



CIVHC and CO APCD Overview

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VP, Client Solutions & State Initiatives



CENTER FOR IMPROVING
VALUE IN HEALTH CARE

Our Mission

We strive to empower individuals, communities, and organizations through collaborative support services and health care information to advance the Triple Aim: **Better Health**, **Better Care**, **Lower Cost**

We are:

- Non-profit
- Independent
- Objective



Who We Serve

Change Agents

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



Pharmacy



Clinicians



Hospitals



Government



Consumers



Employers



Researchers



Health Plans

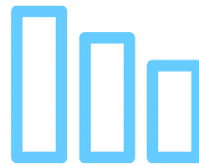


Non-Profits

Focus Areas



Public CO APCD Data
Identify opportunities for improvement in your community through interactive reports and publications



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



Data Literacy
Attend data academies to learn how to use available data resources across the state and country



Turning Data into Actionable Information

What's in the CO APCD



Health Insurance Payers

We receive claims from **Medicaid, Medicare**, Medicare Advantage, and over **40 commercial payers**



Claims

The Colorado APCD has over **875+ million claims** (Medical, Pharmacy, and Dental)



Unique Lives

The Colorado APCD represents **over 4.3 million** unique lives, and over **80% of insured Coloradans**



Emergency Department Utilization Project

- **Goals Of The Project:**

- Better understanding of the top reasons for outpatient ED utilization in Northern Colorado.
- What is the cost associated with these ED visits?
- How does the outpatient ED utilization and cost vary between the commercial and Medicaid population?
- What outpatient ED visits could be classified as avoidable



Emergency Department Utilization Project

- High Level Description Of Data Analyzed:
 - Service dates 2015 – 2018
 - Claims flagged as ER visits
 - Classified diagnoses using ICD-9 or ICD-10 coding system
 - Commercial and Medicaid claims
- Geography Examined:
 - Member zip code at month of admission used to categorize into various geographic regions
 - Community Level (Fort Collins, Greeley, Loveland)
 - County Level (Boulder, Larimer, Weld)
 - Regional Accountable Entity (RAE) #2
 - State of Colorado



Emergency Department Utilization Project

- Two methods used to determine whether an ED visit could be classified as avoidable:
 - NIH Guidelines: subjective and based on NIH guidelines for when to use the emergency room. Ability to categorize visits into:
 - Emergency, Avoidable or Unknown
 - NYU Algorithm: categorizes ED visits into several groups using information such as procedures, mortality, and hospitalizations.
 - Able to categorize visits by severity level and identify some visits as “non-emergent”
 - Also identifies carve out categories for visits that may be justifiably emergent, but were less clearly associated with hospitalization or mortality. These include ED visits due to injury, mental health issues, alcohol or drugs





ED Utilization in Northern Colorado

Cindy Kronauge MPH PhD
Weld County Department of Public Health and Environment

11/6/2019

Key Questions

What do the data tell us about ED utilization in Northern Colorado?

ED UTILIZATION

What does outpatient ED utilization look like in Northern Colorado?

What outpatient ED visits were avoidable?

AVOIDABLE REASONS



TOP REASONS

What are the top reasons for outpatient ED utilization?

What are the costs associated with these outpatient ED visits?

COSTS

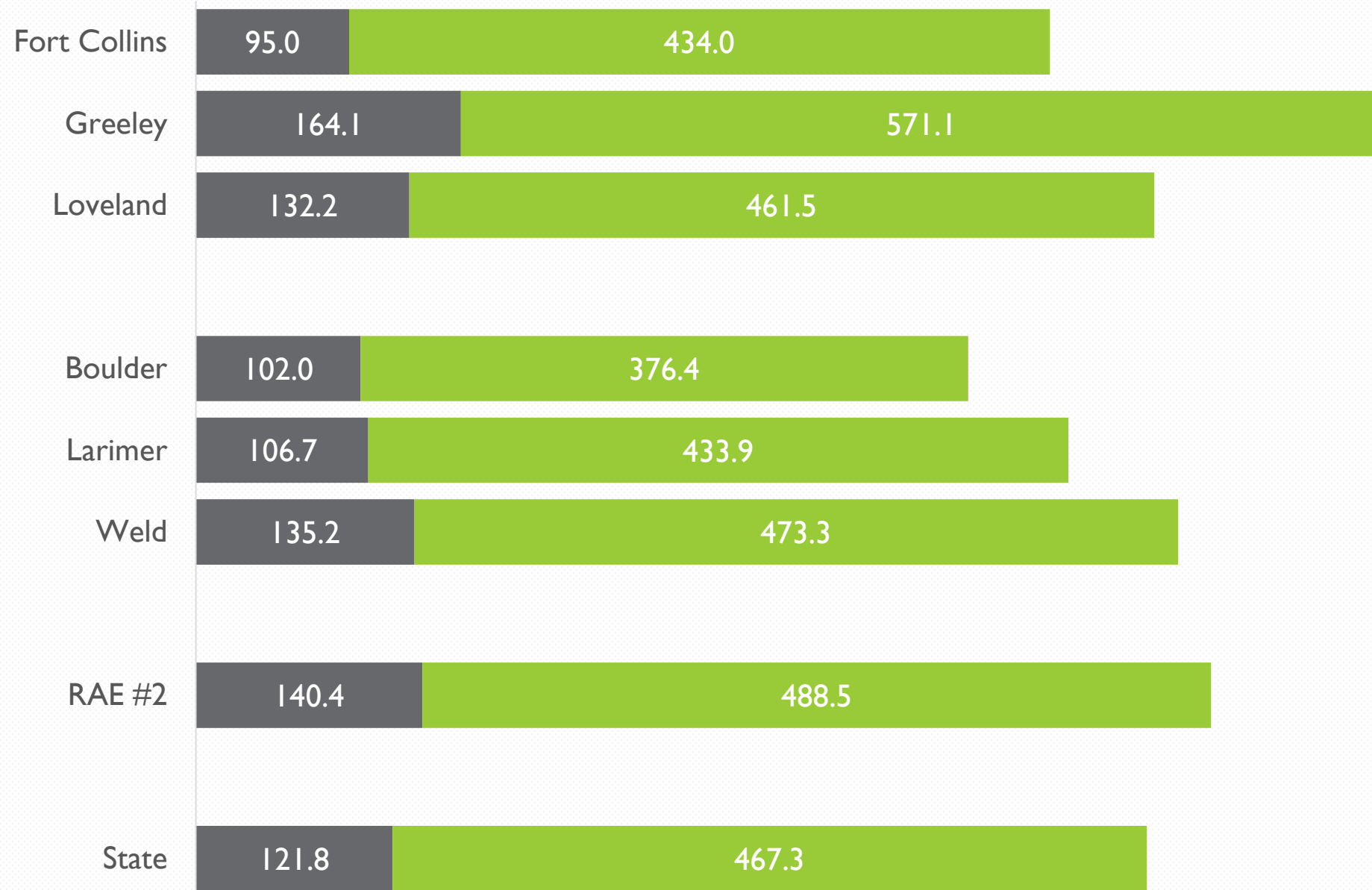


What does outpatient ED
utilization look like in Northern
Colorado?



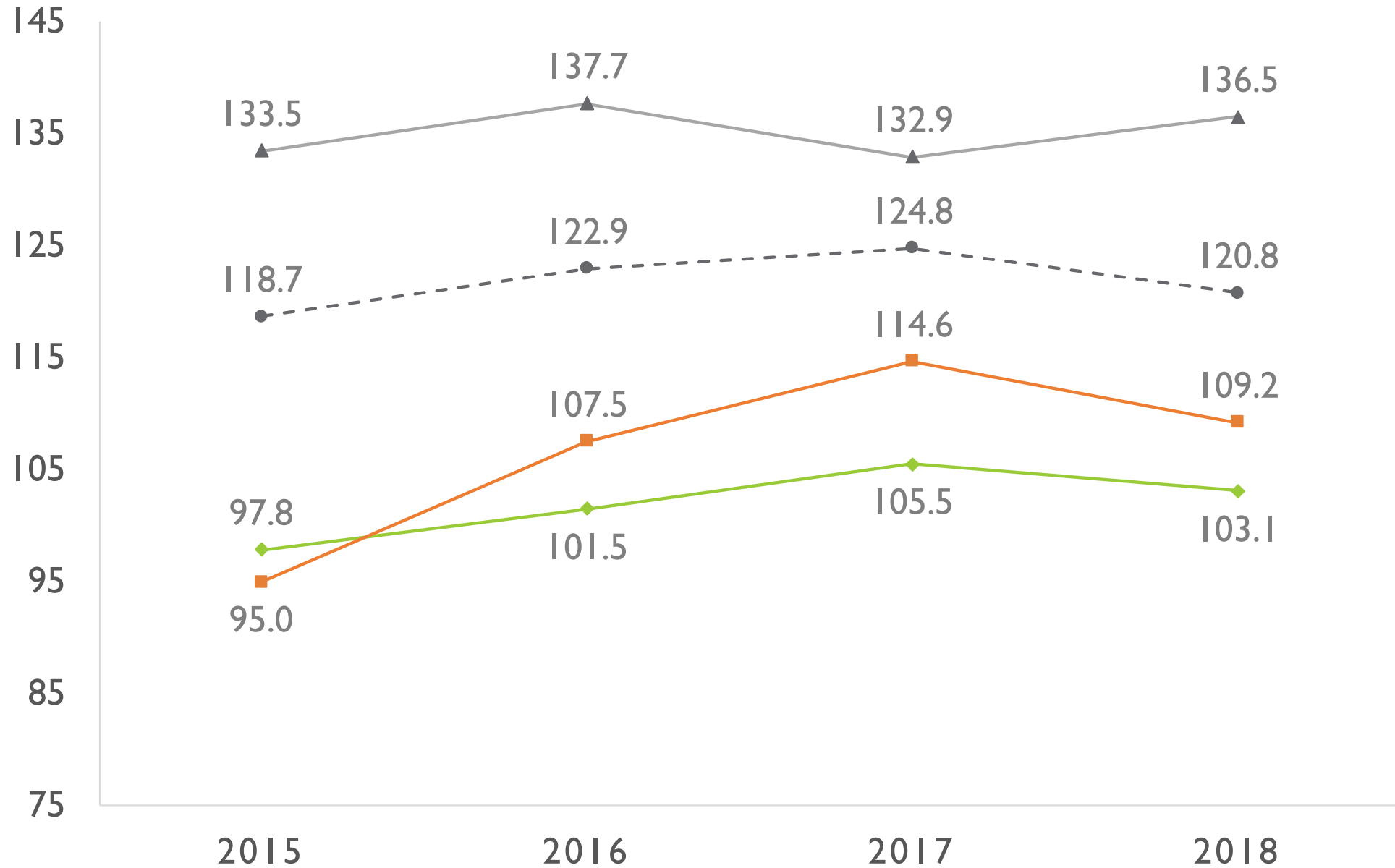
ED Visits per 1,000 Members per Year (2015 - 2018)

■ Commercial ■ Medicaid

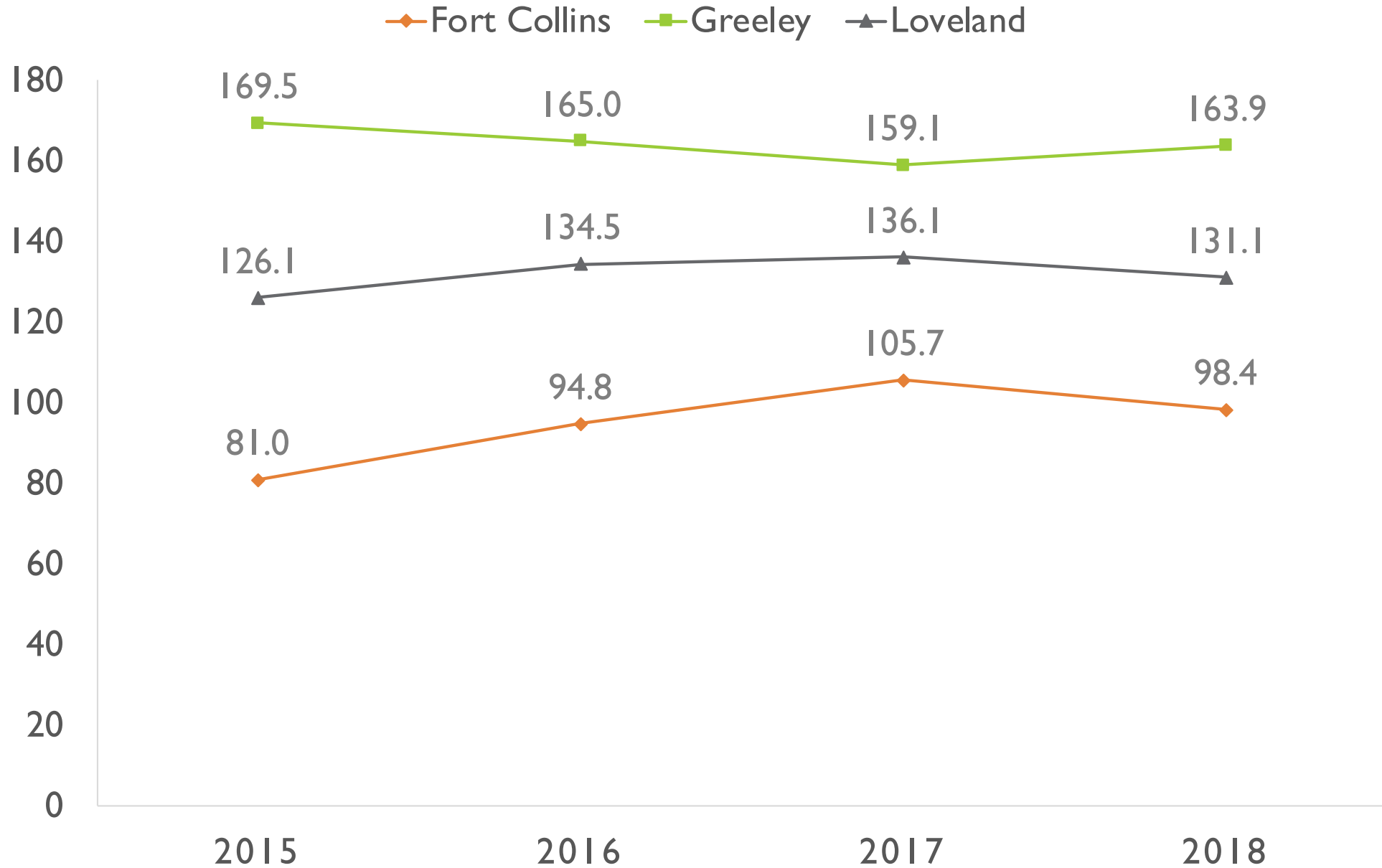


Commercial Outpatient ED Visit Trends

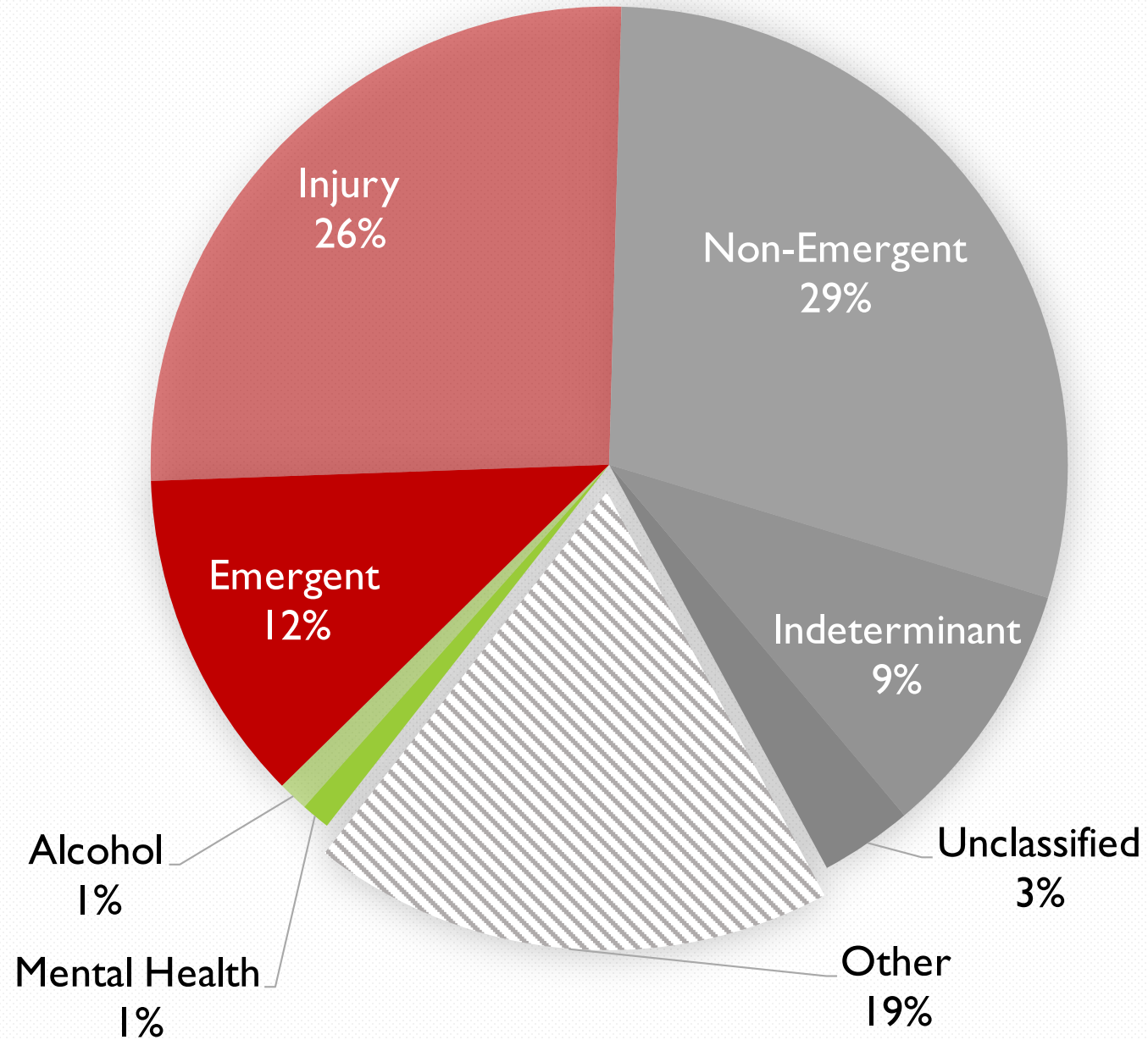
◆ Boulder ■ Larimer ▲ Weld -●- State



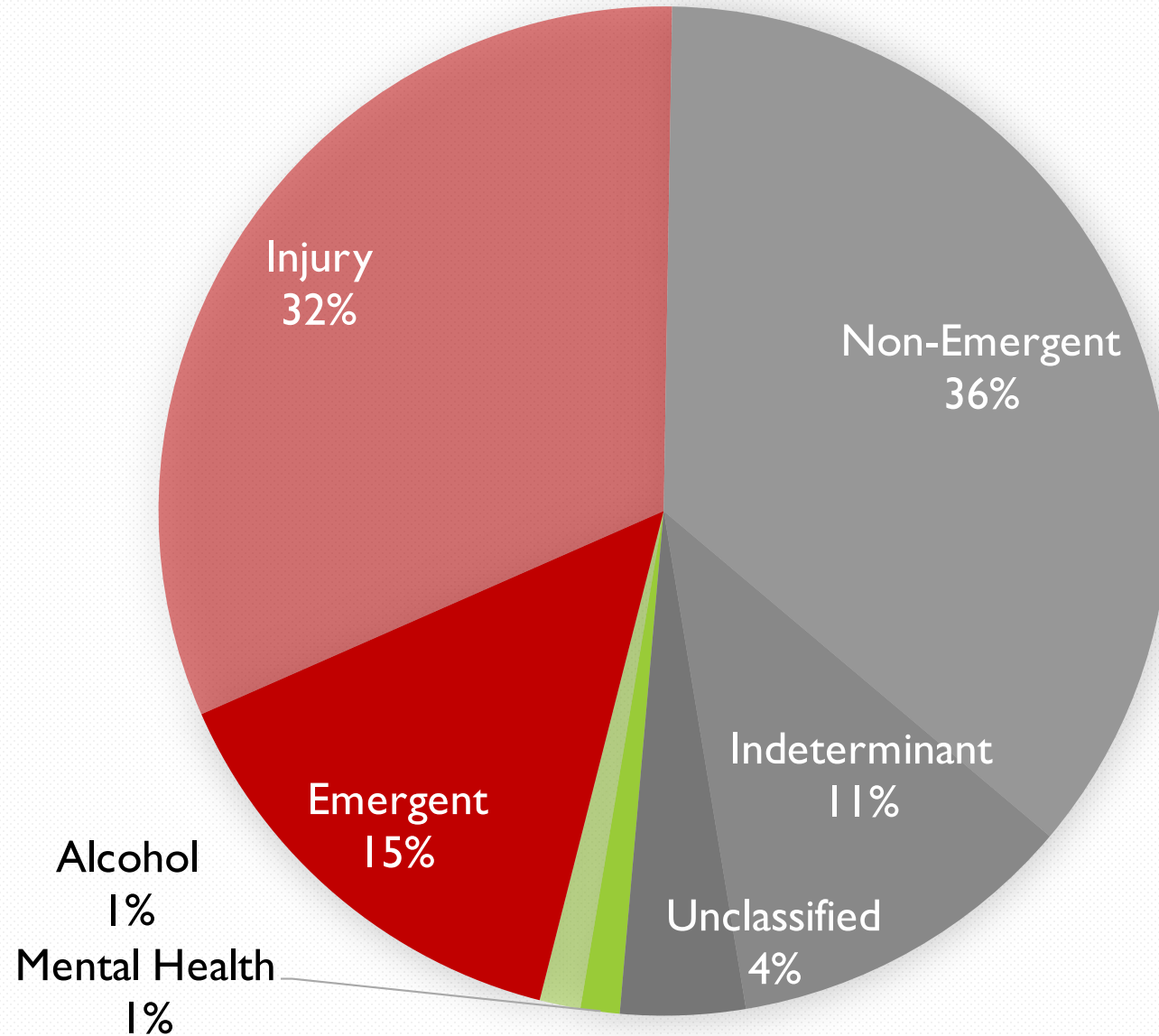
Commercial Outpatient ED Visit Trends by Municipality



Outpatient ED Visits, Larimer and Weld, 2015-2018

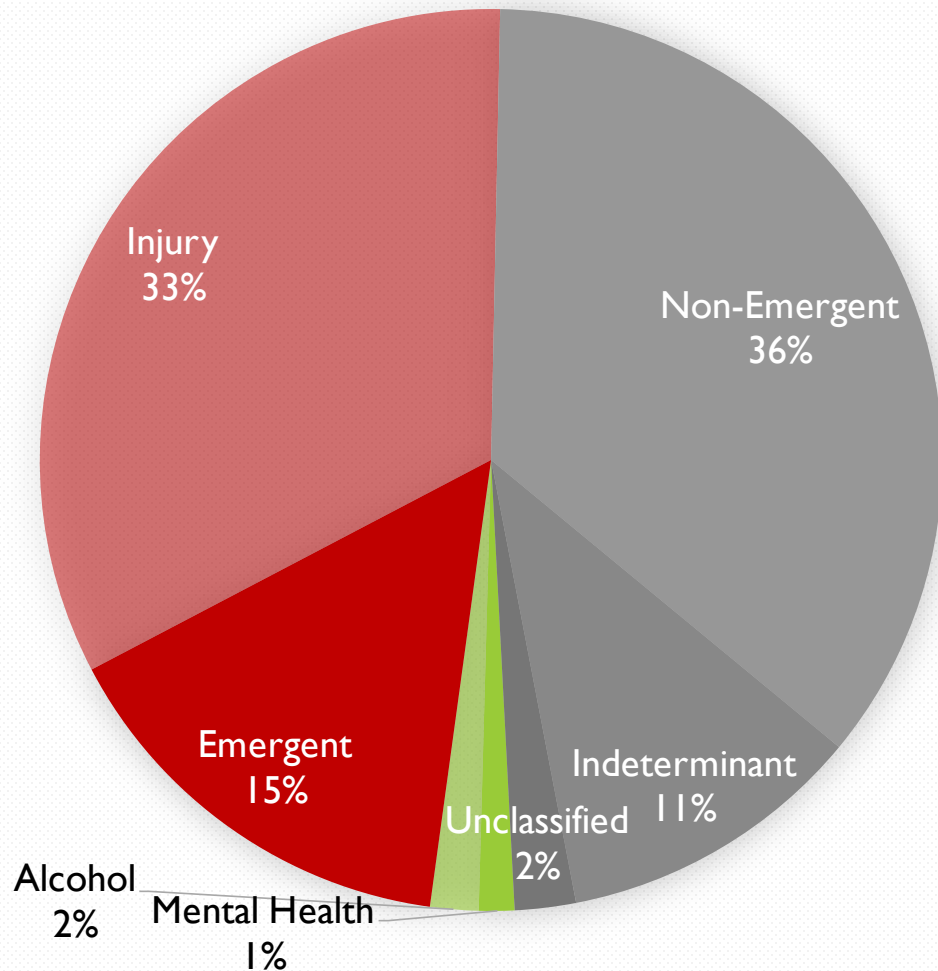


Commerical Outpatient ED Visits, Larimer and Weld, 2015-2018

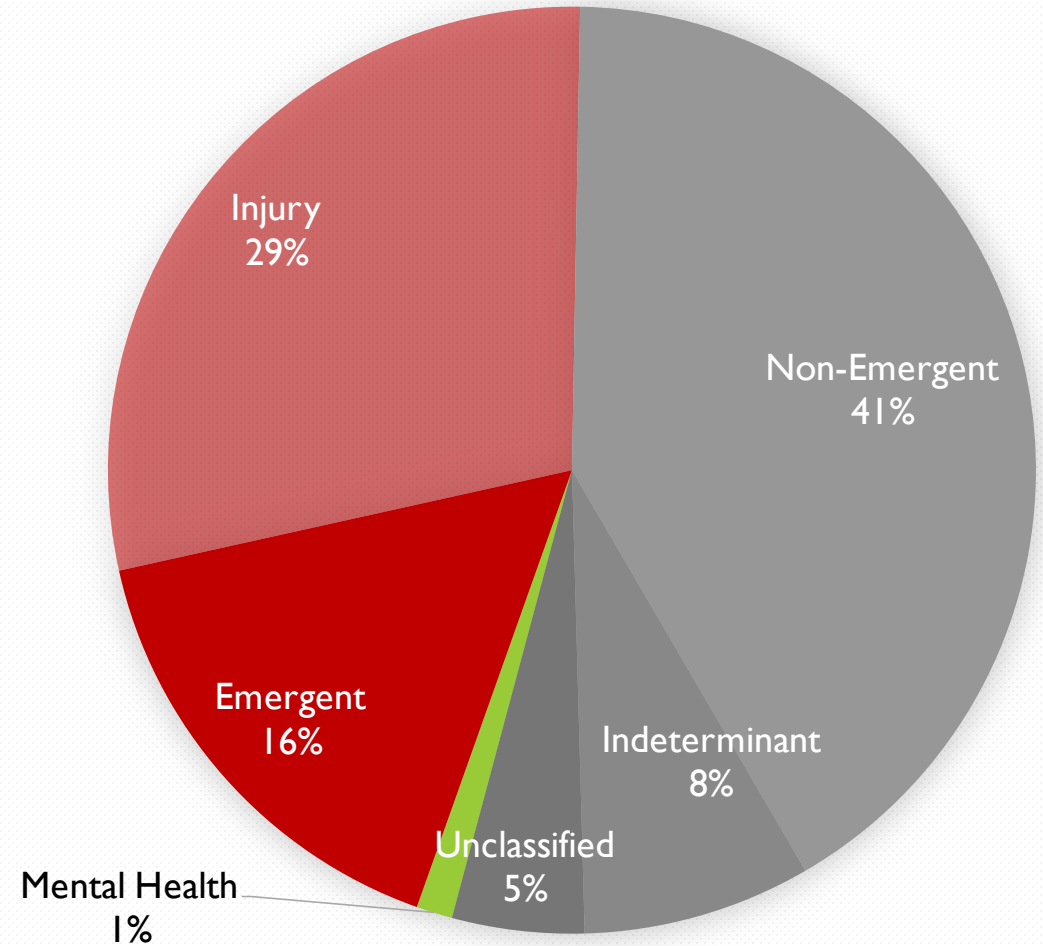


Commercial Outpatient ED Visits

Fort Collins, 2015-2018



Greeley, 2015-2018



Takeaways - I

- Outpatient ED utilization is higher in the Medicaid population
- Utilization varies by where members live with rates being generally higher in Weld County and Greeley compared to other areas
- At least 3 out of 10 outpatient ED visits are avoidable, non-emergent



What are the top reasons for
outpatient ED utilization?





Diseases of the heart

were the most common outpatient ED visit diagnoses in each geographic region except Boulder County.

Top Reasons – Larimer and Weld County

Diseases of the heart, 9%

Open wounds, 7%

Respiratory infections*, 6%

Diseases of the urinary system**, 6%

Fractures, 5%

* avoidable, non-emergent; **avoidable, indeterminant

Ft. Collins	Greeley	Loveland
Diseases of the heart	Diseases of the heart	Diseases of the heart
Open wounds	Respiratory infections*	Diseases of the urinary system**
Diseases of the urinary system**	Diseases of the urinary system**	Open wounds
Respiratory infections*	Open wounds	Respiratory infections*
Fractures	Sprains and strains	Fractures

* avoidable, non-emergent; **avoidable, indeterminant

Takeaways - II

- Diseases of the heart were the most common diagnosis. Although classified overall as emergent, some of these visits may be avoidable
- Respiratory infections is the most common avoidable reason seen in the outpatient ED, treated and released
- Diseases of the urinary system were harder to classify; some diagnoses may also be avoidable

What outpatient ED visits were avoidable?

Top Avoidable Visits

Respiratory Infections

Headache, including migraine

Ear conditions

Spondylosis, disc disorders, other back problems

Other connective tissue disease

Top Avoidable Visits by County	Boulder	Larimer	Weld
Respiratory infections	6.4%	5.7%	7.0%
Headaches, including migraine	3.2%	3.6%	3.9%
Ear conditions	2.8%	2.9%	3.1%
Spondylosis; disc disorders, other back problems	2.8%	2.9%	3.3%
Other connective tissue diseases	2.1%	2.1%	2.1%
Total	17.3%	17.2%	19.4%

On average there are about **600**
avoidable visits per year in each
county for **respiratory infections**.

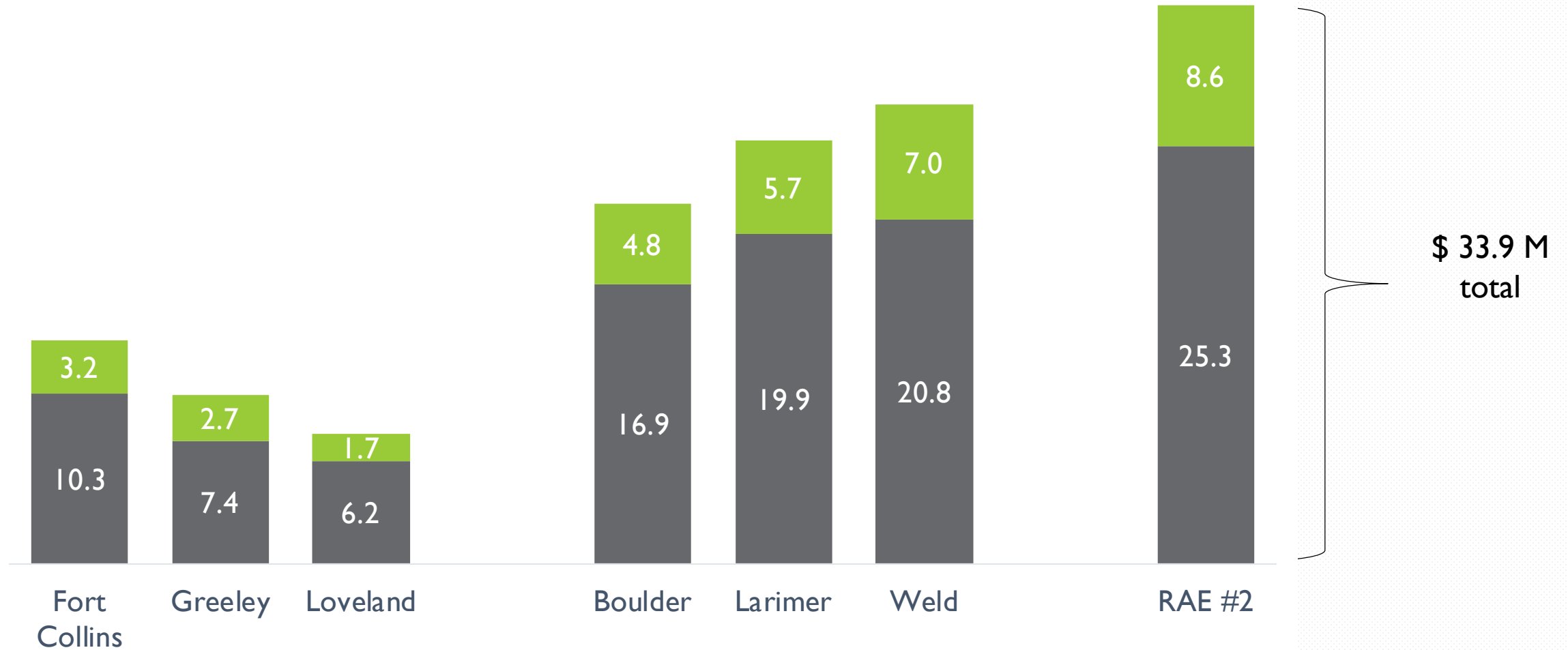
Takeaways - III

- Treatment for respiratory infections in the outpatient ED result in about 1,200 avoidable visits in Larimer and Weld counties.
- Headaches including migraines also account for a substantial number of avoidable visits.

What are the **costs** associated with these outpatient ED visits?

Average Annual Outpatient ED Costs in Millions, Commercial Payers

■ All Other ■ Avoidable

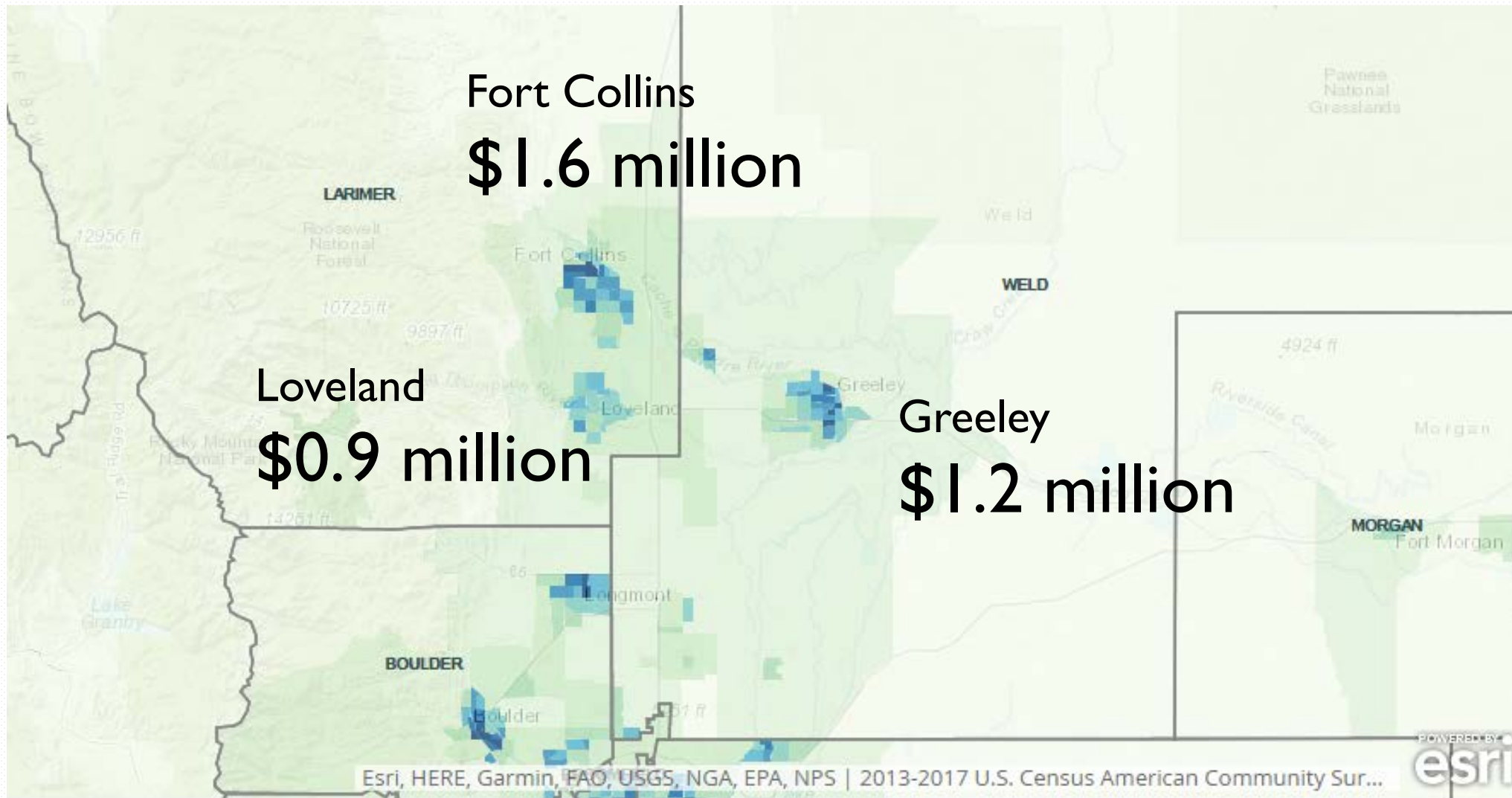


Top Costs – Larimer and Weld County



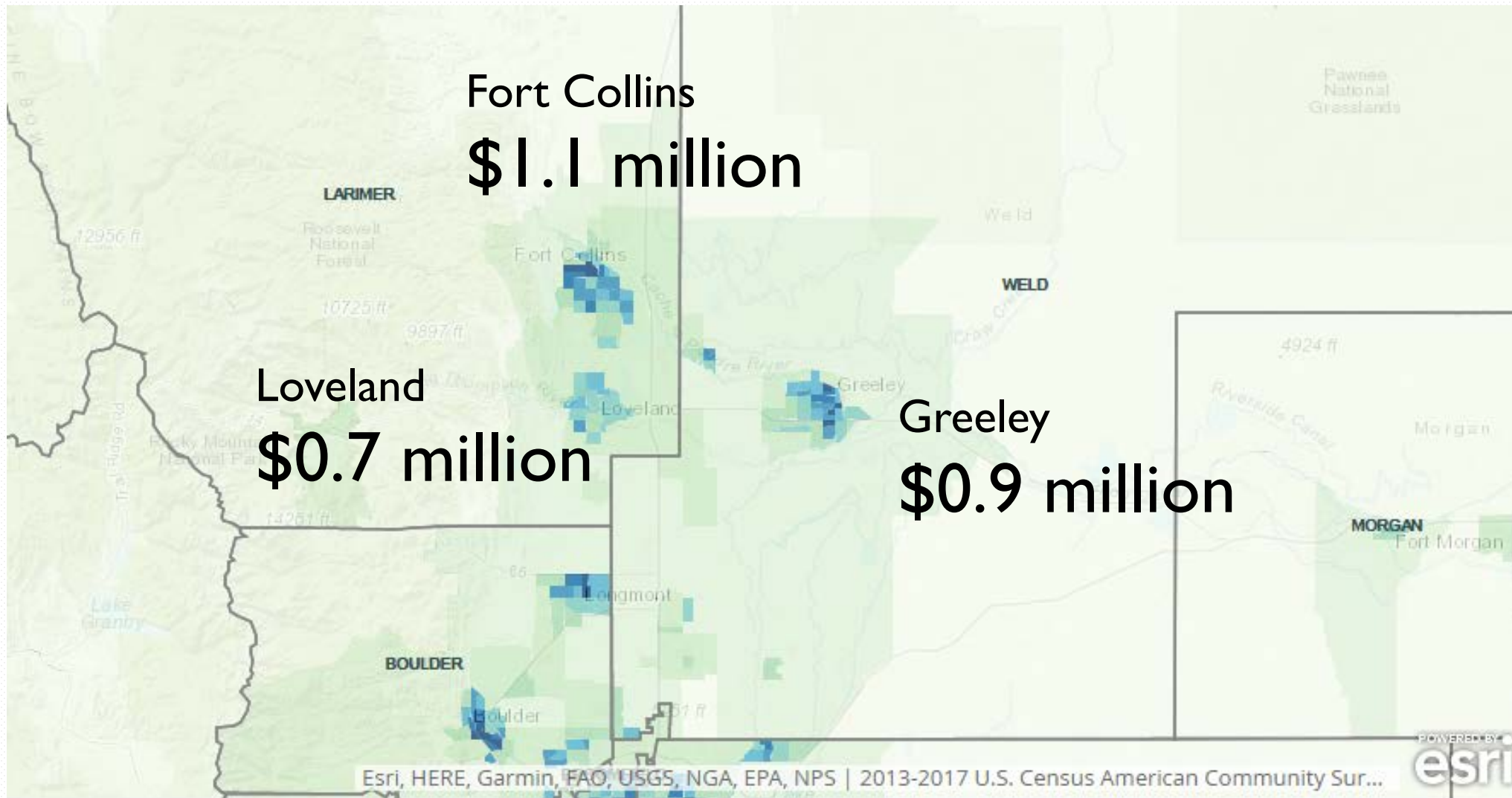
* avoidable, non-emergent; **avoidable, indeterminant

Total Cost of Heart Disease ED Visits per Year, Commercial Payers



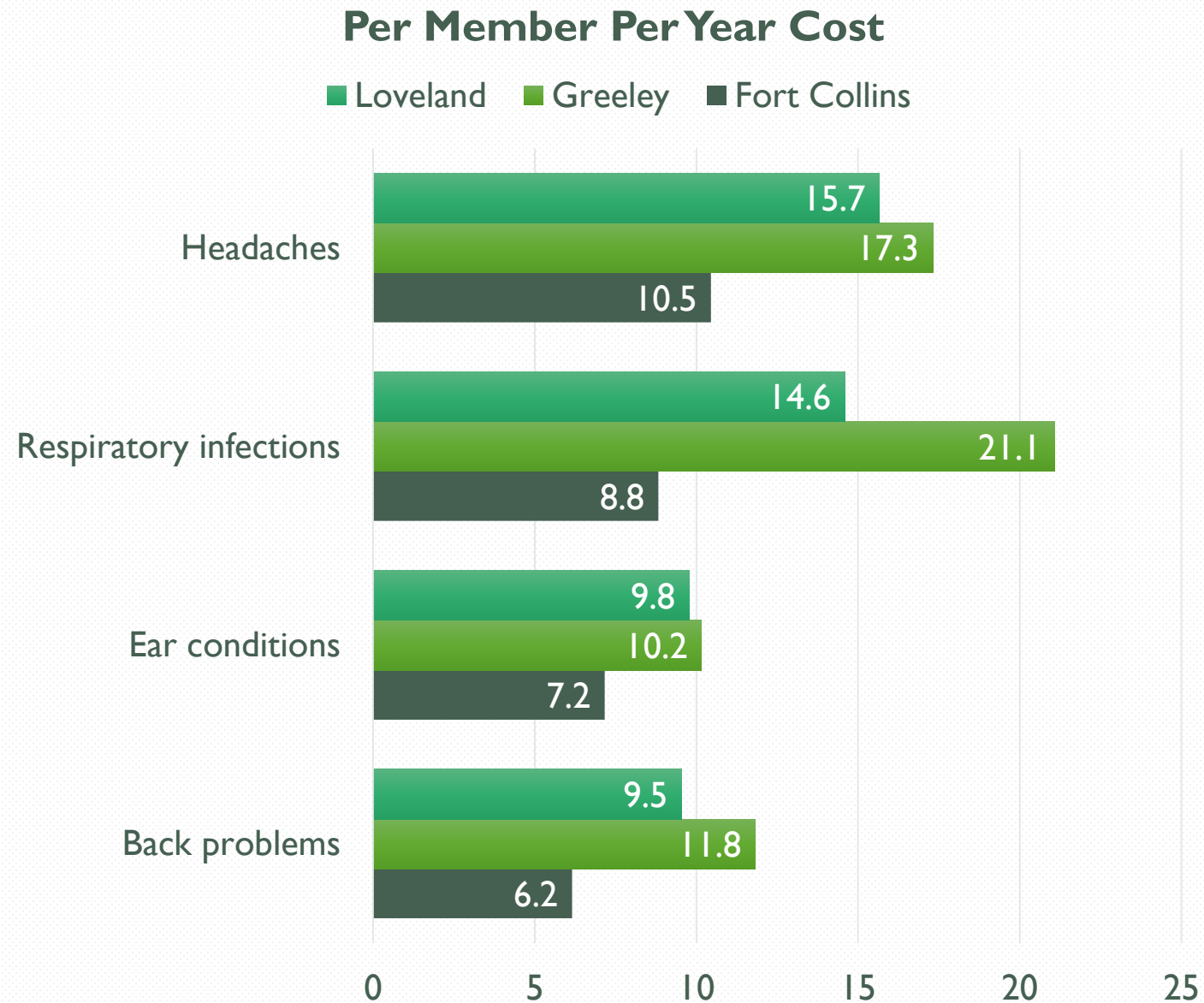
Note: Total costs were defined as the combined allowed amount paid by payer and member. Costs based on commercial claims only.

Total Cost of ED Visits for Diseases of Urinary System / Year

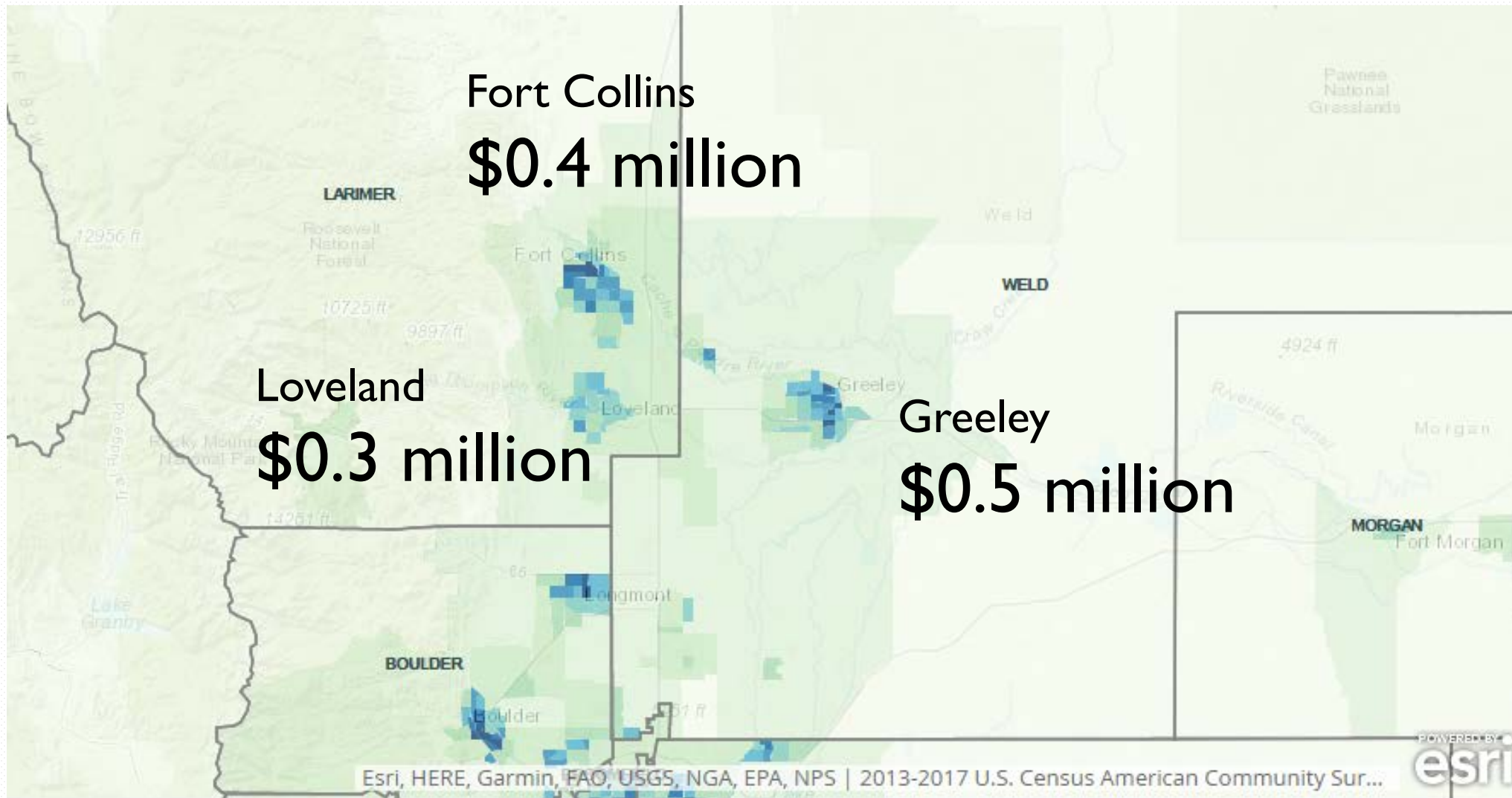


Note: Total costs were defined as the combined allowed amount paid by payer and member. Costs based on commercial claims only.

Top Outpatient ED Avoidable Visit Costs



Total Cost of ED Visits for Respiratory Infections per Year



Note: Total costs were defined as the combined allowed amount paid by payer and member. Costs based on commercial claims only.

Takeaways -IV

- Outpatient ED visits for diseases of the heart account for \$6.3 million per year in costs in Larimer and Weld counties.
- In Larimer and Weld counties, between 2015 and 2018, there were about \$13 million per year in outpatient ED avoidable costs.
- Respiratory infections account for over \$2 million per year in Larimer and Weld.
- Outpatient ED visits for headaches, ear conditions, and back problems are also avoidable and costly.

Summary



#1 At least 3 out of 10 outpatient ED visits are avoidable, non-emergent.

#2 Diseases of the heart were the most common diagnoses for being treated in the outpatient ED. Some of these visits may be avoidable.

#3 Respiratory infections and headaches account for a substantial number of avoidable visits.

#4 Avoidable outpatient ED visits are costly. In Larimer and Weld counties, about \$13 million per year could be avoided if solutions were found to reduce unnecessary ED use.

Recommendations

- ◆ Consider strategies to reduce avoidable ED use that:
 - ◆ Decrease ED visits for one or more of the top avoidable reasons – respiratory infections, headaches, back problems, etc.
 - ◆ Work on solutions together across counties, communities, and health systems
- ◆ Further examine ED use related to heart disease and whether there may be ways to reduce unnecessary visits
- ◆ Continue to broaden access to primary care services
- ◆ At the system level, consider implementing a project focused on the top reasons for outpatient ED use

The image features a background of a complex network diagram with various nodes and connecting lines. A large, semi-transparent orange rectangle is centered over the image, containing the word "Questions?". There are two dark green rectangular shapes, one at the top center and one at the bottom center, partially overlapping the network lines.

Questions?



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