



CENTER FOR IMPROVING  
VALUE IN HEALTH CARE

# Medicare Reference Based Price Report

Spring 2025

## Background

Many cost reduction strategies have been implemented and tested to address rising health care costs both locally and nationally. One model in particular – negotiating rates using Medicare payments as a reference – has [proven effective](#) in reducing health care spending, especially for large employers. This analysis shows commercial health insurance payments for facilities (including hospitals and free standing ambulatory surgical centers) for inpatient (IP) and outpatient (OP) services as a percent of Medicare, along with geographic comparisons and percent change from 2019.

Percent Medicare payments are calculated for each individual facility by comparing **commercial health insurance payments** (total allowed amounts) **to what Medicare Fee-for-Service (FFS) would have paid that facility for the same service**. The result is a percent above or below Medicare prices, with Medicare equal to 100%. For example, a facility with a 200% of Medicare result for inpatient services means commercial insurance payments were two times or double what Medicare pays for similar inpatient services.

To conduct the analysis, the Center for Improving Value in Health Care (CIVHC) engaged Milliman, a health care actuarial and consulting firm, to apply its [Medicare Repricer](#) software to the [Colorado All Payer Claims Database \(CO APCD\)](#). Medicare Repricer software is designed to assign Medicare allowed amounts to the complete range of medical services (excluding pharmacy), and to report the implied percentage of Medicare FFS allowed amount. All results are based on data and information published by the Centers for Medicare and Medicaid Services (CMS) or the Medicare Administrative Contractors (MACs). The output is then provided back to CIVHC analysts for quality checks and analyzed further in order to provide the public display of the data.

## Key Considerations

- The commercial data used for comparison includes the majority of fully insured and small group covered lives in Colorado, and approximately 50% of self-insured covered lives (see [CO APCD Insights Dashboard](#) for more information).
- Inpatient and outpatient payments reflect facility payments only and do NOT include professional claims or payments which may have been billed separately for services.
- Analysis includes only fully adjudicated claims. Claims with invalid or missing or invalid fields such as Medicare Severity Diagnosis Related Groups (MS-DRGs), Healthcare Common Procedure Coding System (HCPSC) or units were excluded.
- Emergency Department claims are included in the outpatient services category and constitute about 10-12% of total repriced spending per year of all outpatient claims.
- Only facilities with at least 30 claims in any category (IP or OP) are displayed.
- Includes out-of-network claims.

## Definitions and Parameters

**Critical Access Hospitals (CAH):** [CAH designation](#) is given to eligible rural hospitals by CMS. Critical Access Hospitals in this analysis were identified in the CO APCD using the Colorado Hospital Association's [directory](#).

**Ambulatory Surgery Centers:** Free standing surgical centers were identified in the CO APCD through the Centers for Medicare & Medicaid Services (CMS) [National Plan and Provider Enumeration System \(NPPES\)](#):

- Grouping: Ambulatory Health Care Facilities
- Classification: Clinic/Center
- Specialization: Ambulatory Surgical

### Main Service Categories

- **Inpatient:** Services delivered at acute care hospitals where the patient stayed in the hospital overnight. Costs include patient and health plan payments for facility services only, and do not include professional payments which may occur for the same visit.
  - See Appendix A for Hospital Taxonomies included.
- **Outpatient:** Services that were provided that did not result in an overnight hospital stay including imaging, office visits, ambulatory surgery, observation stays, and emergency department visits. Costs include patient and health plan payments for facility services only, and do not include professional payments which may occur for the same visit.

## Calculations

### Payer Range Calculations

1. Includes all commercial payers who paid a claim to the specified facility during the specified year, displayed as a percent of Medicare payments. The report shows the lowest end payer, median payer, and the highest end payer percent of Medicare.
2. There may be fewer than 30 claims for individual payers which may cause some outlier results for smaller facilities.

### Facility, Division of Insurance (DOI) Region, County, and Urban/Rural designation percent of Medicare methodology

1. Summed the following fields for Inpatient Services only, Outpatient Services only, and Inpatient Services and Outpatient Services combined:
  - Total private commercial insurance allowed amount (payer and patient combined)
  - Simulated Medicare allowed amount
2. Divided the sum of total private allowed amount by the total simulated Medicare allowed amount.

Measure	Calculation
Inpatient (IP) % of Medicare	<b>Numerator:</b> Total commercial allowed amount for IP claims <b>Denominator:</b> Total simulated Medicare IP allowed amount

<b>Outpatient (OP) % of Medicare</b>	<b>Numerator:</b> Total commercial allowed amount for OP claims <b>Denominator:</b> Total simulated Medicare OP allowed amount
<b>Inpatient (IP) and Outpatient (OP) Combined % of Medicare</b>	<b>Numerator:</b> Total commercial allowed amount for IP and OP claims combined <b>Denominator:</b> Total simulated Medicare IP and OP combined allowed amount  <b>*NOTE:</b> To be included in IP/OP Combined data, facilities must have BOTH IP and OP data in the Medicare Repricer output. Any facility with only one or the other will not have a combined % Medicare in the report.

## Geographic Groupings

Percent Medicare payments are available in the report by Colorado county and Division of Insurance (DOI) commercial insurance geographic rate setting areas.<sup>1</sup> Percent Medicare payments reflect commercial payments for all facilities in a given region. The following is a list of counties in each DOI region, along with the label displayed for each region in this report:

- Rating Area 1 – Boulder: Boulder
- Rating Area 2 – Colorado Springs: El Paso, Teller
- Rating Area 3 – Denver: Adams, Arapahoe, Broomfield, Clear Creek, Denver, Douglas, Elbert, Gilpin, Jefferson, Park
- Rating Area 4 – Ft. Collins: Larimer
- Rating Area 5 – Grand Junction: Mesa
- Rating Area 6 – Greeley: Weld
- Rating Area 7 – Pueblo: Pueblo
- Rating Area 8 – East: Alamosa, Baca, Bent, Chaffee, Cheyenne, Conejos, Costilla, Crowley, Custer, Fremont, Huerfano, Kiowa, Kit Carson, Las Animas, Lincoln, Logan, Mineral, Morgan, Otero, Phillips, Prowers, Rio Grande, Saguache, Sedgwick, Washington, Yuma
- Rating Area 9 – West: Archuleta, Delta, Dolores, Eagle, Garfield, Grand, Gunnison, Hinsdale, Jackson, La Plata, Lake, Moffat, Montezuma, Montrose, Ouray, Pitkin, Rio Blanco, Routt, San Juan, San Miguel, Summit

DOI region and county breakdown in the Tableau is based on the billing facility's local address. Only facilities in the state of Colorado were included.

## Assigning Outpatient Facilities to Affiliated Hospital Campuses

In many instances, a hospital or hospital system owns or operates an offsite outpatient clinic or facility. In order to attribute outpatient claims billed under a separate identifier to a hospital to show outpatient prices and inpatient and outpatient prices combined, CIVHC went through the following process:

1. Identified all facilities in the CO APCD classified as 'General Acute Care Hospital' using NPPES classification system.
2. Matched all facilities with the same organization name as identified in Step 1.

<sup>1</sup> <https://www.cms.gov/CCIIO/Programs-and-Initiatives/Health-Insurance-Market-Reforms/co-gra>

3. Rolled up remaining facilities into one of the hospitals identified in Step 1 using the steps below:

- Group facilities by ORGANIZATION NAME and ZIP CODE.
  - Facility IDs having the same organization name and zip code as a facility with a hospital taxonomy identified in Step 1 were grouped together.
- Group facilities by ORGANIZATION NAME and COUNTY.
  - Facility IDs that did not match on zip code, but were in the same county and had the same organization name as a facility with a hospital taxonomy were subsequently grouped together.
  - Some counties had multiple hospitals within the same system (e.g. El Paso, Denver) and a manual review was necessary.
- The remaining facilities that did not match on zip code or county were grouped by the following:
  - The main general acute hospital that was (a) in the same hospital network and (b) located within the closest distance (miles).

#### Resources Used:

- The Colorado Hospital Association's directory [list](#) was used to cross-reference the following:
  - Facility name
  - Address
  - Hospitals that did not have an NPPES General Acute Hospital classification
  - Critical Access Hospital status
- Google Maps and the Colorado Department of Public Health facility lists were used to further confirm addresses from Colorado Hospital Association's list.

#### Example below:

**NPI:**1093326357

**Organization:** CATHOLIC HEALTH INITIATIVES COLORADO

**City, Zip, County:** FRISCO,80443, Summit

**Taxonomy:** Ambulatory Health Care Facilities

**Matching Hospital:** CommonSpirit St. Anthony Summit Medical Center

**Explanation:** CommonSpirit St. Anthony Summit Medical Center is the closest in distance (miles) general acute hospital, in the Catholic Health Initiatives network, to the address for NPI 1093326357.

### Limitations of Medicare Repricer Software

The Milliman Medicare Repricer tool, like any software, has limitations. The list below includes some of the known limitations of the tool, but is not an exhaustive list. The information below comes from the Milliman technical specifications guide.

#### **Adjustment to 2023 Service Dates.**

A quality review of output data from Milliman identified an issue with the software used to process claims for 2023. The version in use did not apply the correct Medicare fee schedule for claims from critical access hospitals (CAHs) and ambulatory surgical centers (ASCs). These claims should have been

repriced using their respective CAH or ASC fee schedules, but instead, the software misclassified them, leading to incorrect pricing.

To ensure accurate reporting of 2023 claims from these facilities, a correction method was developed. Typically, outpatient claims use HCPCS procedure codes to determine Medicare pricing, while inpatient claims rely on MS-DRGs. Since 2022 claims were correctly processed, the median repriced amounts from 2022—categorized by HCPCS or MS-DRG code—were used as reference points to approximate 2023 repriced values. The actual allowed amount for 2023 was then divided by the estimated Medicare-allowed amount to generate a corrected percentage of Medicare pricing. This approach ensures more accurate reimbursement calculations and aligns 2023 claim data with expected values for these facility types.

### **Medicare Payments are Estimates**

The Medicare allowed amounts assigned using the Medicare Repricer may differ from actual Medicare payment due to the following:

- All repriced amounts reflect prospective payment amounts and do not reflect any settlements with CMS.
- Repriced amounts are typically based on information released at the beginning of each year (Federal fiscal year for inpatient and calendar year for other types of services).

### **Inpatient**

- The Medicare Repricer prices discharges using Medicare's Acute Inpatient PPS fee schedule (used for about 94% of Medicare FFS inpatient, non-SNF payments) and currently does not support Inpatient Psychiatric Facility PPS, Inpatient Rehabilitation Facility PPS, Long-Term Care Hospital PPS, and Hospice PPS fee schedules. Additionally, facilities paid outside of PPS are not priced by the Medicare Repricer.
- No adjustments are made for hospitals that participate in Medicare's Bundled Payment for Care Improvement (BPCI) initiative or the Rural Community Hospital Demonstration Program.
- Critical Access Hospital (CAH) payments are calculated based on the interim payment rate information available in the CMS Medicare FFS experience data and the CMS Cost Reports. CAH repricing results are estimates and should be verified using the CAH's interim rate letter(s) from the Medicare Administrative Carrier (MAC). CAHs' final payments under Medicare are adjusted to a percent of cost (e.g., 101% of cost).
- The software does not calculate the impact of the hospital Medicare Value-Based Payment program on Medicare payments for individual Hospitals.

### **Outpatient**

- The Medicare Repricer prices claims using Medicare's Hospital Outpatient PPS fee schedule for hospital claims (used for about 90% of Medicare outpatient facility, non-ASC, non-dialysis payments) and the Ambulatory Surgical Center (ASC) Payment for ASCs. For the following provider types the Medicare Repricer prices using the OPPS fee schedule which will not match actual Medicare payments: Cancer Hospitals (paid based on cost), and Children's Hospitals (paid based on cost).
- For obsolete or deleted codes, the Medicare Repricer maps the service to an equivalent current code, when available.

## **Service Dates and Data Vintage**

### **Service Dates Included**

The service year is defined by the service start date on each claim. This analysis includes claims data for the following calendar years: 2019, 2020, 2021, 2022 and 2023.

### **Data Vintage**

This report is based off claims data in the CO APCD data warehouse refresh on July 2024. For more information about number of claims in the CO APCD during a particular reporting year and data discovery information regarding payer submissions, please visit our website at [www.civhc.org](http://www.civhc.org).

For more information or additional questions, contact us at [info@civhc.org](mailto:info@civhc.org).

## **Appendix A**

Hospital Taxonomies included. Taxonomy codes are based on categories defined in the National Plan & Provider Enumeration System (NPPES).

<b>Taxonomy Code</b>	<b>Grouping</b>	<b>Classification</b>	<b>Specialization</b>
<b>207LP2900X</b>	Allopathic & Osteopathic Physicians	Anesthesiology	Pain Medicine
<b>207L00000X</b>	Allopathic & Osteopathic Physicians	Anesthesiology	
<b>207P00000X</b>	Allopathic & Osteopathic Physicians	Emergency Medicine	
<b>207QH0002X</b>	Allopathic & Osteopathic Physicians	Family Medicine	Hospice and Palliative Medicine
<b>207QS0010X</b>	Allopathic & Osteopathic Physicians	Family Medicine	Sports Medicine
<b>207Q00000X</b>	Allopathic & Osteopathic Physicians	Family Medicine	
<b>208D00000X</b>	Allopathic & Osteopathic Physicians	General Practice	
<b>208M00000X</b>	Allopathic & Osteopathic Physicians	Hospitalist	
<b>207RC0000X</b>	Allopathic & Osteopathic Physicians	Internal Medicine	Cardiovascular Disease
<b>207RC0200X</b>	Allopathic & Osteopathic Physicians	Internal Medicine	Critical Care Medicine
<b>207RE0101X</b>	Allopathic & Osteopathic Physicians	Internal Medicine	Endocrinology, Diabetes & Metabolism
<b>207RG0100X</b>	Allopathic & Osteopathic Physicians	Internal Medicine	Gastroenterology
<b>207RH0003X</b>	Allopathic & Osteopathic Physicians	Internal Medicine	Hematology & Oncology
<b>207RH0002X</b>	Allopathic & Osteopathic Physicians	Internal Medicine	Hospice and Palliative Medicine
<b>207RI0200X</b>	Allopathic & Osteopathic Physicians	Internal Medicine	Infectious Disease
<b>207RI0011X</b>	Allopathic & Osteopathic Physicians	Internal Medicine	Interventional Cardiology
<b>207RX0202X</b>	Allopathic & Osteopathic Physicians	Internal Medicine	Medical Oncology
<b>207RN0300X</b>	Allopathic & Osteopathic Physicians	Internal Medicine	Nephrology
<b>207RP1001X</b>	Allopathic & Osteopathic Physicians	Internal Medicine	Pulmonary Disease
<b>207RR0500X</b>	Allopathic & Osteopathic Physicians	Internal Medicine	Rheumatology
<b>207R00000X</b>	Allopathic & Osteopathic Physicians	Internal Medicine	
<b>207T00000X</b>	Allopathic & Osteopathic Physicians	Neurological Surgery	
<b>207VX0201X</b>	Allopathic & Osteopathic Physicians	Obstetrics & Gynecology	Gynecologic Oncology
<b>Taxonomy Code</b>	<b>Grouping</b>	<b>Classification</b>	<b>Specialization</b>
<b>207VG0400X</b>	Allopathic & Osteopathic Physicians	Obstetrics & Gynecology	Gynecology

<b>207VM0101X</b>	Allopathic & Osteopathic Physicians	Obstetrics & Gynecology	Maternal & Fetal Medicine
<b>207V00000X</b>	Allopathic & Osteopathic Physicians	Obstetrics & Gynecology	
<b>207XX0004X</b>	Allopathic & Osteopathic Physicians	Orthopaedic Surgery	Foot and Ankle Surgery
<b>207XS0117X</b>	Allopathic & Osteopathic Physicians	Orthopaedic Surgery	Orthopaedic Surgery of the Spine
<b>207XX0005X</b>	Allopathic & Osteopathic Physicians	Orthopaedic Surgery	Sports Medicine
<b>207X00000X</b>	Allopathic & Osteopathic Physicians	Orthopaedic Surgery	
<b>207Y00000X</b>	Allopathic & Osteopathic Physicians	Otolaryngology	
<b>207ZP0105X</b>	Allopathic & Osteopathic Physicians	Pathology	Clinical Pathology/Laboratory Medicine
<b>2080P0006X</b>	Allopathic & Osteopathic Physicians	Pediatrics	Developmental - Behavioral Pediatrics
<b>208000000X</b>	Allopathic & Osteopathic Physicians	Pediatrics	
<b>2081P2900X</b>	Allopathic & Osteopathic Physicians	Physical Medicine & Rehabilitation	Pain Medicine
<b>208100000X</b>	Allopathic & Osteopathic Physicians	Physical Medicine & Rehabilitation	
<b>208200000X</b>	Allopathic & Osteopathic Physicians	Plastic Surgery	
<b>2083X0100X</b>	Allopathic & Osteopathic Physicians	Preventive Medicine	Occupational Medicine
<b>2084N0400X</b>	Allopathic & Osteopathic Physicians	Psychiatry & Neurology	Neurology
<b>2084P0800X</b>	Allopathic & Osteopathic Physicians	Psychiatry & Neurology	Psychiatry
<b>2085R0202X</b>	Allopathic & Osteopathic Physicians	Radiology	Diagnostic Radiology
<b>2085R0001X</b>	Allopathic & Osteopathic Physicians	Radiology	Radiation Oncology
<b>208600000X</b>	Allopathic & Osteopathic Physicians	Surgery	
<b>208G00000X</b>	Allopathic & Osteopathic Physicians	Thoracic Surgery (Cardiothoracic Vascular Surgery)	
<b>204F00000X</b>	Allopathic & Osteopathic Physicians	Transplant Surgery	
<b>Taxonomy Code</b>	<b>Grouping</b>	<b>Classification</b>	<b>Specialization</b>



207VG0400X	Allopathic & Osteopathic Physicians	Obstetrics & Gynecology	Gynecology
208800000X	Allopathic & Osteopathic Physicians	Urology	
261QB0400X	Ambulatory Health Care Facilities	Clinic/Center	Birthing
261QC1500X	Ambulatory Health Care Facilities	Clinic/Center	Community Health
261QC0050X	Ambulatory Health Care Facilities	Clinic/Center	Critical Access Hospital
261QD0000X	Ambulatory Health Care Facilities	Clinic/Center	Dental
261QE0002X	Ambulatory Health Care Facilities	Clinic/Center	Emergency Care
261QE0700X	Ambulatory Health Care Facilities	Clinic/Center	End-Stage Renal Disease (ESRD) Treatment
261QF0400X	Ambulatory Health Care Facilities	Clinic/Center	Federally Qualified Health Center (FQHC)
261QM1200X	Ambulatory Health Care Facilities	Clinic/Center	Magnetic Resonance Imaging (MRI)
261QM2500X	Ambulatory Health Care Facilities	Clinic/Center	Medical Specialty
261QM0801X	Ambulatory Health Care Facilities	Clinic/Center	Mental Health (Including Community Mental Health Center)
261QM1300X	Ambulatory Health Care Facilities	Clinic/Center	Multi-Specialty
261QX0200X	Ambulatory Health Care Facilities	Clinic/Center	Oncology
261QP2000X	Ambulatory Health Care Facilities	Clinic/Center	Physical Therapy
261QP2300X	Ambulatory Health Care Facilities	Clinic/Center	Primary Care
261QR0200X	Ambulatory Health Care Facilities	Clinic/Center	Radiology
261QR0400X	Ambulatory Health Care Facilities	Clinic/Center	Rehabilitation
261QR1300X	Ambulatory Health Care Facilities	Clinic/Center	Rural Health
261QS1000X	Ambulatory Health Care Facilities	Clinic/Center	Student Health
261QU0200X	Ambulatory Health Care Facilities	Clinic/Center	Urgent Care
261Q00000X	Ambulatory Health Care Facilities	Clinic/Center	
103TC0700X	Behavioral Health & Social Service Providers	Psychologist	Clinical
<b>Taxonomy Code</b>	<b>Grouping</b>	<b>Classification</b>	<b>Specialization</b>
103TC1900X	Behavioral Health & Social Service Providers	Psychologist	Counseling
133V00000X	Dietary & Nutritional Service Providers	Dietitian, Registered	

<b>152W00000X</b>	Eye and Vision Services Providers	Optometrist	
<b>275N00000X</b>	Hospital Units	Medicare Defined Swing Bed Unit	
<b>273R00000X</b>	Hospital Units	Psychiatric Unit	
<b>273Y00000X</b>	Hospital Units	Rehabilitation Unit	
<b>282NC2000X</b>	Hospitals	General Acute Care Hospital	Children
<b>282NC0060X</b>	Hospitals	General Acute Care Hospital	Critical Access
<b>282NR1301X</b>	Hospitals	General Acute Care Hospital	Rural
<b>282N00000X</b>	Hospitals	General Acute Care Hospital	
<b>282E00000X</b>	Hospitals	Long Term Care Hospital	
<b>283Q00000X</b>	Hospitals	Psychiatric Hospital	
<b>283X00000X</b>	Hospitals	Rehabilitation Hospital	
<b>284300000X</b>	Hospitals	Special Hospital	
<b>291U00000X</b>	Laboratories	Clinical Medical Laboratory	
<b>314000000X</b>	Nursing & Custodial Care Facilities	Skilled Nursing Facility	
<b>163WN0002X</b>	Nursing Service Providers	Registered Nurse	Neonatal Intensive Care
<b>367A00000X</b>	Physician Assistants & Advanced Practice Nursing Providers	Advanced Practice Midwife	
<b>367500000X</b>	Physician Assistants & Advanced Practice Nursing Providers	Nurse Anesthetist, Certified Registered	
<b>363LP0808X</b>	Physician Assistants & Advanced Practice Nursing Providers	Nurse Practitioner	Psychiatric/Mental Health
<b>363A00000X</b>	Physician Assistants & Advanced Practice Nursing Providers	Physician Assistant	
<b>213ES0103X</b>	Podiatric Medicine & Surgery Service Providers	Podiatrist	Foot & Ankle Surgery
<b>225100000X</b>	Respiratory, Developmental, Rehabilitative and Restorative Service Providers	Physical Therapist	
<b>231H00000X</b>	Speech, Language and Hearing Service Providers	Audiologist	
<b>237700000X</b>	Speech, Language and Hearing Service Providers	Hearing Instrument Specialist	
<b>Taxonomy Code</b>	<b>Grouping</b>	<b>Classification</b>	<b>Specialization</b>
<b>235Z00000X</b>	Speech, Language and Hearing Service Providers	Speech-Language Pathologist	

<b>332B00000X</b>	Suppliers	Durable Medical Equipment & Medical Supplies	
<b>3336C0002X</b>	Suppliers	Pharmacy	Clinic Pharmacy
<b>3336C0003X</b>	Suppliers	Pharmacy	Community/Retail Pharmacy
<b>3336I0012X</b>	Suppliers	Pharmacy	Institutional Pharmacy
<b>3336S0011X</b>	Suppliers	Pharmacy	Specialty Pharmacy
<b>333600000X</b>	Suppliers	Pharmacy	
<b>335E00000X</b>	Suppliers	Prosthetic/Orthotic Supplier	