CO APCD Advisory Committee

May 14, 2019
Agenda

• Welcome and Introductions
• Committee Role, Affordability Roadmap & CO APCD Funding
• Public Reporting
• CO APCD Scholarship Subcommittee
• Data Quality Orientation
• Employer Data & CO APCD Milestones
• Topics for Next Meeting
Committee Role, Affordability Roadmap & CO APCD Funding

Executive Director Kim Bimestefer •
Colorado Department of Health Care Policy & Financing
Committee Roles – Historical v Future Focus

See Handout

• CAAC current role (C.R.S. 25.5-1-204 2018): The advisory committee shall make recommendations to the ED and the CO APCD administrator:

• CAAC current role (SB 18-1327): the Advisory Committee shall:

• Administrator Duties with CAAC input (C.R.S. 25.5-1-204 2018): The administrator, with input from the advisory committee shall:
Committee Roles – Future Focus

In addition to core statutory and regulatory requirements...

Utilize CO APCD Advisory Committee to provide input and insights on how CIVHC as Administrator of the CO APCD can provide valuable information in support of the State Affordability Roadmap
2019 Legislation Followed

- HB 19-1174 Out of Network
- SB 19-004 High Cost Health Insurance Pilot Program (PEAK Alliance)
- HB 19-1168 Reinsurance (Exchange)
New CO APCD State Funding

- Total Newly Approved FY20: $4.04M
  - Scholarship Fund: $0.50M
  - Prior Approved GF: $1.03M (CMS 50/50 - State portion)
  - New approved funds: $2.51M

(Additional funds may be available through other contracts for services – i.e. SIM/TCPI; fiscal notes; legacy contracted services; etc)
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Public Reporting

Cari Frank, MBA •
CIVHC VP of Communication and Marketing
Recent Releases - Opioids

Although fill rate has fallen for two of the three opioids analyzed, more than half of all prescriptions filled were for eight days or more.

Oxycodone, Percocet, and Vicodin Prescription Trends in Colorado, 2009-2017
Commercial, Medicaid, and Medicare Advantage, CO APCD
Recent Releases – Opioids Cont.

- Although it’s least prescribed, Oxycodone prescription fill rates increased 247% between 2009-2017.
- Rates of Percocet and Vicodin fills have steadily declined since reaching a peak in 2014, although Percocet fill rates in 2017 were still higher than 2009 rates.
Recent Releases – Price Variation Graphics with State Medians

**Head or brain**
- Lowest: $20
- Highest: $2,250
- Median: $565

**Abdomen and pelvis, w/contrast**
- Lowest: $290
- Highest: $5,150
- Median: $1,240

**Abdomen and pelvis, w/o con.**
- Lowest: $120
- Highest: $6,030
- Median: $1,130

**Knee Replacement & Knee Revision**
- Lowest: $18,540
- Highest: $53,760
- Median: $35,170

**Hip Replacement & Hip Revision**
- Lowest: $15,520
- Highest: $47,210
- Median: $33,590

**Gall Bladder Surgery**
- Lowest: $5,300
- Highest: $24,920
- Median: $12,875

**Knee Arthroscopy**
- Lowest: $3,400
- Highest: $19,010
- Median: $5,960

**Vaginal Delivery**
- Lowest: $6,000
- Highest: $17,160
- Median: $11,660

**C-Section**
- Lowest: $14,020
- Highest: $23,150
- Median: $18,110
Planned Upcoming Releases

• **Updates pending to Reference Based Price reports**
• **May - July**: Additional infographics and geographic variation related facility price and quality information (DOI region price information, % facility fee)
• **Target July - Aug**: Pharmacy dashboard
• **Target Aug - Dec**: Updates to current Interactive Reports plus updated Insights (2016-2018 data) – pending Medicaid submission
• **Target October**: Total Cost of Care trend information (2014-17) and inclusion of Medicaid; public interactive report if possible
• **Target November**: Facility Price updated with 2018; Investigating adding new Prometheus episodes and potentially dental services
• **December**: Annual Report with analytic insights
Reference Based Pricing Analysis

• RAND study using CO APCD data released 5.11
• Excel file with named hospital/system information available
• Planning to use RAND data to provide public report information; re-calculate reference-based price cost savings estimates
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CO APCD Scholarship Subcommittee

Peter Sheehan •
CIVHC VP of Business Development
CO APCD Scholarship Subcommittee

**Scholarship Subcommittee Members:**
- David Keller, CU School of Medicine, Children’s Hospital
- Chris Underwood, Dept. of Health Care Policy & Financing
- Nathan Wilkes, Headstorms, Inc.

**Update**
Fiscal Year to Date, 18 projects have been approved by the Scholarship Subcommittee and also approved by HCPF.

The full $500,000 has been allocated across 18 different projects:

- 2 Government project requests
- 6 Academic institution/research project requests
- 10 Non-profit project requests
<table>
<thead>
<tr>
<th>Data Requestor</th>
<th>Opportunity Name</th>
<th>HCPF Scholarship Portion</th>
<th>Close Date</th>
<th>Research</th>
<th>Govt</th>
<th>Non Profits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children's Hospital Colorado &amp; University of Colorado Denver (UCD)</td>
<td>19.02 Predicting Asthma Outcomes through Analysis of Early Respiratory Hospitalizations in Children</td>
<td>$33,904.00</td>
<td>10/31/2018</td>
<td></td>
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<tr>
<td>University of Colorado Denver (UCD) Cancer Center</td>
<td>19.05 UCD HPV Vaccination HSR Project, Evaluating the impact of distance and vaccination</td>
<td>$36,256.00</td>
<td>9/27/2018</td>
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<tr>
<td>University of Colorado Denver (UCD) School of Medicine</td>
<td>18.77 Apoyo con Carino (Support through Caring): Improving Palliative Care Outcomes for Latinos with Advanced Medical Illness</td>
<td>$38,651.00</td>
<td>5/31/2019</td>
<td></td>
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<tr>
<td>University of Colorado Denver (UCD) School of Medicine</td>
<td>16.76.3 UCD Cardiac Stress Tests- Evaluating Low-Value Tests and Their Potential Harm</td>
<td>$32,560.00</td>
<td>4/16/2019</td>
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<tr>
<td>Colorado School of Public Health</td>
<td>19.71 UCD Evaluating and Modeling REMS Drug Diffusion, Prescription &amp; Utilization Patterns</td>
<td>$37,712.00</td>
<td>1/30/2019</td>
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<tr>
<td>University of California Los Angeles (UCLA)</td>
<td>18.107 UCLA Youth Psychotropic Medication Use</td>
<td>$44,696.00</td>
<td>12/27/2018</td>
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<td>CIVHC Analytics</td>
<td>19.104 Millman/VBID Low Value Waste Calculator Extract</td>
<td>$38,159.00</td>
<td>4/30/2019</td>
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<tr>
<td>Colorado Children's Access Program</td>
<td>18.37 Emergency Department Utilization Project- Evaluating the Cost Savings of Establishing Medical Homes</td>
<td>$35,510.00</td>
<td>5/10/2019</td>
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<tr>
<td>Colorado Community Managed Care Network (CCMCN)</td>
<td>19.40 CCMCN Subscription (Integrating Claims Data to FQHC Clinical Data for Care Management)</td>
<td>$45,000.00</td>
<td>6/30/2019</td>
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<tr>
<td>Data Requestor</td>
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<tr>
<td>Colorado Consumer Health Initiative</td>
<td>18.121 Analysis of Prescription Drug Costs, Top 20 High Volume/High Cost Prescriptions</td>
<td>$24,656.00</td>
<td>8/24/2018</td>
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<td>Colorado Dental Association (CDA)</td>
<td>19.67 Evaluating ED usage for Dental Pain since the inclusion of dental benefits in HFC Medicaid Plans</td>
<td>$8,500.00</td>
<td>1/4/2019</td>
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<td>Colorado Dental Association (CDA)</td>
<td>19.68 Evaluating the utilization of dental services between embedded plans vs. standalone plans.</td>
<td>$0.00</td>
<td>11/30/2018</td>
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<td>Colorado Medical Society</td>
<td>19.08 Charging Patterns for Professional Services in CO Relating to Out-of-Network and Variations in Pricing</td>
<td>$27,824.00</td>
<td>1/25/2019</td>
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<tr>
<td>Northwest Colorado Community Health Partnership</td>
<td>19.35 ED Utilization and Potentially Avoidable Costs in NW CO</td>
<td>$17,504.00</td>
<td>11/30/2018</td>
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<tr>
<td>Palliative Care</td>
<td>17.123.3 Palliative Care: The Costs Associated with the Care at End of Life</td>
<td>$20,500.00</td>
<td>5/16/2019</td>
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<td></td>
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<tr>
<td>Quality Health Network (QHN)</td>
<td>19.10 QHN Medicaid and Medicare Eligibility in support of RAE and AHCM CMS Grant activities</td>
<td>$13,500.00</td>
<td>5/31/2019</td>
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<tr>
<td>Colorado State- Division of Insurance</td>
<td>19.101 Potential Savings with Costs Associated with Reinsurance Program Repricing Claims using Medicare Reference Based Methodology</td>
<td>$35,884.00</td>
<td>2/22/2019</td>
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<tr>
<td>Colorado State Legislature</td>
<td>19.103 Understanding the Variance of Paid/Allowed Amount Among the Top 25 CPT Codes Across the State</td>
<td>$9,184.00</td>
<td>2/28/2019</td>
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<td></td>
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<tr>
<td><strong>total:</strong></td>
<td></td>
<td>$500,000.00</td>
<td></td>
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<td>6</td>
<td>2</td>
</tr>
</tbody>
</table>
CO APCD Scholarship Subcommittee

Next Steps & Action Items

The Scholarship program has proven to be very popular. Applications are reviewed and approved on a first-come, first served basis each fiscal year. Several projects shifted to FY 2020 due to the dollars being fully allocated this year.

Scholarship eligible projects for FY 20 are currently being vetted and will be moving to the Subcommittee for review.

A 2019 review and 2020 planning meeting is being held with HCPF on May 29th.
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- Welcome and Introductions
- Committee Role, Affordability Roadmap & CO APCD Funding
- Public Reporting
- CO APCD Scholarship Subcommittee
- **Data Quality Orientation**
- Employer Data & CO APCD Milestones
- Topics for Next Meeting
Data Quality Orientation
Data User Experience Panel

Barbara Martin
Colorado State Innovation Model

Mark Gritz
University of Colorado

John Bartholomew
Department of Health Care Policy and Financing

David Keller
University of Colorado School of Medicine and Children’s Hospital Colorado
Current and Enhanced Quality Processes

Vinita Bahl, DMD, MPP •

CIVHC Director of Analytics and Data
Overview

• User experiences are a reflection of several gaps in the process of delivering high quality, valid results

• Delivering high quality, valid results dependent on:
  1. Quality of underlying data in CO APCD
  2. An analytic process focused on understanding client need and executed to produce desired results

• Evaluation of processes for these key elements reveal opportunities for improvement
Process of Delivering Information

1. Receive Request for Information
2. Specify Business Problem and Analytic Plan
3. Create Custom Report or Extract
4. Validate Results
5. Deliver Results
Potential Problems Delivering Information

Little Communication with Client about Meaning and Possible Limitations of Results; and Comparability with Outside Sources

Receive Request for Information

Specify Business Problem and Analytic Plan

Create Custom Report or Extract

Validate Results

Deliver Results

Misspecification of Business Problem

Misspecification of Content of Report or Extract

Error in Results because
- Analyst Error
- APCD Data Incomplete, Inaccurate or Insufficient

Failure to Adequately Validate Results
**CO APCD Data Quality – Current Process**

1. **Level 1. Check submitter compliance with Data Submission Guide**
   - New file copied and immediately removed from SFTP Server.
   - Paremeter submissions.
   - Enclave file server.
   - Monitor process.
   - Newly detected file.

2. **Level 2. Compare content of submitted files with data in APCD to identify files that are resubmissions**
   - Release staging.
   - Calculated variables, member ID, and provider processing.
   - Nightly batch.
   - Passed files.
   - Initial storage.
   - Unzip, decrypt.
   - Level 1 QC: Data intake validation process.

3. **Level 3. Check submitted data based on trends in volume of claims, members, cost PMPM and check data enhancements**
   - Vertical data warehouse commercial/medicaid load eligible.
   - Post-grouper enrichment/load analytic layer.
   - Level 3 QC: Post-ingestion QA/QC reports.
   - Client review.
   - Vertical data warehouse/eligible.
   - Level 4 QC: Data mining.

**Flowchart:**
- Payer submissions
- Internet
- SFTP server
- Enclave file server
- Monitor process
- Newly detected file
- Unzip, decrypt
- Level 1 QC: Data intake validation process
- Vertical load EMPI grouper provider index
- Vertical data warehouse/eligible
- Level 4 QC: Data mining
- Client signoff
- Vertical data warehouse commercial/medicaid load eligible
- Post-grouper enrichment/load analytic layer
- Level 3 QC: Post-ingestion QA/QC reports
- Client review
- Vertical data warehouse/eligible
- Level 4 QC: Data mining
- Client signoff
- Vertical data warehouse commercial/medicaid load eligible
- Post-grouper enrichment/load analytic layer
- Level 3 QC: Post-ingestion QA/QC reports
- Client review
- Vertical data warehouse/eligible
- Level 4 QC: Data mining
- Client signoff
CO APCD Data Quality – Current Process

Assessment of Data Quality Process To-Date

• Although hundreds of data quality checks are performed, these checks are still incomplete
• Numerous reports of results of data quality checks; most require time-consuming review to identify problems
• Documentation of data quality process and of reports is incomplete
## CO APCD Data Quality – New Framework

<table>
<thead>
<tr>
<th>Dimensions of Quality &amp; Quality Checks for Data Submissions/Enhancements</th>
<th>Designed to identify incomplete, incorrect or redundant data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Check file submissions each month for completeness and explainable trends</td>
<td>Check data enhancements (e.g., member composite ID, APR-DRG)</td>
</tr>
<tr>
<td>Check submitter compliance with Data Submission Guide</td>
<td>Check for erroneous claims data (e.g., claim with procedure inappropriate for patient gender)</td>
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<tr>
<td>Check Medicare data files that are not submitted according to DSG</td>
<td>Identify and document redundant data (e.g., Medicare Part D)</td>
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<tr>
<td>Check of proper claims handling (e.g., claim reversals, adjustments, sum of claim lines)</td>
<td>Validation with other sources (e.g., parity checks with submitters, hospital data with CHA)</td>
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</tbody>
</table>
## Dimensions of Quality & Quality Checks for Data Submissions/Enhancements

Designed to identify incomplete, incorrect or redundant data

<table>
<thead>
<tr>
<th>Check</th>
<th>Description</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Check file submissions each month for completeness and explainable trends</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Check submitter compliance with Data Submission Guide</td>
<td></td>
</tr>
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<td>3.</td>
<td>Check Medicare data files that are not submitted according to DSG</td>
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<td>4.</td>
<td>Check of proper claims handling (e.g., claim reversals, adjustments, sum</td>
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<td></td>
<td>of claim lines)</td>
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<tr>
<td>5.</td>
<td>Check data enhancements (e.g., member composite ID, APR-DRG)</td>
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<td>6.</td>
<td>Check for erroneous claims data (e.g., claim with procedure inappropriate</td>
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<td>for patient gender)</td>
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<td>7.</td>
<td>Identify and document redundant data (e.g., Medicare Part D)</td>
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<td>8.</td>
<td>Validation with other sources (e.g., parity checks with submitters, hospital</td>
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<td></td>
<td>data with CHA)</td>
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</table>
CO APCD Data Quality – Next Steps

• Conduct deep-dive into each dimension of data quality checks to identify gaps
• Develop plan, with priorities for filling gaps
• Design reports that directly expose data quality problems
• Document:
  – Enhanced data quality process
  – Details of business rules that explain how data is mapped or transformed from submitted files to CO APCD
  – Recommendations for updates to DSG
  – CO APCD data dictionary

• Create feedback loops and CQI processes with CO APCD users to identify and resolve data quality problems
## Analytic Structure & Process

<table>
<thead>
<tr>
<th>Current (Individual Approach)</th>
<th>New (Team Approach)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insufficient analyst resources</td>
<td>Hire additional analysts</td>
</tr>
<tr>
<td>Request given to individual analyst, who typically works independently to specify methods and output</td>
<td>Establish team approach to reviewing requests and specifying analytic plan, methods and output</td>
</tr>
<tr>
<td>Limited analyst communication with client</td>
<td>Communicate directly with client to resolve questions about request</td>
</tr>
<tr>
<td>No formal oversight by Director of Analytics</td>
<td>Oversight of analytic structure, process and outcomes by Director</td>
</tr>
<tr>
<td>Quality control mostly limited to review of analyst programming code</td>
<td>Enhance quality control to include team review and test of validity of results</td>
</tr>
</tbody>
</table>
Analytic Process – New Team Process

<table>
<thead>
<tr>
<th>Conduct internal review of request within team</th>
<th>Research available data</th>
<th>Document analytic plan and methods</th>
<th>Discuss application with requestor, as needed</th>
<th>Conduct internal review of analytic plan &amp; methods; consult with external experts, as needed.</th>
<th>Produce draft results</th>
<th>Conduct QC of analyst program</th>
<th>Review results with team; test validity</th>
<th>Document results, review with client</th>
</tr>
</thead>
</table>
Summary

• User experiences are a reflection of several gaps in the process of delivering high quality, valid results

• Opportunities for improvement
  • Reframe quality checks of data in CO APCD so they address meaningful dimensions of data quality and document key processes
  • Establish team approach with analysts for reviewing requests; specifying analytic plan, methods and output; and reviewing and testing validity of results
Committee Questions and Discussion
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Employer Data and CO APCD Milestones

William Lindsay •
Principal, Lindsay3, LLC
Employer Data & CO APCD Milestones

• Current Pilots
  • Grand Junction
  • Summit County

• Other Community Activity
  • Vail Valley Partnership
  • Northern Colorado – Larimer & Weld Counties

• Future Employer Reports
# Employer Report Examples

<table>
<thead>
<tr>
<th>Report</th>
<th>Mockups Available</th>
<th>Report Available</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Spending as a percent of Medicare: Inpatient; Outpatient; ED; Professional. Cost trends for Inpatient, Outpatient, ED &amp; Professional Svcs compared to DOI region &amp; State. Will include a roll-up view for group purchasing alliances.</td>
<td>May-19</td>
<td>Jun-19</td>
</tr>
<tr>
<td>2 Identify the top five chronic/comorbid conditions within my covered population, by disease/then compare to my area and statewide. Will include a roll-up view for group purchasing alliances.</td>
<td>Aug-19</td>
<td>Nov-19</td>
</tr>
<tr>
<td>3 Identify underutilization that exists within my population with chronic conditions, and then compare to my area. Will include a roll-up view for group purchasing alliances.</td>
<td>Jan-20</td>
<td>Mar-20</td>
</tr>
<tr>
<td>4 Identify PAC Rates for the top 3 procedures in my covered population. Will include a roll-up view for group purchasing alliances.</td>
<td>Aug-19</td>
<td>Nov-19</td>
</tr>
<tr>
<td>5 Low Value Care Calculator for Employer’s population. Will include a roll-up view for group purchasing alliances.</td>
<td>Jul-19</td>
<td>Sep-19</td>
</tr>
<tr>
<td>6 My plan’s prescription spend vs community average and statewide. Will include a roll-up view for group purchasing alliances.</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>7 Total health care spending in my community/Colorado region on a PMPM basis (APCD “total cost of care study”)</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>8 Percentage of care (by category: Inpatient Hospital, Outpatient Hospital, Physician) that leaves the area for care (shown in percentage of dollars spent)</td>
<td>19-May</td>
<td>19-May</td>
</tr>
</tbody>
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Future Meetings

9am-11am

August 13
November 12