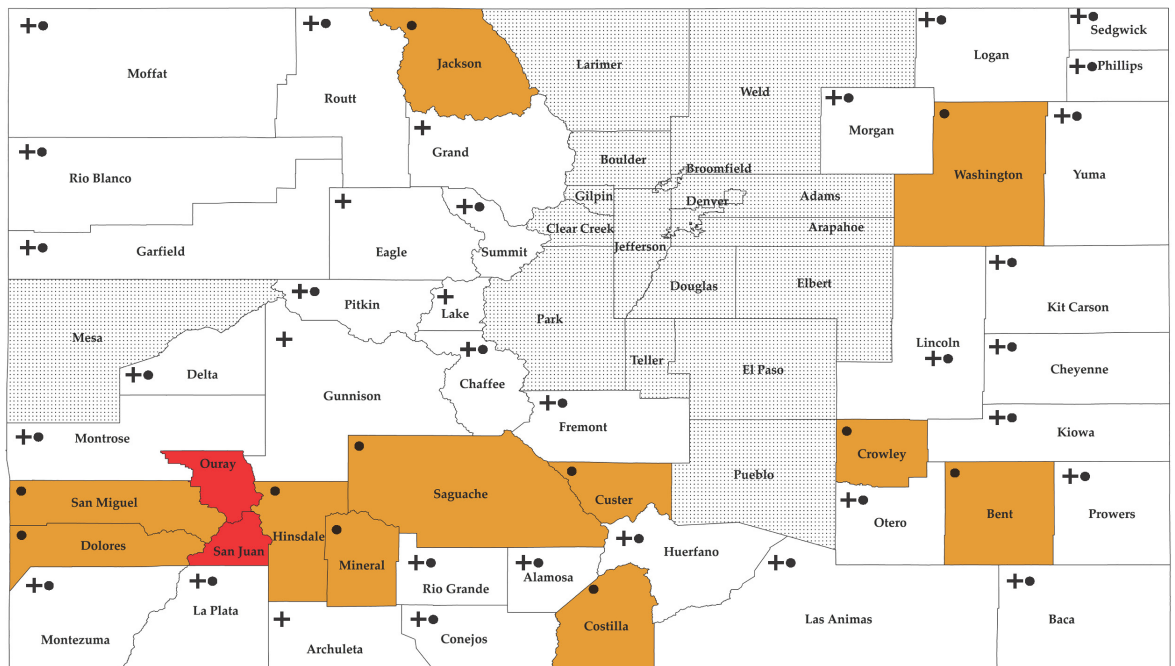
Rural Colorado: Access to Healthcare, 2017

- Rural Clinic*
 - + Rural Hospital*
- Symbols do not indicate location or quantity of facilities available.

- Urban County
- No Hospital
- No rural clinic or hospital

0 25 50 miles

Data Source Information:
Site addresses were collected and geocoded by the State Office of Rural Health, current as of February 2016.

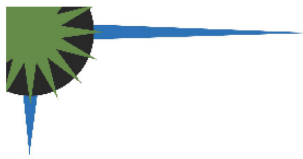
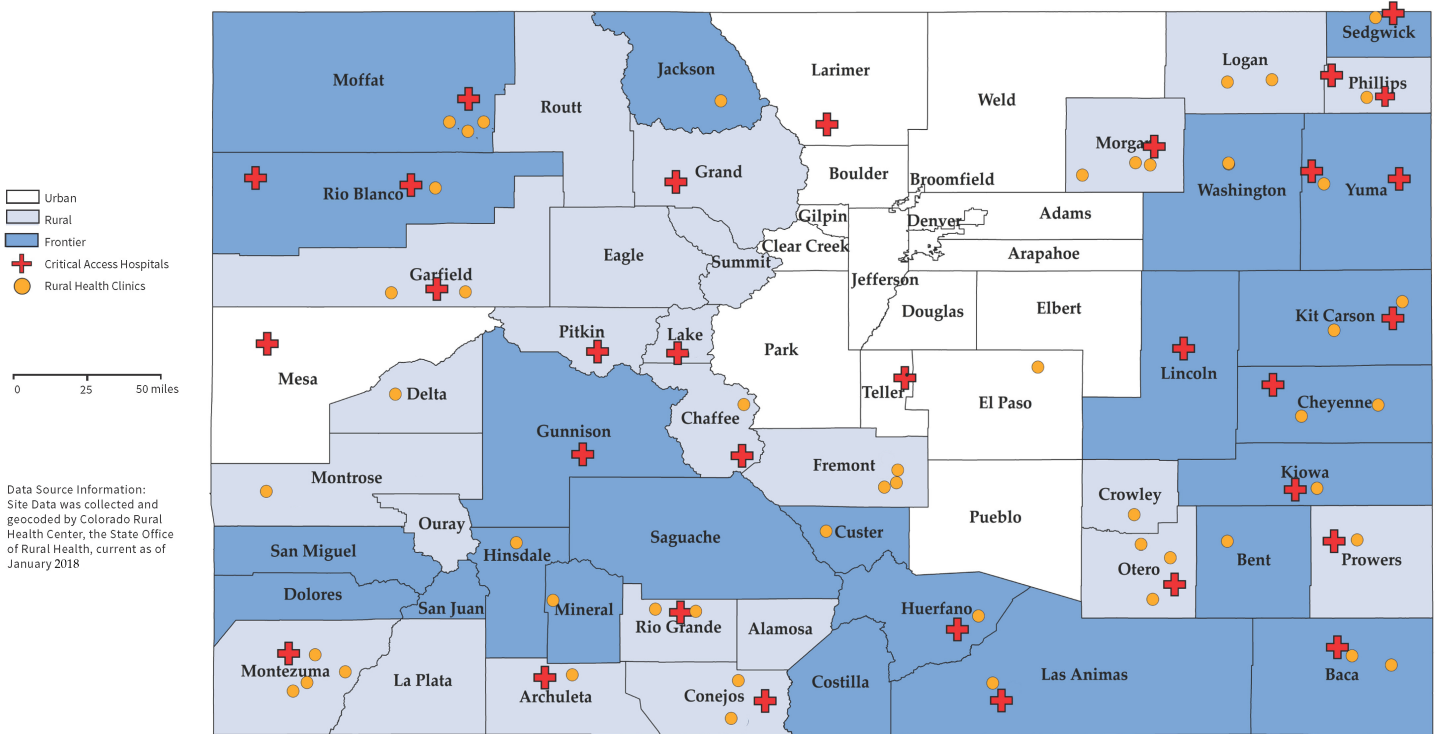


Of Colorado's 47 rural counties:

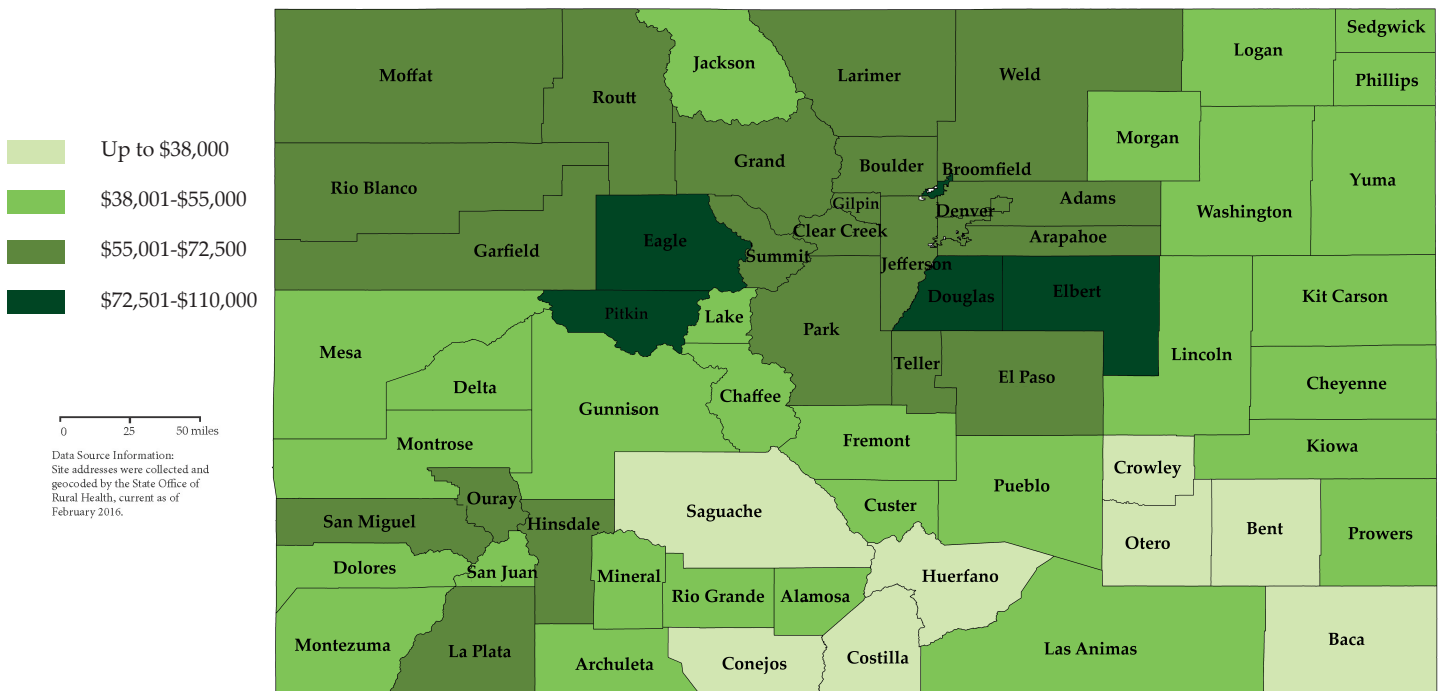
- 11 do not have a hospital
- 2 do not have a rural clinic or hospital

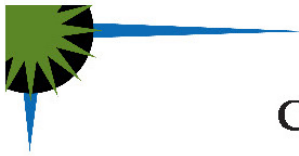


Colorado: Rural Health Facilities within County Designations, 2017



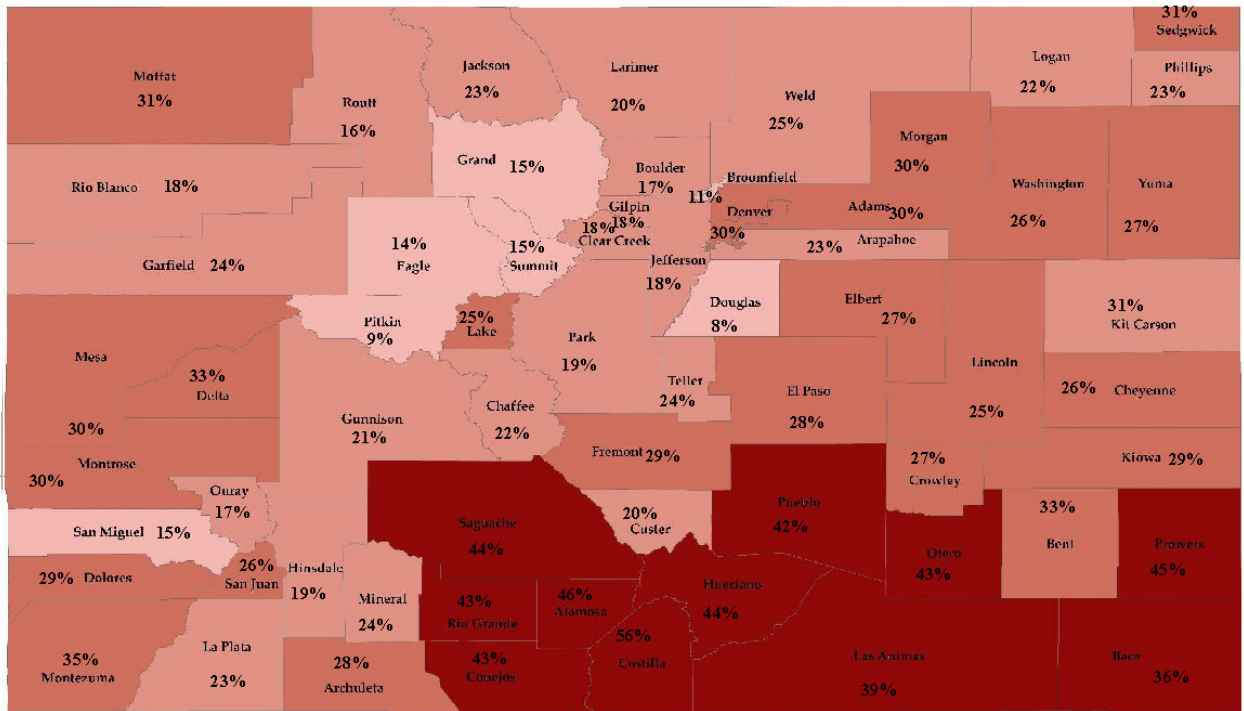
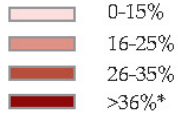
Median Household Income, 2017





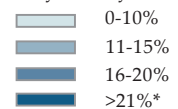
Colorado: Medicaid Enrollment by County, 2016

Medicaid Enrollment by County, May 2016

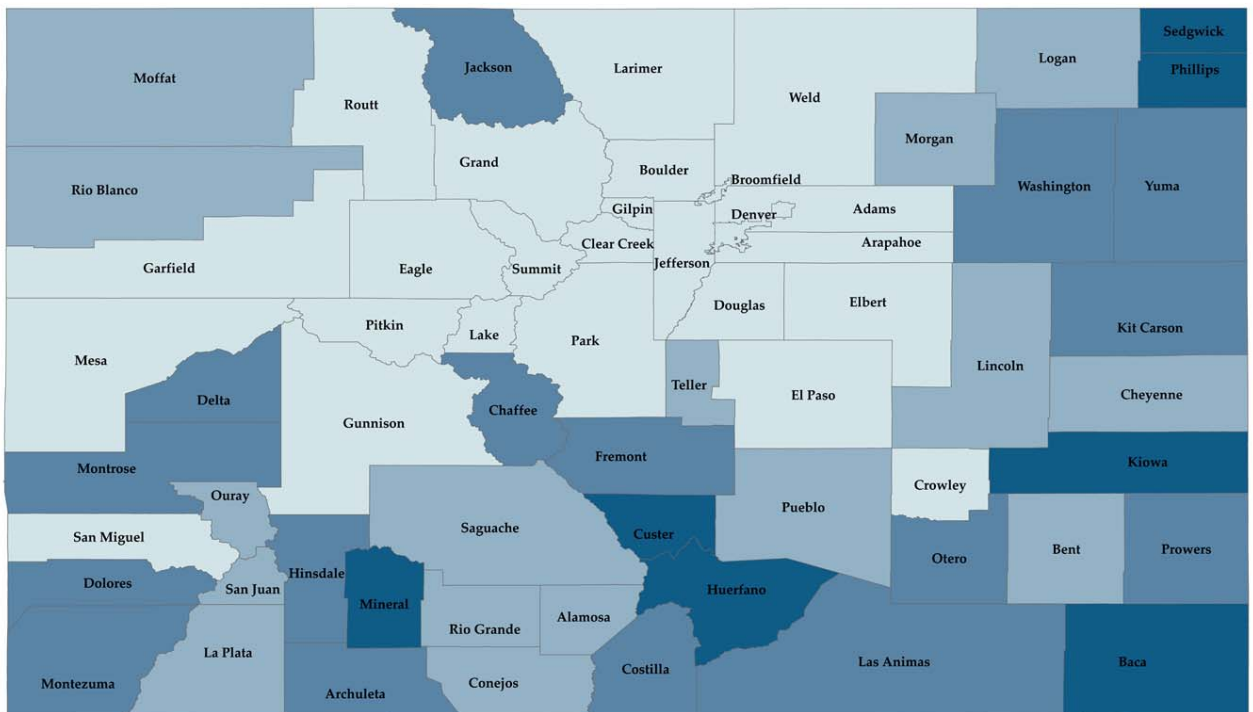


Colorado: Medicare Enrollment by County, 2016

Medicare Enrollment by County, 2012

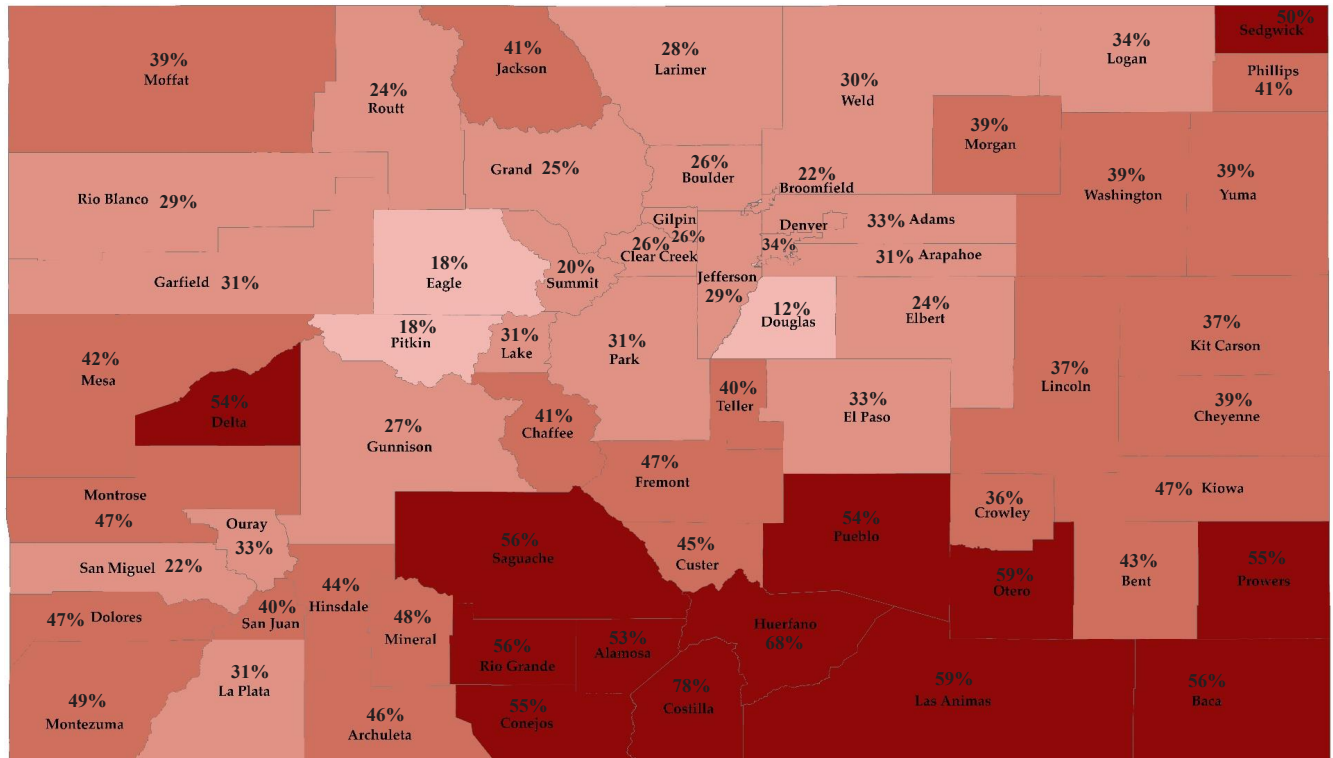


highest county enrollment is 25%

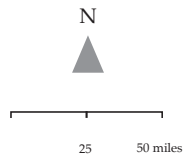
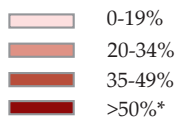




Combined Medicaid (2016) and Medicare (2015) Enrollment by County



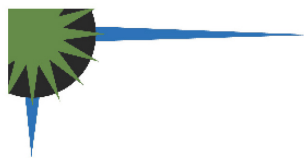
Medicaid + Medicare Enrollment by County



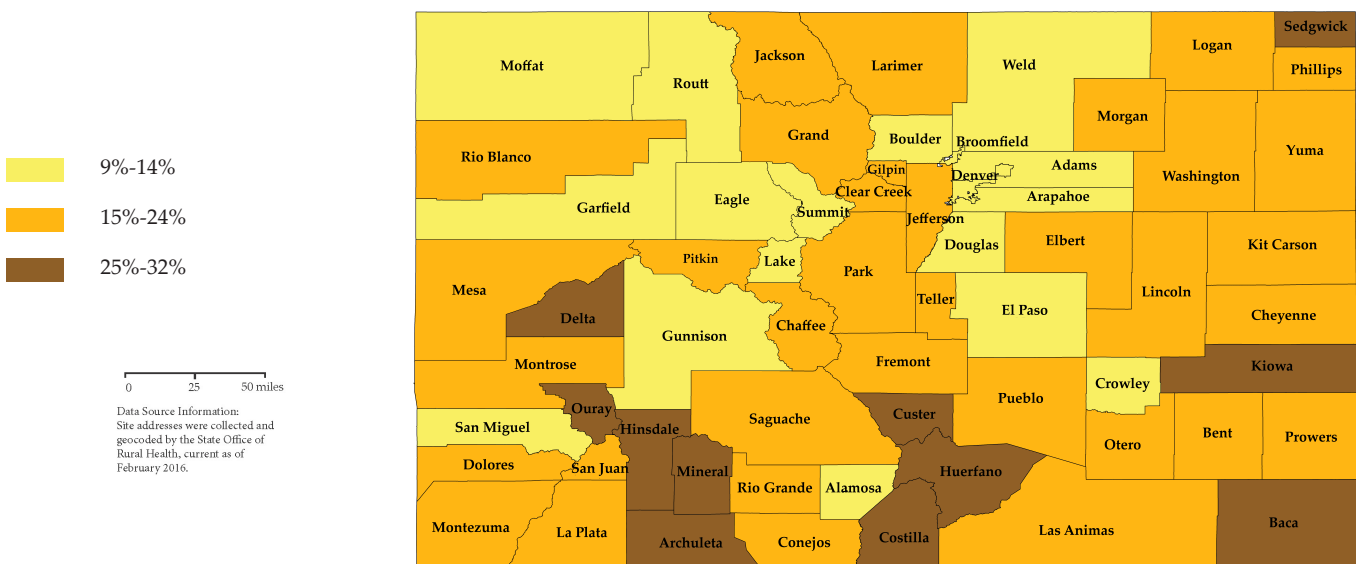
Data Source Information:
 Colorado Health Institute.
 Medicaid data represents total 2016 monthly average enrollment. Medicare data represents total 2015 monthly average enrollment.



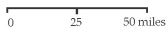
Highest county enrollment is 78%. State average is 32%



Percent of Population 65 or Older, 2016



Data Source Information:
 Site addresses were collected and geocoded by the State Office of Rural Health, current as of February 2016.



For a detailed list of Snapshot data sources, please visit coruralhealth.org

CRHC Report Contributors:

Matt Enquist, Outreach Manager

Jenny Royce, HIT Data Analyst - Business Intelligence