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.

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Mission & Vision

Definitions

THE COLORADO RURAL HEALTH CENTER

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

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

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

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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.

“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
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.

<table>
<thead>
<tr>
<th>Location</th>
<th>Average Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Akron, CO</td>
<td>$30,992</td>
</tr>
<tr>
<td>Cortez, CO</td>
<td>$37,561</td>
</tr>
<tr>
<td>Durango, CO</td>
<td>$48,975</td>
</tr>
<tr>
<td>Telluride, CO</td>
<td>$55,856</td>
</tr>
<tr>
<td>Boulder, CO</td>
<td>$71,574</td>
</tr>
</tbody>
</table>

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).

58% of rural Coloradans attend some type of post-secondary education, compared to 65% of urban Coloradans.

From data reported in 2016 and 2017, rural Colorado observed an 18% 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

10.1% of rural Coloradans are enrolled in the Supplemental Nutrition Assistance Program (SNAP) compared to 8.3% urban.

The percent difference of the median household income in rural areas is 34.7% lower than in urban areas.

Approximately 27% of families in rural Colorado are single parent households.

For rural Coloradans aged 0-17, 23% live below the 2014 Federal Poverty Level of $23,850 per four person family compared to the state average of 16%.

50% of rural children enrolled in public schools are eligible for free or reduced lunch compared to 36% of urban children.

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.

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.

86% of kids in Saguache County are eligible for Free or Reduced lunch.

49% 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.
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.

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

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

Costilla County has the highest Medicaid rate of all Colorado counties at 56%, 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:

- 31 Critical Access Hospitals
- 10 Additional Rural Hospitals engaged with CRHC
- 48 Federally Certified Rural Health Clinics
- 52 Additional Rural Clinics engages with CRHC
- 141 Rural Facilities

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.
The Health of Rural Coloradans

**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%.

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

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.

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.

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

**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 25 (a 41.3% difference).
• In 2012, farming, fishing and forestry had the highest rate of suicide of all industry sectors, at nearly 85 per 100,000 population.

• 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

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

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.

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
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.
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.

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

**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.

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.

CRHC’s iCARE program is supported through the receipt of the Federal HRSA Medicare Rural Hospital Flexibility Program Grant, CFDA 93.241; Award 2 H54RH00056-15-00, and the Colorado Department of Public Health and Environment’s Cancer, Cardiovascular, and Pulmonary Disease Grant Program.
**Preventable Hospital Stays**

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

- **iCARE Network:** 46 per 1,000
- **State Average:** 32

*Source: County Health Rankings [www.countyhealthrankings.org]*

**Diabetic Monitoring**

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

- **iCARE Network:** 82%
- **State Average:** 84%

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

**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.

- **iCARE Network:** 90%
- **State Average:** 89%

*Source: HCAHPS. Raw Data: Composite 6 (2Q2016-1Q2017) [www.hcahpsonline.org]
Appendix

MAPS

Colorado: County Designations, 2017

Rural Colorado: Access to Healthcare, 2017

11 do not have a hospital
2 do not have a rural clinic or hospital
Median Household Income, 2016

Data Source Information:
Site Data was collected and generated by Colorado Rural Health Center, the State Office of Rural Health, current as of January 2018.
Colorado: Medicare Enrollment by County, 2016

Data Source Information:
Data was County Health Rankings and geocoded by Colorado Rural Health Center, the State Office of Rural Health, current as of March 2016.

Medicare Enrollment by County, 2012
- Highest county enrollment is 25%

Colorado: Medicaid Enrollment by County, 2016

Medicaid Enrollment by County, May 2016
- 0-15%
- 16-25%
- 26-35%
- >36%*
Combined Medicaid (2016) and Medicare (2015) Enrollment by County

Medicaid + Medicare Enrollment by County

- 0-19%
- 20-34%
- 35-49%
- >50%*

Percent of Population 65 or Older, 2016

Highest county enrollment is 78%. State average is 32%
For a detailed list of Snapshot data sources, please visit coruralhealth.org

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