

# Connecting Rural Providers to Data to Improve the Health of their Communities



CENTER FOR IMPROVING  
VALUE IN HEALTH CARE

March 28, 2024



# Agenda

- About CIVHC
- Rural Connectivity
- Community Analytics Platform
- The Future of Rural Connectivity
- Q&A



# Housekeeping

- All lines are muted
- Please ask questions in the Chat box
- Webinar is being recorded
- Slides and a link to the recording will be posted on the Event Resources page at: [civhc.org](https://www.civhc.org)





# Who We Are



CIVHC  
CENTER FOR IMPROVING  
VALUE IN HEALTH CARE

## Our Mission

To equip partners and communities in Colorado and across the nation with the resources, services and unbiased data needed to improve health and health care.

## Our Vision

Everyone has the opportunity to be healthy and has access to equitable, affordable, high-quality health care.

## We Are

- Non-profit
- Independent and objective
- Service-oriented



# Who We Serve

## Change Agents

Individuals, communities, or organizations working to lower costs, improve care, and make Colorado healthier.



Clinicians



Hospitals



Government



Consumers



Employers



Researchers



Health Plans



Non-Profits



# How We Serve



## Public CO APCD Data

Identify opportunities for improvement in your community through interactive reports and publications



## Non-Public CO APCD Data

License data from the most comprehensive claims database in CO to address your specific project needs

- Administrator of the Colorado All Payer Claims Database
- Research & Evaluation Services
- Program Focus Areas: Advance Care Planning, Palliative Care
- Community Engagement



# Presenters



John Kennedy  
Colorado Office of eHealth  
Innovation  
Sr. Project Manager, Rural  
Analytics



James Stephenson  
Colorado Rural Health Center  
Associate Director of Health  
Information



Andy Woster  
Colorado Community Managed Care Network  
Population Health Analytics Director



# What is Rural Connectivity?

Implemented to increase access to health information technology (HIT) resources and analytics for Colorado's Rural Health Clinics (RHCs) and Critical Access Hospitals (CAHs). Project goals include:

- ✓ Connecting providers to Colorado's Health Information Exchanges
- ✓ Supporting rural providers to adopt health information technology, data sharing, and analytics through continuous technical assistance
- ✓ Providing analytics and tools to support emergency response, care coordination, and quality measurement

Providers participating in the Rural Connectivity Project are equipped with the tools to view:

- ✓ Attributed Population Health Metrics
- ✓ Financial Metrics
- ✓ Utilization Metrics

Access to this information can aid in:

- ✓ Improving workflows
- ✓ Understanding costs
- ✓ Identifying trends within attributed populations
- ✓ Program planning



CCMCN



COLORADO  
RURAL HEALTH  
CENTER



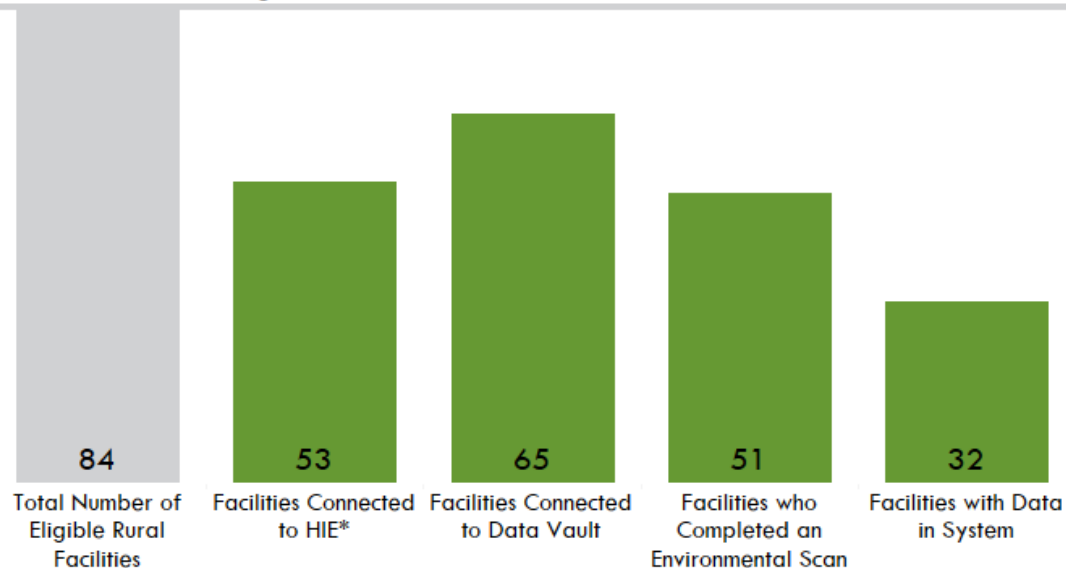
# RURAL CONNECTIVITY PROGRAM

## 2022-2023

Rural Connectivity Program, a program funded by the Office of eHealth Innovation, Department of Health Care Policy and Financing and in partnership with the Colorado Community Managed Care Network (CCMCN).

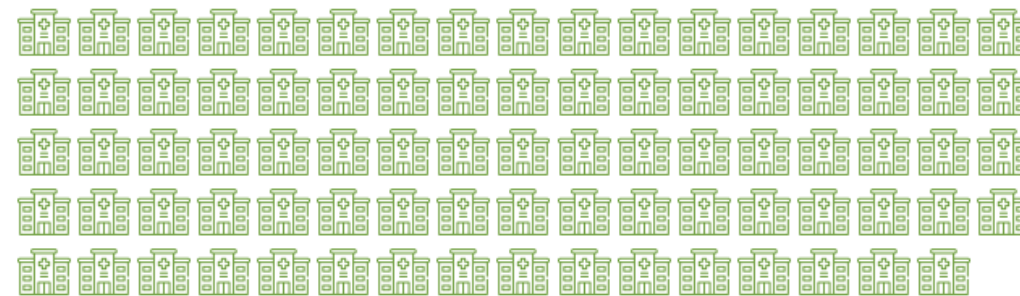
The goals are to establish a sustainable model for rural connectivity, including connecting providers to Colorado's Health Information Exchanges, supporting rural providers to adopt health information, data sharing and analytics/tools to support care coordination and quality measurement.

Total Number of Eligible Rural Facilities: 84



\*31 rural facilities were already connected to the HIE prior to the start of the Rural Connectivity Program

**100%** (84 out of 84) of Rural Health Facilities are **Connected** with Health Information Exchange



Of the **84** eligible rural facilities, **31** were already connected to the Health Information Exchange (HIE), **53** additional facilities were connected for a total of **84** facilities connected to the health information exchange (HIE), **65** were connected to CRHC's Data Vault, **51** completed an environmental scan, **32** have data in the system, and **22** completed a workflow activity.

**DEDICATED FUNDS: \$11,858,563.00**

**LIVES ATTRIBUTED TO RURAL PROVIDERS: 170,602**

**TOTAL NUMBER OF CASES IN THE CRHC DATA VAULT: 1.6 Million**

# Community Analytics Platform Current Participation



**69%**



of RHCs are contracted to participate in the Community Analytics Platform



**56%**



of RHCs have uploaded Demographics to the Community Analytics Platform



**31%**



of RHCs have completed TP Authorization



**58%**



of RHCs have completed a CIIS agreement



**75%**



of CAHs are contracted to participate in the Community Analytics Platform



**69%**



of CAHs have uploaded Demographics to the Community Analytics Platform



**28%**



of CAHs have completed TP Authorization



**50%**



of CAHs have completed a CIIS agreement

# About CCMCN

## Colorado Community Managed Care Network (CCMCN)

Colorado non-profit  
organization

Founded in 1994

Governed by Colorado's  
Federally Qualified Health  
Centers (FQHCs)

### Our Approach

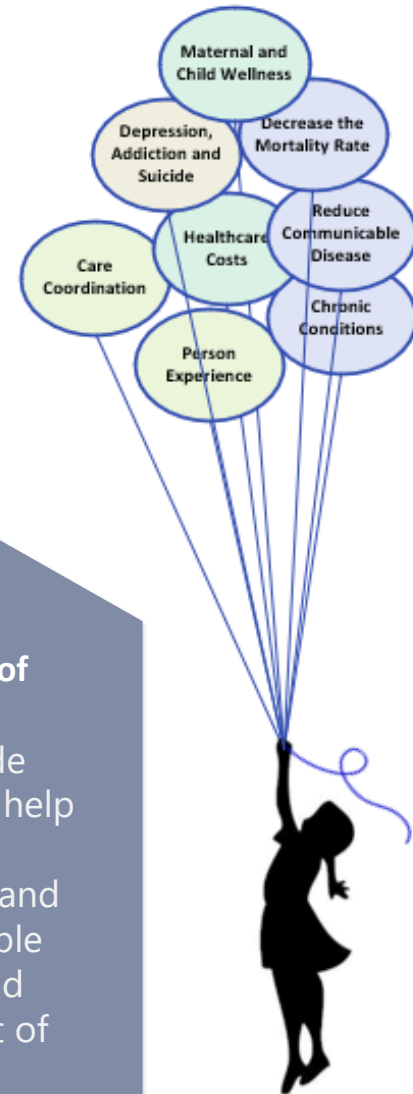
Provide community  
organizations with  
innovative  
solutions to  
improve health  
equity

### Federal and State Supported

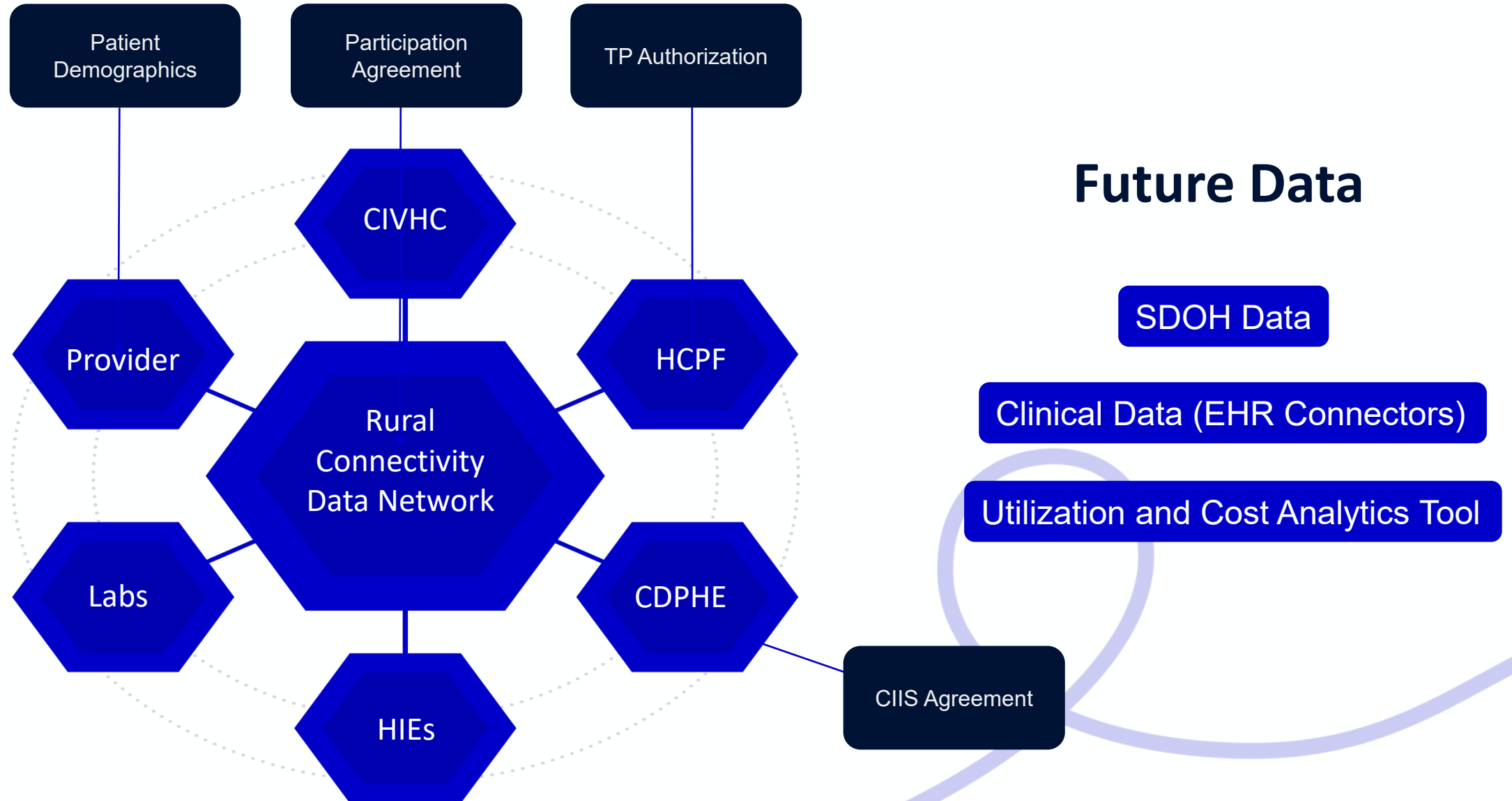
to contribute to an  
interoperable  
technology  
network supporting  
communities in  
Colorado

### Definition of Success

We provide  
systems that help  
protect  
Coloradans and  
lift vulnerable  
people and  
families out of  
poverty



# CCMCN Data: Current & Future



# Community Analytics Platform (CAP)

- **New reporting platform built on CCMCNs honeycomb data network combining data from previously-described data sources, launched in December 2023**
- **Hosts custom reports created by CCMCN data engineers and business intelligence developers**
- **CCMCN is HITRUST certified, the CAP is MFA-enabled, and provides multiple levels of permissioning, including row-level security**
- **Users see only menus, reports/dashboards, and data rows they are provisioned to view**

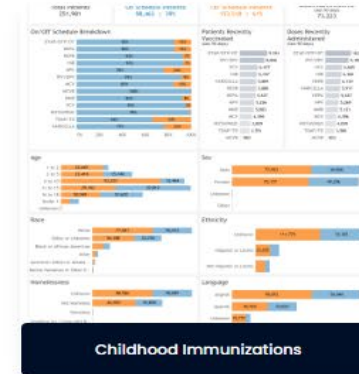
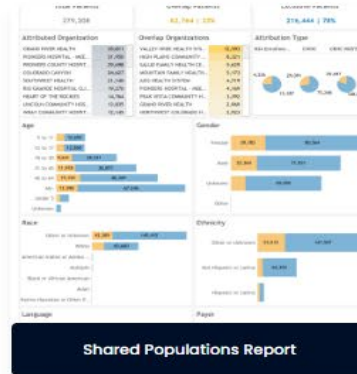
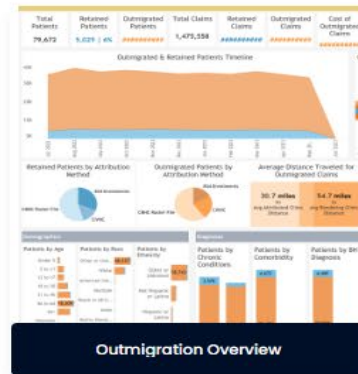
# Community Analytics Platform (CAP)

Home ADT Attribution Chronic Disease COVID Immunization Journey Mapping Internal Reports

COVID-19 Trends and Distributions  
COVID-19 Patient Management  
COVID-19 Vaccination Tracker

## Community Analytics Platform

### Recent Reports



### Directory

# Community Analytics Platform Reports

- ✓ **ADT Summary Report**
- ✓ **Medicaid Attribution and PHE Unwind**
- ✓ **Outmigration Overview**
- ✓ **Shared Populations Report**
- ✓ **Childhood Immunizations**
- ✓ **Cancer Screenings and Diagnoses**
- ✓ **Diabetes Screenings and Diagnoses**
- ✓ **COVID-19 Trends and Distributions**
- ✓ **COVID-19 Patient Management**
- ✓ **COVID-19 Vaccination Tracker**



# Uses of APCD Data in Rural Connectivity

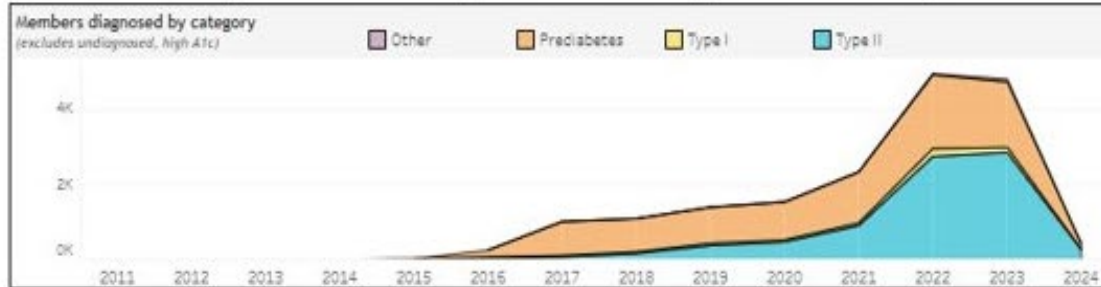
- **Create population level views for providers to:**
  - Understand population characteristics and well-being
  - Identify common diagnoses, procedures, and cost drivers
  - Determine patterns of utilization and shared membership
  - Drive business strategy conversations
- **Create identifiable, patient record views for:**
  - Follow-up and engagement in care
  - Understanding a patient's journey through the healthcare system
  - Developing a longitudinal view of patient services and diagnoses

# Chronic Conditions - Diabetes Report



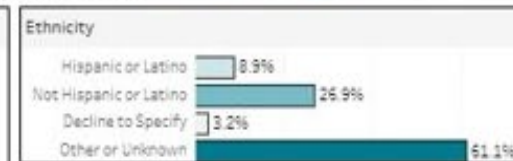
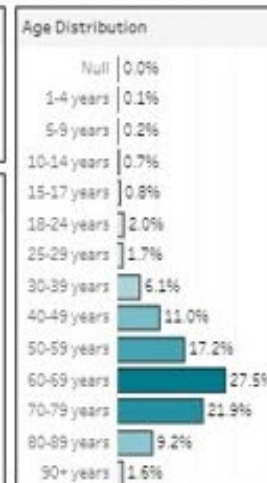
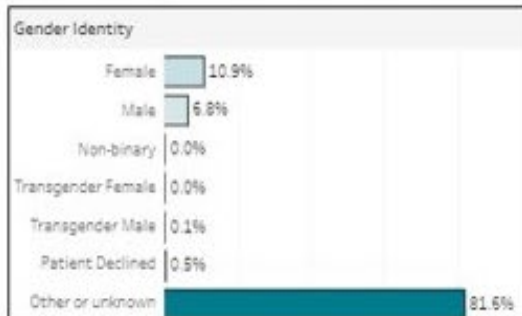
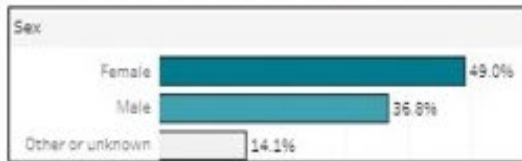
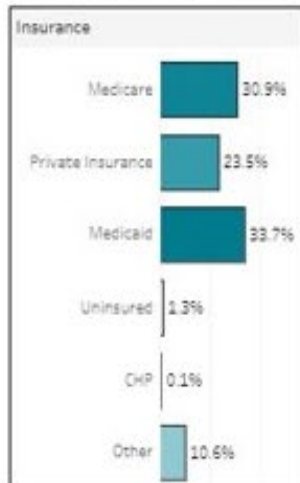
## Diabetes Patient Population Report

Patient Count	Avg A1C (Total)	Avg A1C (Diabetes)	Avg A1C (Prediabetes)	Diagnosis Date	Source Clinic	Status	Diabetes Type	Medicaid	Documented Death
24,525	6.7	7.5	6.0	5/6/2011 - 2/26/2024	(All)	(All)	(All)	(All)	(All)



Diabetes Complications (ever diagnosed)

Neuropathy (any)	Neuropathy Foot
12.6%	9.4%
Nephropathy	Retinopathy
9.9%	5.4%
Heart Disease	Vascular Disease
15.8%	6.3%



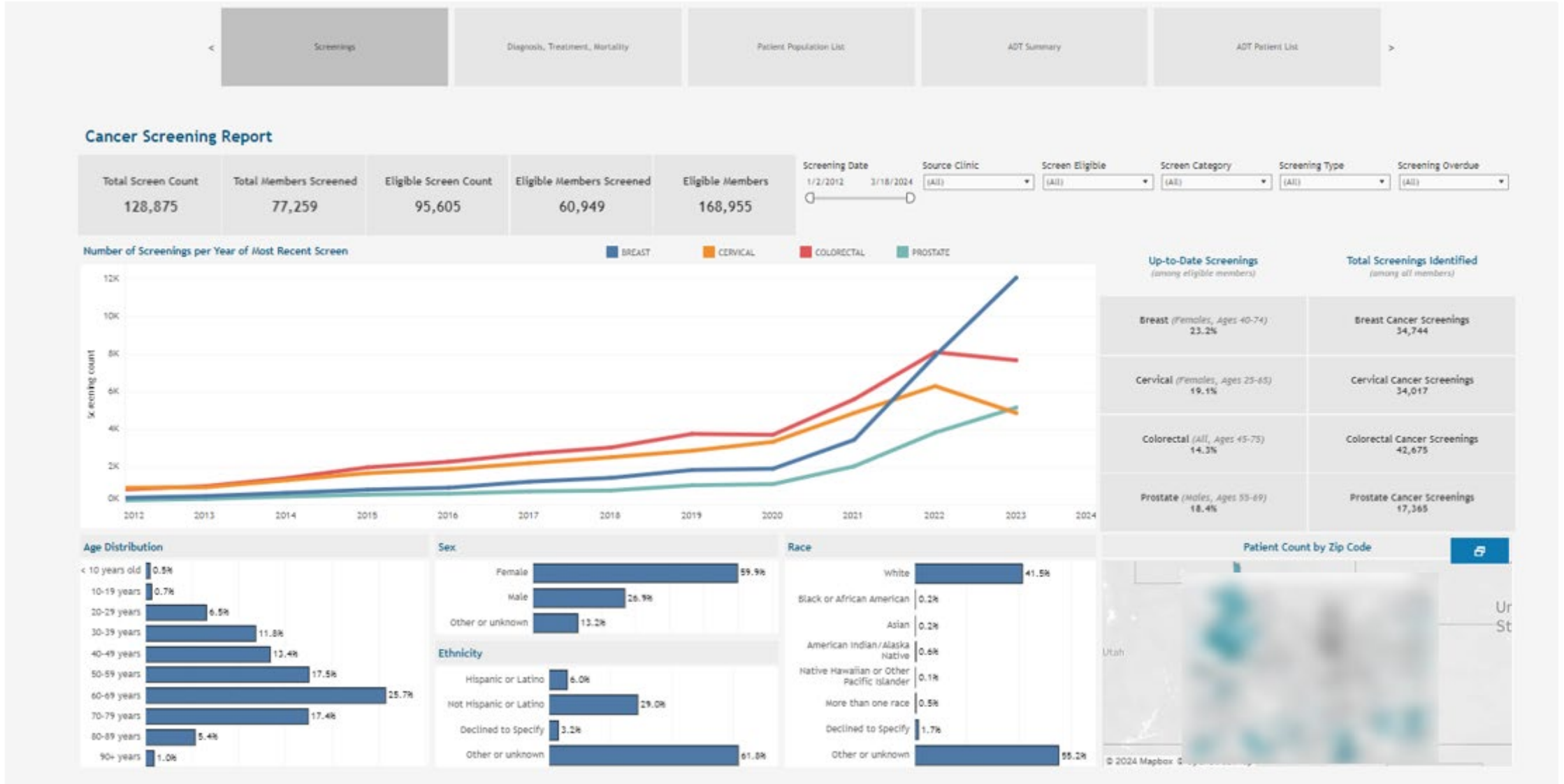
Recommended Screenings (past 18 months)

Wellness Exam	Dilated Eye Exam
5.4%	1.4%
Foot Exam	Oral Exam
2.1%	7.3%

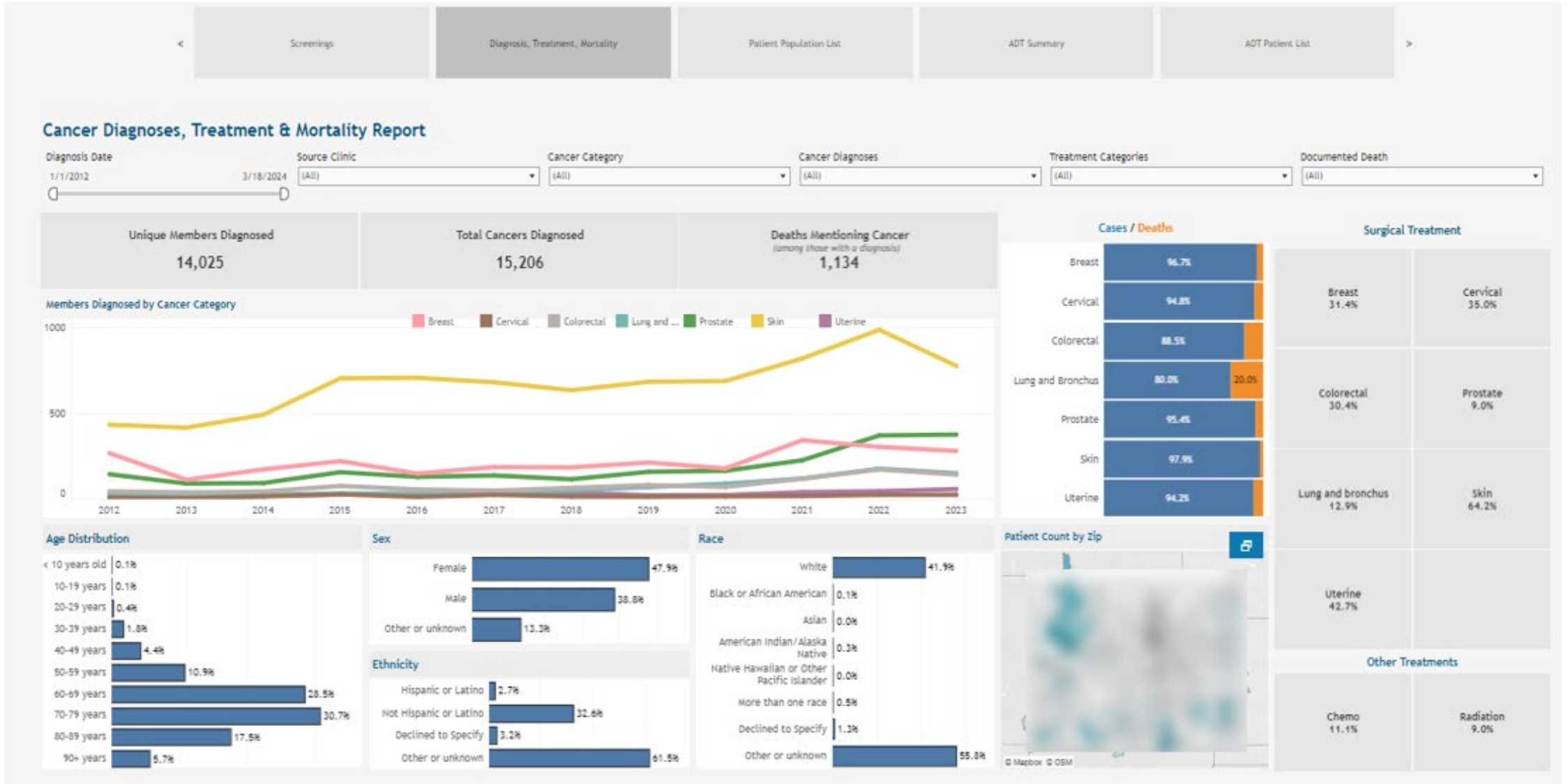
Common Comorbidities (ever diagnosed)

Kidney Disease	Dyslipidemia
6.8%	27.9%
Obesity	Hypertension
17.8%	29.0%

# Chronic Conditions - Cancer Report



# Chronic Conditions - Cancer Report



# COVID-19 – Trends and Distributions

## COVID-19 Data from CIVHC Claims Files

Total Patients	Positive Patients	Total Episodes	Death Rate
21,171	21,171	25,716	0.0% ( 1 )

**COVID-19 Diagnosis Date**  
By Patient Episode Date

© 2024 Mapbox © OpenStreetMap

Diagnosis Date: 1/3/2020 to 9/28/2023

Source Clinic: (All)

CCMCN has received validated claims data from "01/01/2020" to 5/31/2023".

**COVID-19 Status**

Had Covid: 21,171

**COVID-19 ICD-10 Codes**

ICD-10 Code	Description	Count
B9729	Other coronavirus as the cause of diseases classified elsewhere	186
J1281	Pneumonia due to SARS-associated coronavirus	198
U071	COVID-19	21,067

**Cause of Death Categories**

**Chronic Conditions**

Condition	NO	YES
Asthma	89.7%	10.3%
Autoimmune Disorder	98.7%	1.3%
Cancer	74.3%	25.7%
Cerebrovascular Disease	97.2%	2.8%
Coagulation Disorder	93.9%	6.1%
Diabetes	89.3%	10.7%
Heart Disease	93.9%	6.1%
Hepatitis B	100.0%	0.0%
Hypertension	59.5%	40.5%
Kidney Disease	94.8%	5.2%
Lung Disease	92.3%	7.7%
Obesity	79.7%	20.3%
Transplant Recipient	99.0%	1.0%
Ventilator Dependence	99.9%	0.1%

Patient ZIP Code (select to filter)

**DEMOGRAPHICS (select to filter)**

**Age Distribution**

Under 5	3.2%
5 to 11	5.1%
12 to 15	3.2%
16 to 24	10.4%
25 to 34	12.5%
35 to 44	14.0%
45 to 54	12.8%
55 to 64	15.3%
65 to 74	12.1%
75 to 84	7.0%
85+	4.3%
Other oc..	0.2%

**Sex**

Female	56.4%
Male	35.0%
Unknown	24.1%

**Gender Identity**

Identifies as Female	11.0%
Identifies as Male	5.8%
Non-binary	0.0%
Transgender F.	0.0%
Transgender Male (FTM Fe..	0.1%
Other or Unknown	90.1%

**Race and Ethnicity**

Other or unknown	88.8%
Hispanic or Latino	3.3%
Non-Hispanic White	7.7%
Black or African American	0.1%
Asian	0.0%
American Indian or Alaska Native	0.0%
Native Hawaiian or Other Pacific Isla..	0.0%
Declined to specify	0.0%
More than one race	0.0%

**Housing Status**

Other or Unkn..	71.6%
Not Homeless	27.2%
Homeless	0.5%
Public/Transiti..	0.6%
Doubling Up	0.1%
Living with ReL..	0.0%

**Smoking Status**

No	88.2%
Yes	6.8%
Former	4.7%
Unknown	0.3%

# Outmigration Overview

## Outmigration Population Clinic Analysis



Claim Date: 7/1/2022 to 9/28/2023  
 Outmigration Claims Per Patient: 0 to 1583  
 Outmigrated Claims Threshold: 1  
 Attributed Parent Org: (All)  
 Attributed Clinic: (All)  
 Attribution Type: (All)  
 Rendering Clinic: (All)  
 Primary Or Specialty: (All)  
 Rendering Clinic Specialty: (All)  
 Place of Service: (All)  
 Age Group: (All)  
 Gender: (All)  
 Race: (All)  
 Ethnicity: (All)  
 Primary Language: (All)  
 Chronic Conditions: (All)  
 Comorbidity: (All)  
 BH Diagnosis: (All)  
 Recent ER Visit: (All)  
 Claim Payer: (All)

Display visualizations by: Patients

Total Outmigrated Patients  
**113,620**

Total Outmigrated Claims  
**2,308,771**

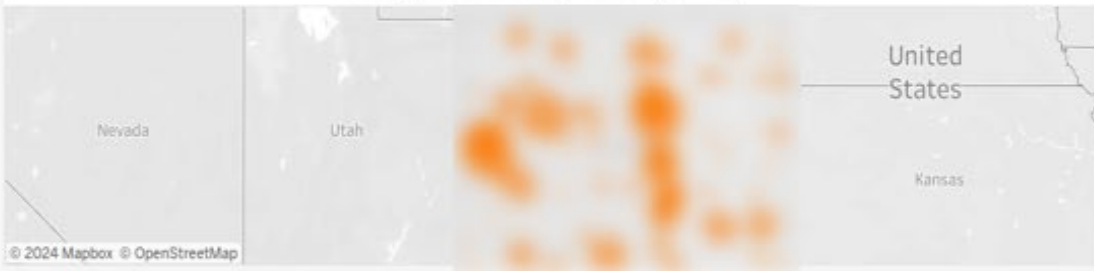
Cost of Outmigrated Claims  
**\$2,479,863,810**

### Average Distance Traveled for Outmigrated Claims

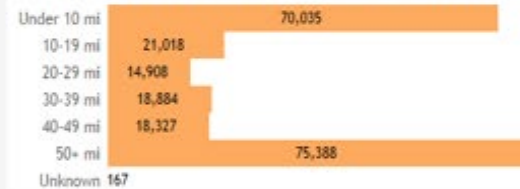
**53.8 miles**  
to  
Avg Rendering Clinic Distance

**27.9 miles**  
to  
Avg Attributed Clinic Distance

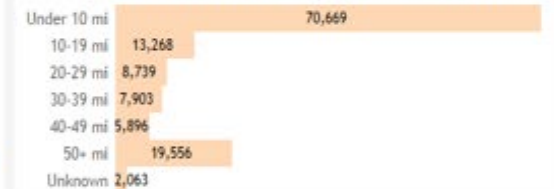
### Outmigrated Patients by Rendering Clinic Zip



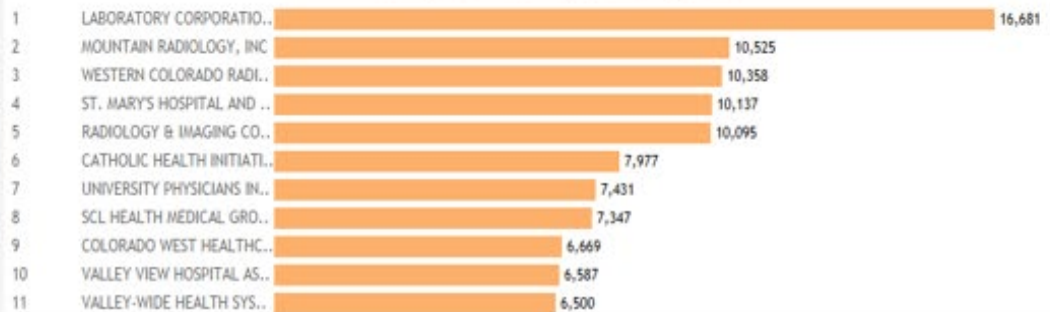
### Outmigrated Patients by Distance to Rendering Clinic



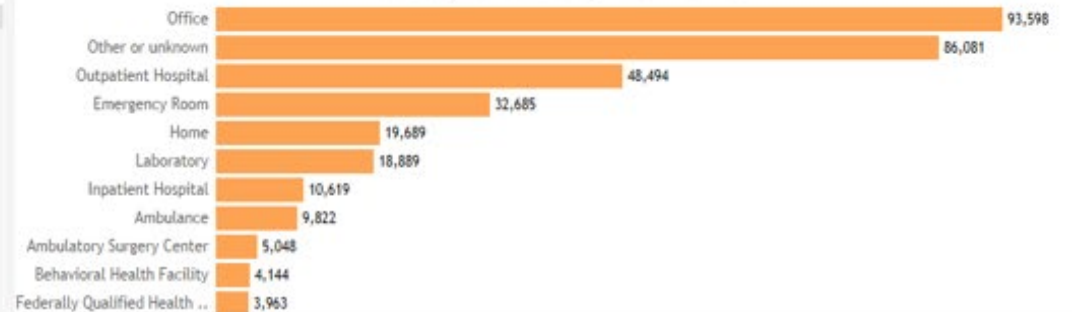
### Outmigrated Patients by Distance to Attributed Clinic



### Outmigrated Patients by Rendering Clinic



### Outmigrated Patients by Place of Service



# The Future of Rural Connectivity at CCMCN

- **OeHI, CCMCN, and CRHC are working to add non-certified/independent rural providers to the project**
- **Reports**
  - **Obstetric Health**
  - **Older Adult Immunization (65+)**
- **Utilization and Cost Reporting – Q2 2024**
- **TBD**

# Questions?

## Custom Reporting:

**Andy Woster**

Colorado Community Managed

Care Network

Population Health Analytics Director

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## Claims Reporting:

**Demetria Flowers**

Colorado Community Managed Care Network

Data Insight Analyst

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## Technical Assistance:

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Colorado Rural Health Center

Associate Director of Health Information

E-mail: [js@coruralhealth.org](mailto:js@coruralhealth.org)

## Rural Connectivity Project:

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Colorado Office of eHealth Innovation

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