



All Payer Claims Database

New Mexico Data Users Conference

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Presentation Outline

- Overview
- Use Cases
- Public Portal
- Request Process

Overview: All Payer Claims Database

- Systemically collect medical, pharmacy, dental claims, eligibility files, and provider files
- Claims which are created when an insured patient receives care or fills a prescription and includes:
 - A record of what was provided
 - Who provided it
 - How much was charged
 - How much was paid
- Claims data resides in a centralized database.

Overview: APCD History

- Definition of an **APCD** (All Payer Claims Database): Repository of healthcare claims data that combines data from multiple payers
- The Health Information System (**HIS**) Act § 24-14A-1 et seq. NMSA 1978 requires the Department of Health (DOH) to provide the public access to a user-friendly, searchable and easily accessible website on which the department regularly posts data about healthcare cost and quality
- The **APCD Rule** § 7.1.31.6 NM Code R. 2021 governs the creation and maintenance of repository of healthcare claims data to be used to increase the quality and effectiveness of health care delivered in New Mexico

Overview: APCD Goals

- Improves transparency to assist patients, providers, hospitals, and communities
- Benchmarks performance against others by focusing on best practices
- Enables purchasers to identify value
- Builds expectations into their purchasing strategies
- Improves health care cost and quality

Overview: APCD Stakeholders

Providers

- Quality and utilization of provider and peer group care
- Identify and monitor quality improvement projects

Payers

- Comparative performance of provider networks to statewide benchmarks
- Identify variation in utilization and cost efficiency

Employers

- Increased transparency in the cost and utilization of health care to stabilize the cost of health coverage for employers
- Larger population/sample size and benchmarks

Consumers

- Price “shopping” websites to find lowest cost for procedures, etc.

Policy Makers

- Inform/support public policy with information on how the health care system is operating and support data-driven improvements in access, quality and cost of healthcare

Public Health Practitioners

- Variation in utilization of health care services to target “hot spot” opportunities to improve population health
- Cost burden of chronic diseases such as diabetes, cardiovascular disease and asthma

Overview: All Payer Claims Database 2

Parts



- Data Science Portal
 - A database where claims data is housed
- Public Data Portal
 - A website <https://apcd.doh.nm.gov/>
 - Healthcare cost by Medical Procedure
 - Healthcare cost by Provider
 - Cost of Prescription drugs
 - Available in Spanish

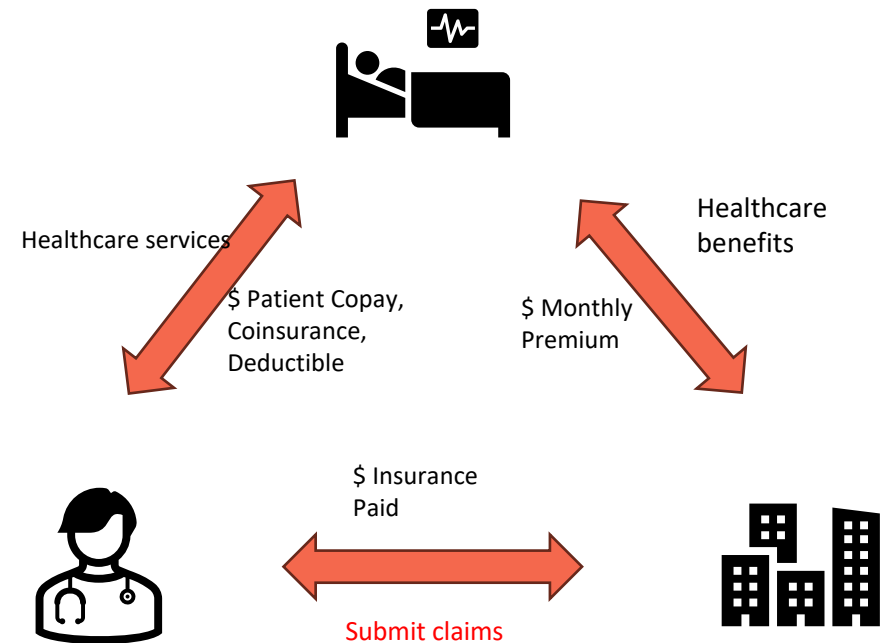
Overview: What is NOT in an APCD

- Federal Programs: Veterans Health Administration (VHA), TRICARE, and Indian Health Service (IHS)
- Employer sponsored plans regulated under the federal Employee Retirement Income Security Act(ERISA)
- Uninsured, Self-Pay, Charity, and Worker's Compensation claims
- Non claims data such as capitation data, drug rebate data, and other alternative payment method data.
- Denied claims but partial claims
- Lab results

Overview Claims Data

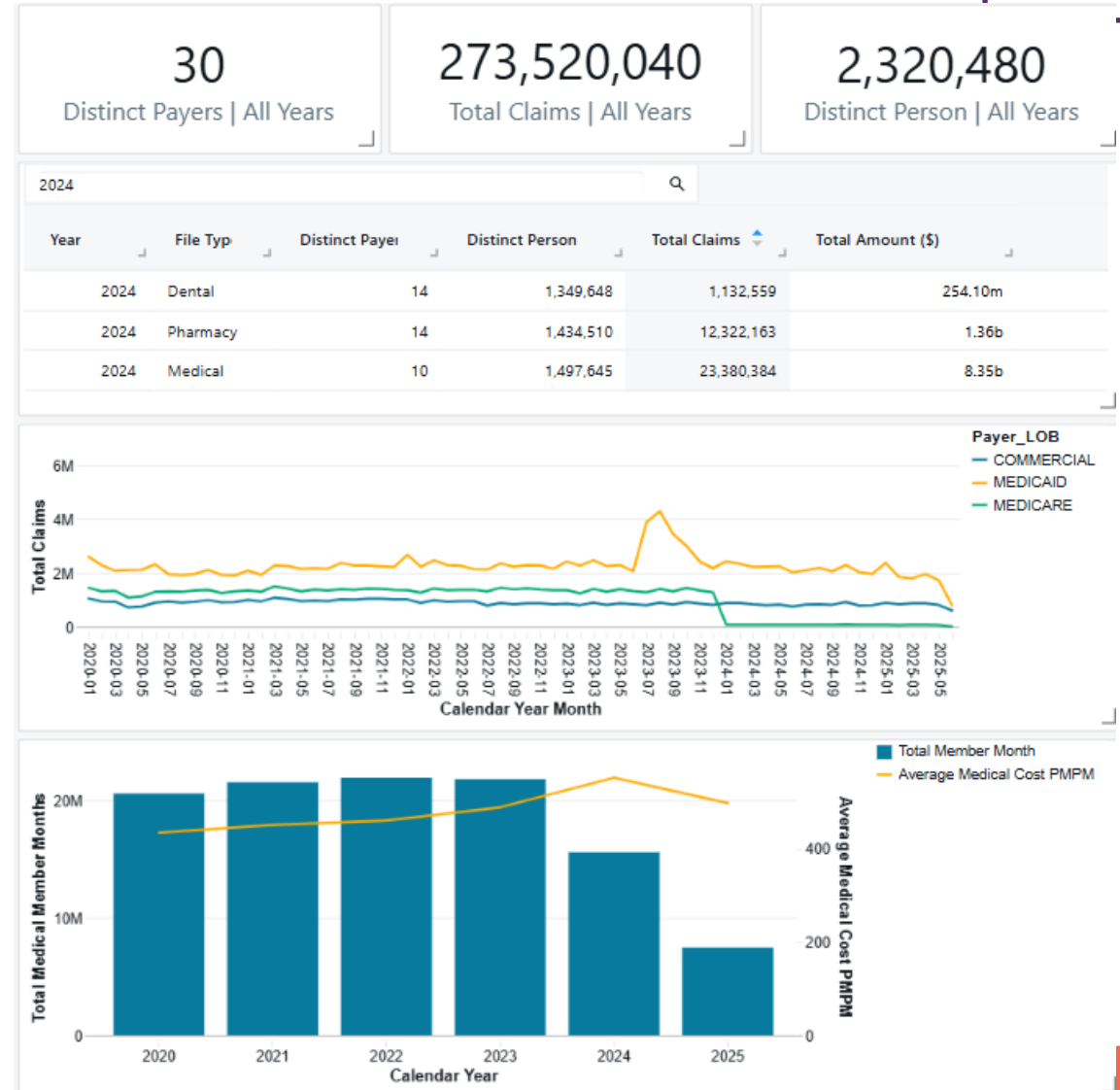
A claim is a record submitted by providers to insurers for payments.

- Financial data
- Well structured
- High accuracy (clearing house)
- Versions control
- Claim lags



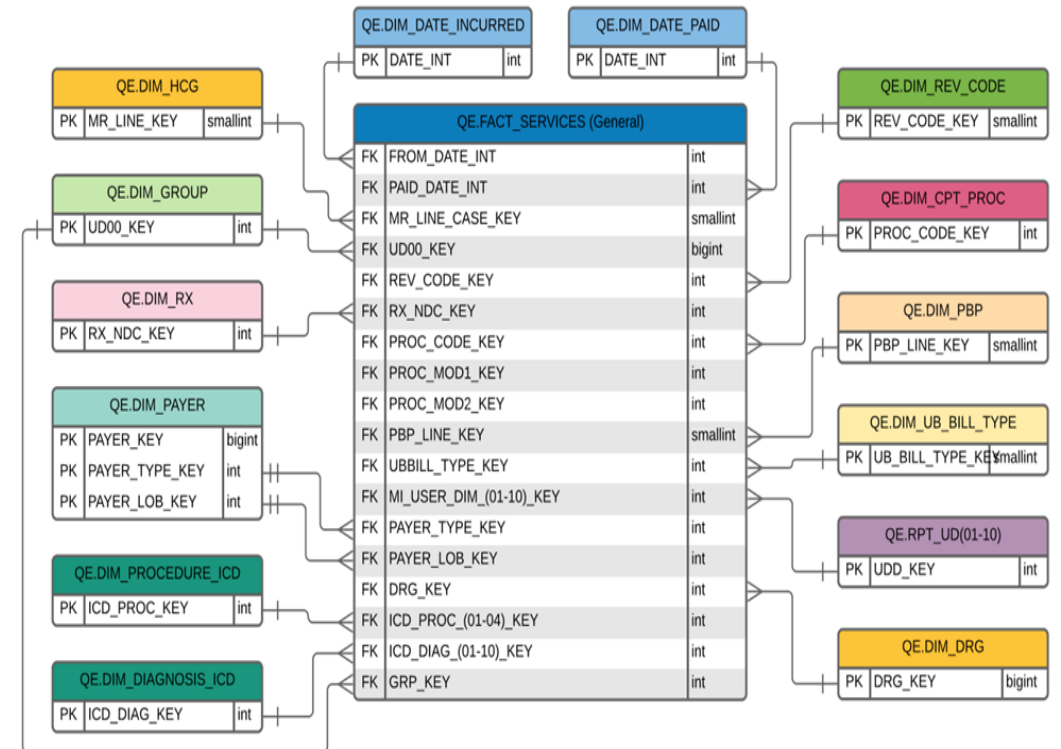
Overview: NM APCD Status

- Database (Data Science Portal) with limited direct access
- Updated quarterly
- Data since Jan. 2020
- 30 data submitters include payers cover medical, pharmacy, and dental benefits
- 273m claims, 2m+ Distinct person
- Covers 70% of New Mexicans
- External get access through data requests
- New dashboard will be published soon



Overview: APCD Data Elements

- Total 43 tables, 1200 variables
- Data collected in [Common Data Layout](#) (CDL by NAHDO)
- Main tables:
 - ❖ Eligibility
 - Member ID, plan type, enrolled month; member age, sex, name, address;
 - ❖ Medical/Dental/Pharmacy services
 - Claim ID, line #, Service date, Paid date, member ID, provider ID, procedure code, diagnosis code, NDC, drug name, tooth #
 - ❖ Provider
 - Provider ID, NPI, taxonomy code, provider specialty, Name, address
- Tables relationship diagrams
- Milliman Groupers, NM DOH User Defined Fields



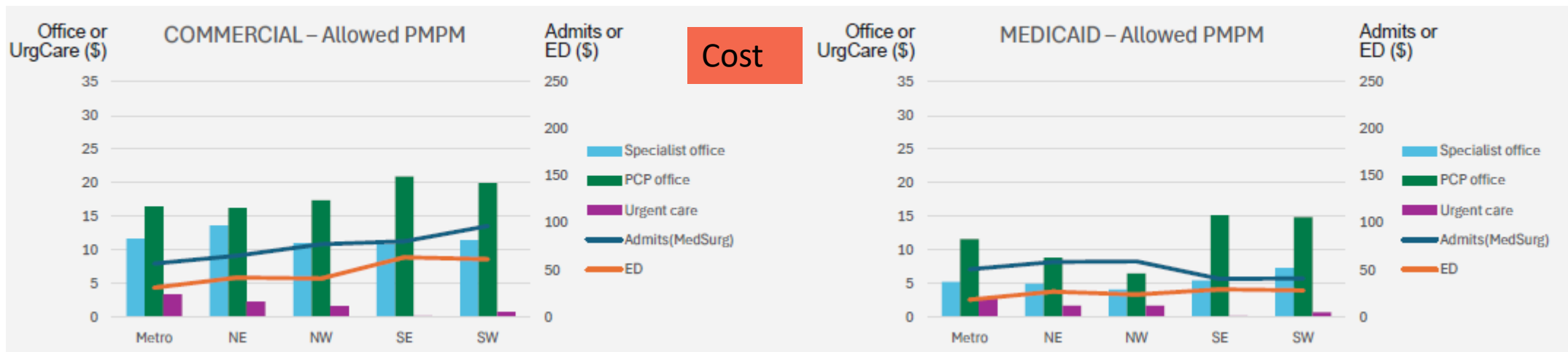
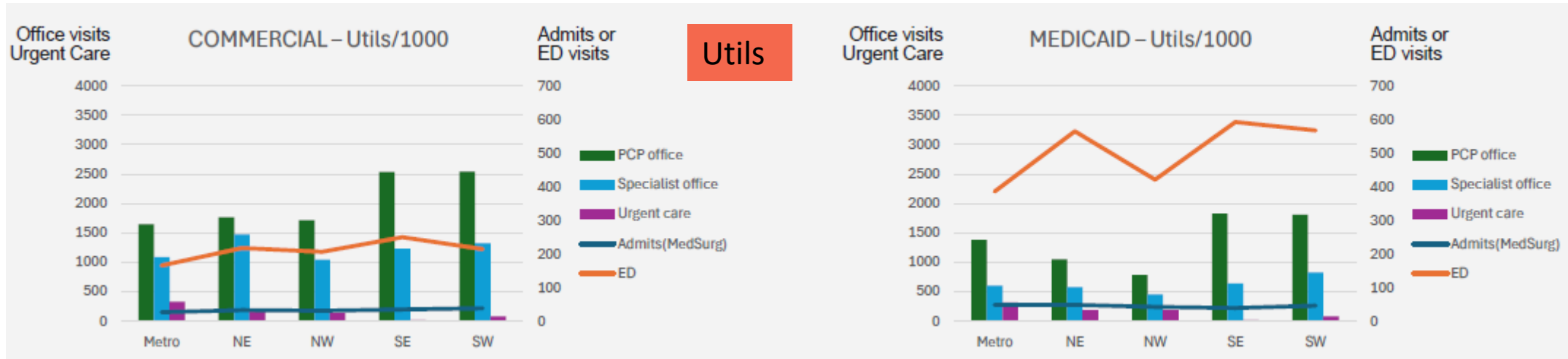
Overview: Milliman Groupers/Fields

MedInsight Groupers and Methodologies	
Milliman Health Cost Guidelines (HCG)	Groups services into meaningful benefit and service delivery categories and established utilization metrics
Chronic Condition Hierarchical Groups (CCHG)	Assigns enrollees to chronic condition populations.
Milliman Advanced Risk Adjuster (MARA)	Grouper that takes demographic and claims (medical and pharmacy) elements to assign a relative risk score to individuals.
Evidence Based Measures (EBMs)	Example: HEDIS, Produces NYU Avoidable Emergency Department
Episode Treatment Groups (ETG's) – Optum	Groups medical and pharmacy data into clinical episodes. Useful for understanding disease treatment patterns and physician profiling.
Master Patient ID	A unique person ID assigned for person enrolled in different plans
Master Provider ID	Unique Identifier for the crosswalk provider

Use Cases: Cost & Utilizations



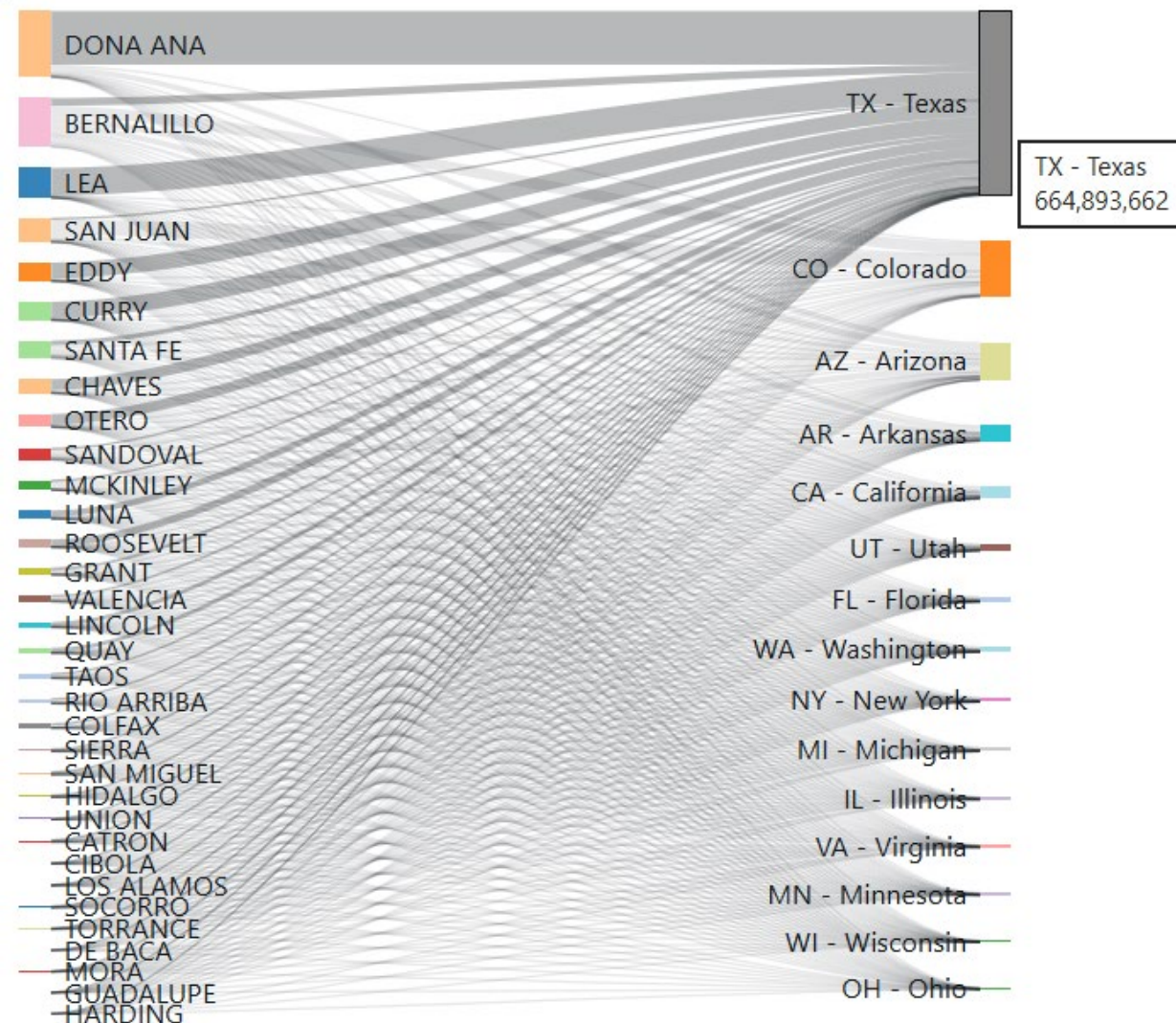
- Compare Medicaid and commercial cost and utilizations by HCG and Regions



Use cases: Services Out of State

- Visualization type: Sankey
- Service Year: 2023
- Payer Categories: Medicaid, Medicare, Commercial
- Service Types: Inpatient, outpatient, Physician
- Patient State: NM
- Provider State: Top 15 Non-NM states

➤ Explore the healthcare cost New Mexican spend out of state

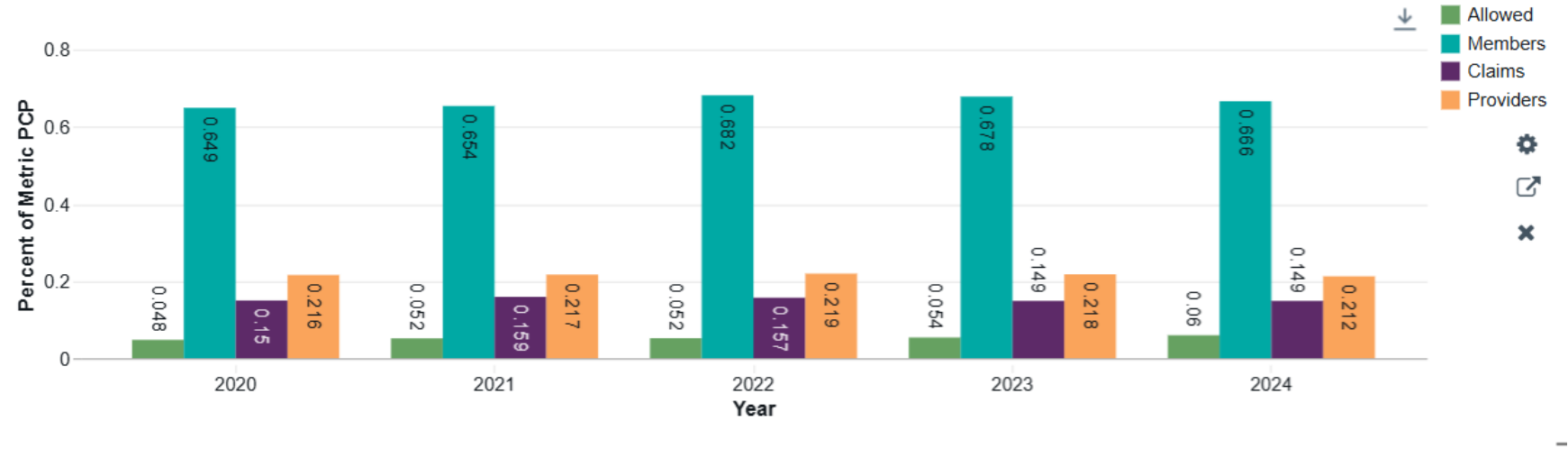


Use Cases: Primary Care



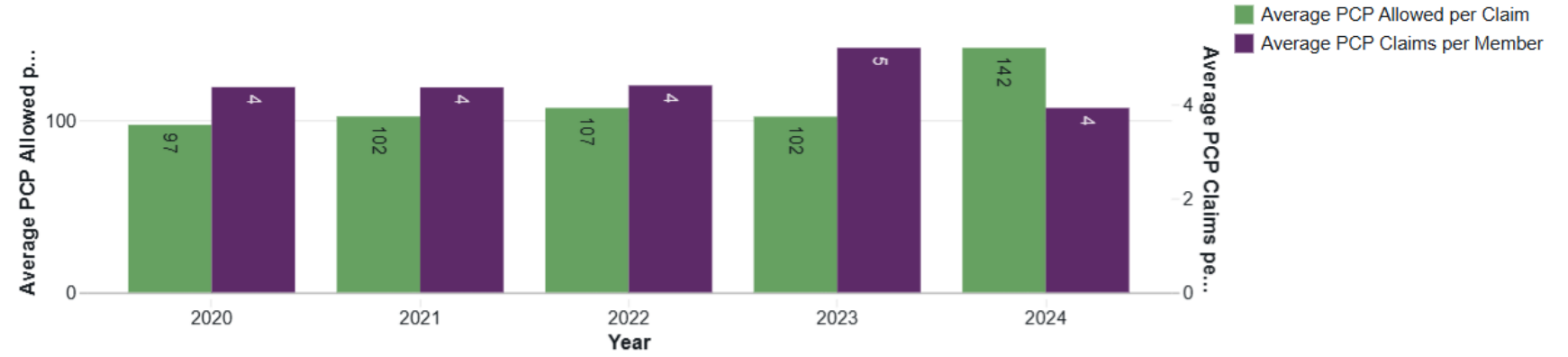
➤ Explore the Primary care services cost and usages, and find the differences by county and regions

% Metric PCP YoY



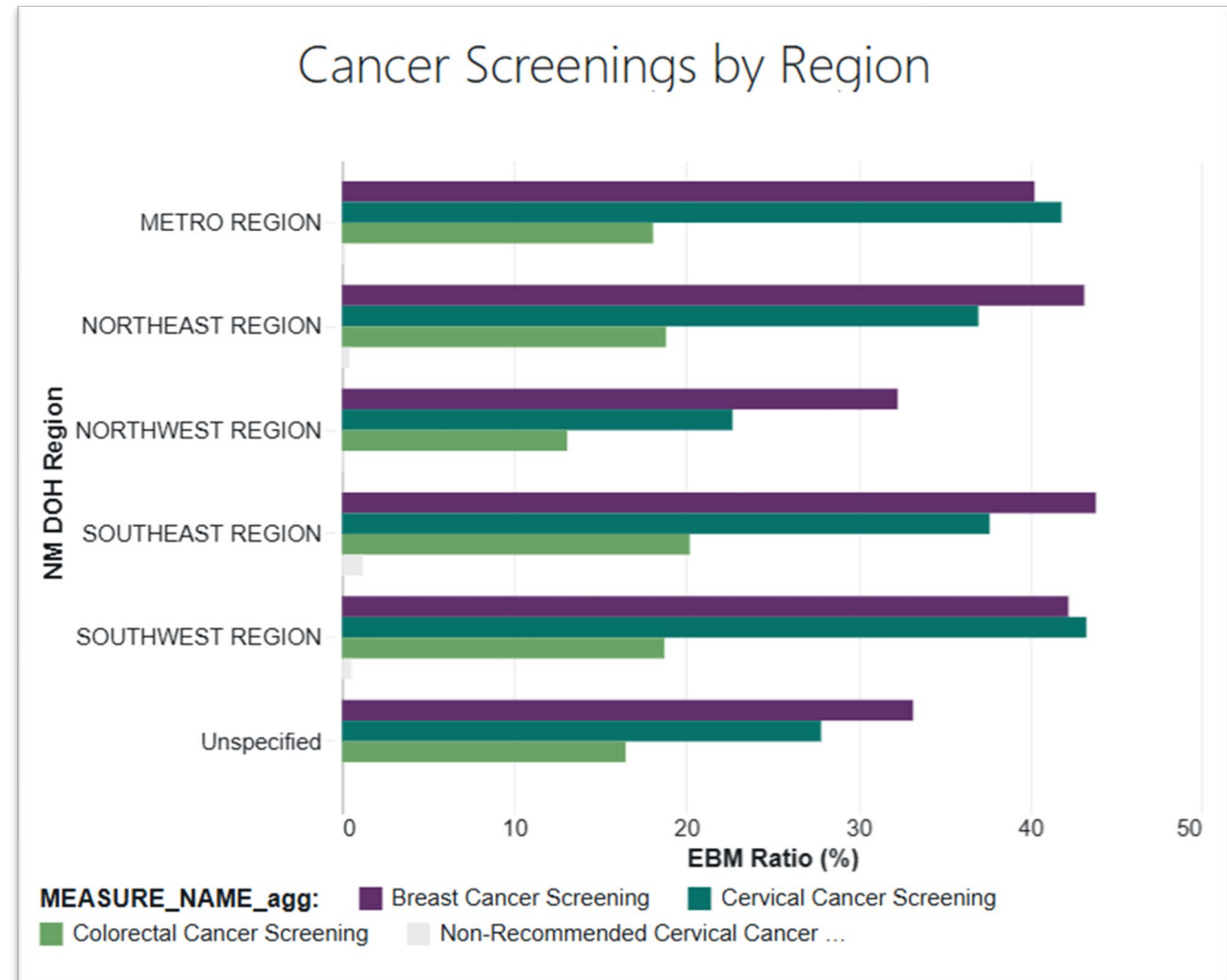
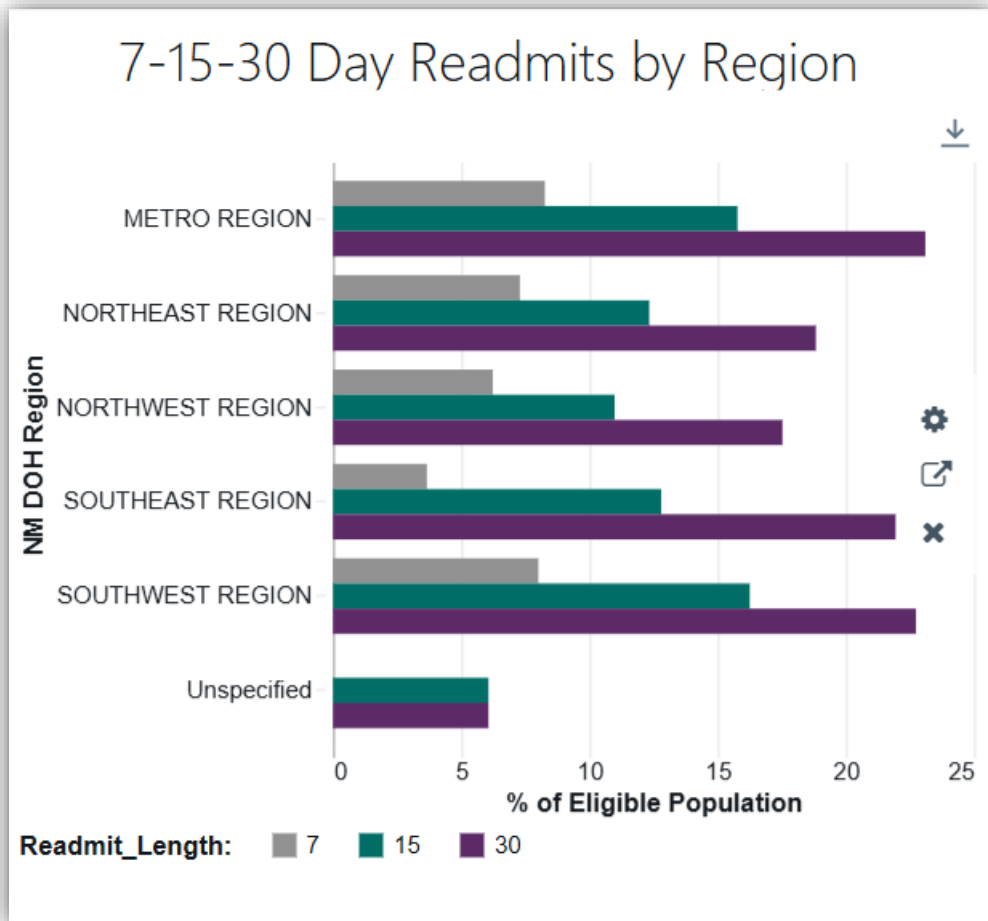
- Payer types: Medicaid, Medicare, Commercial
- Provider type: Service
- Provider state: NM
- Provider specialty:
 - Family practice, General practice, Internal medicine, Pediatric medicine, Preventive medicine
 - Obstetrics/gynecology
 - Nurse practitioner, Physician assistant

Avg \$ / # PCP YoY



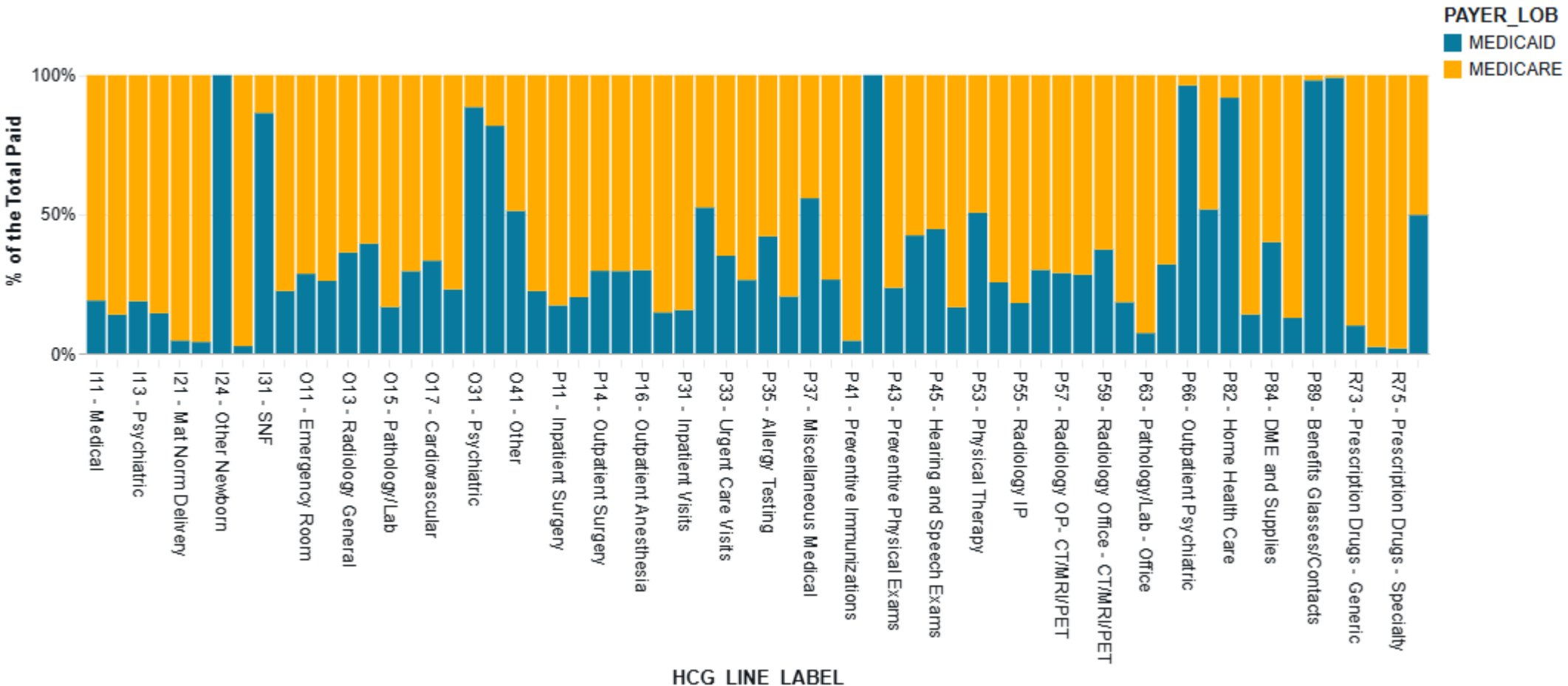
Use Cases: Healthcare Quality

- Use the EBM measure directly and avoid hard coding from scratch



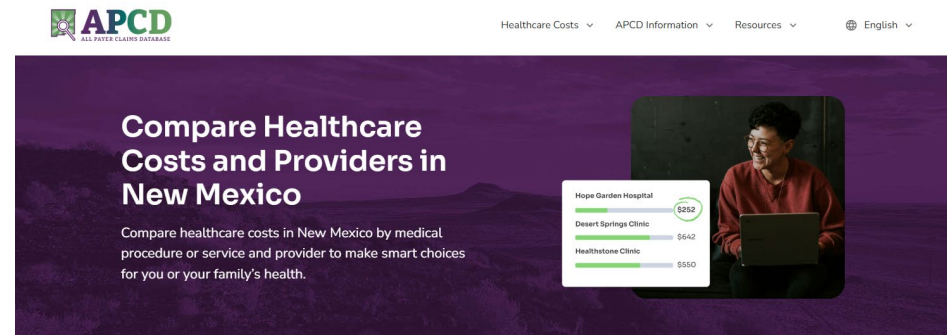
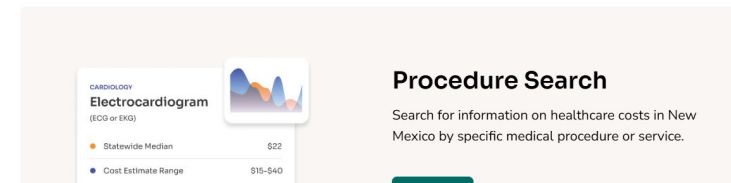
Use Cases: Medicaid Medicare Duals

- Use the unique person ID to have wholly picture of services for people with multiple insurances



APCD Public Portal

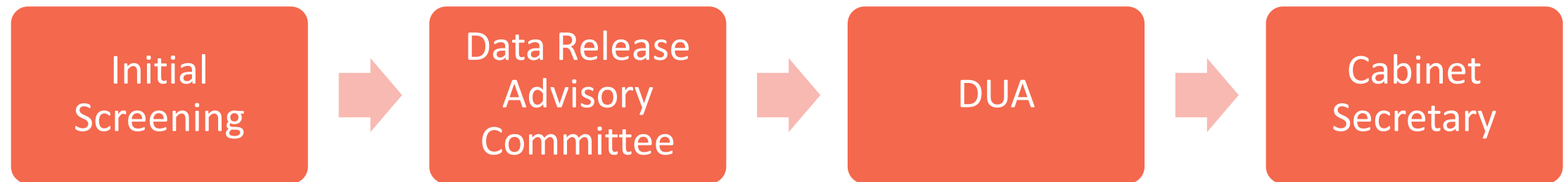
- Public Portal for Information Transparency [New Mexico APCD](https://apcd.doh.nm.gov/)
- <https://apcd.doh.nm.gov/>

A screenshot of the APCD Public Portal homepage. The header includes the APCD logo (All Payer Claims Database) and navigation links for Healthcare Costs, APCD Information, Resources, and English. The main content area features a purple background with the heading "Compare Healthcare Costs and Providers in New Mexico". Below this, a text block explains the purpose: "Compare healthcare costs in New Mexico by medical procedure or service and provider to make smart choices for you or your family's health." To the right, a small graphic shows a person using a laptop, with a data overlay listing costs for three providers: Hope Garden Hospital (\$252), Desert Springs Clinic (\$642), and Healthstone Clinic (\$550).A screenshot of the Procedure Search interface. On the left, a card for "CARDIOLOGY Electrocardiogram (ECG or EKG)" is shown. It includes a bar chart and two data points: "Statewide Median" at \$22 and "Cost Estimate Range" at \$15-\$40. On the right, the "Procedure Search" section is visible, with the text: "Search for information on healthcare costs in New Mexico by specific medical procedure or service."

Request Process: Request Form Elements

- Form elements
 - Project Overview
 - Requestor Information
 - Project Description
 - Evaluation of Allowable Uses
 - Project Personnel
 - Type of Request
 - Data Elements
 - Justification
 - Data Management Plan
 - Technical and Physical Safeguards
- Data Dictionary -Select variables

Request Process: Data Release



Request Process: Example of an Efficient Request



- By “efficient”, it means, clearly written, meets APCD rules, compliant with laws relating to confidentiality, ready to be presented to the DRAS, and saves you TIME
- Hypothetical case example “Measuring the effectiveness of an education program for pneumonia prevention in New Mexico”

Request Process: Example of an efficient request



Briefly describe the project aims, specific research or analysis questions, and overall purpose.

We are measuring the number of pneumonia cases in New Mexico to test the effectiveness of an education program at Organization X among seniors >65 years. We would like to examine the effectiveness of our education program by comparing the number of pneumonia cases among seniors 1 year before and 1 year following program initiation. As a secondary analysis, we would also like to measure the impact of the program in reducing antibiotic failure related hospitalization in the treatment of pneumonia cases among seniors before and after the program initiation.

- P: Target Population
- I: Intervention
- C: Comparison
- O: Outcome
- T: Time

Secondary analysis is OK
but adding a second
study is discouraged!

Request Process: Example of an Efficient Request



Will findings be made publicly available? If YES, briefly describe the dissemination plan and how findings will be disseminated and to whom. Public information must comply with the New Mexico DOH Small Numbers Policy, "[NM Rule for Small Numbers and Public Data Release.](#)" If NO, briefly describe how the information derived from NM APCD data will be used and by whom.

Findings will be published in an academic journal, presented at conferences, reported in the media, or used in grant or funding proposals. All reported information will comply with the NM Rules for Small Numbers. We will also follow Organization X's IRB protocol.

Request Process: Example of an Efficient Request



Line(s) of Business

- Commercial Plans
- Medicaid
- Medicare Fee for Service (NM State Agency use only)

Data Type(s)

- Medical Claims
- Dental Claims
- Pharmacy Claims
- Eligibility Data
- Provider Data



Geographic Area(s) for Individuals

- New Mexico Statewide
- County level
- DOH Public Health Regions
- Other: _____

Request Process: Example of an Efficient Request



Justification

Briefly explain why indirect identifiers (Limited Data Set elements) are necessary to accomplish the project purpose/research questions and how your request complies with the minimum data necessary standard, [45 CFR 164.514 Minimum Necessary Compliance](#). Briefly explain why any sensitive information is required.

Elements of dates, such as DOB, service, admit dates are requested in this data for the identification of patient population (seniors) and event dates. Limited data elements are only needed for measurement. Only aggregated data will be reported.

Request Process: Example of an Efficient Request



Description

Specify data inclusion criteria. If you do not have any relevant filters, please put NA as response or consult with APCD staff to avoid unnecessarily large data.

Data Element	Response	Add explanation if needed
ICD diagnosis Code(s) :	ICD-10: Influenza with pneumonia: J10.0, J11.0, J11.1; Viral pneumonia, unspecified: J12.9; Pneumonia : J13, J14, J15.0-J15.9, J16.8, J17.0, J17.2	Please provide all claims with pneumonia ICD codes in any diagnosis position AND all ED or inpatient claims within 1 month of the index pneumonia claim
Procedure(s) (list CPT, HCPCS, DRG, ICD, and/or CDT codes):		
Drug(s) (list generic, brand names, pharmacy NDC and/or HCPCS codes):	amoxicillin (generic): 63304-514-01, 63304-514-05, 63304-515-01, 63304-515-04, view less 63304-515-30, 63304-654-01, 63304-654-05, 63304-654-11, 63304-654-20, 63304-654-30, 63304-654-77, 63304-655-01, 63304-655-05, 63304-655-11, 63304-655-20, 63304-655-30, 63304-655-40, 63304-655-50, 63304-655-77, 63304-760-01, 63304-760-05, 63304-760-20, 63304-761-01, 63304-761-05, 63304-761-20, 63304-762-01, 63304-762-05, 63304-762-13, 63304-762-20, 63304-762-82, 63304-763-01, 63304-763-05, 63304-763-13, 63304-763-20, 63304-763-82, 63304-969-01, 63304-969-03, 63304-969-04, 63304-970-01, 63304-970-03, 63304-970-04; Nuzyra (omadacycline): 71715-001-01, 71715-001-02, 71715-002-21, 71715-002-23, 71715-002-24, 71715-002-27, 71715-002-28	Please provide all antibiotic claims within 3 days of index pneumonia diagnosis AND any antibiotic use (antibiotic refill or switch to a new antibiotic) within 30 days of initial antibiotic
Other:		

Request Process: Example of an Efficient Request



Briefly describe the data you are requesting. Specify whether you are requesting a report or data set. If you are requesting a report, please describe the population, intervention & comparison (if any) and the outcome (s) of interest.

We are requesting all pneumonia, pneumonia-associated hospitalizations and ED claims from the medical claims and antibiotic claims from the pharmacy claims for people who were >65 years at 1/1/2021. We are also requesting other demographic variables, such as gender, race/ethnicity.

Request Process: Example of an Efficient Request



Data Security: Briefly describe the data security policies and procedures in place to ensure that NM APCD data will be protected from unauthorized access or use.

The APCD dataset will be stored on a secure research drive on the X's servers.

Personnel Access and Authentication: How will approved project personnel access the data? Briefly describe your user authentication methods.

The data requester, ABC, is the only person with permission to access this folder. Access is granted by the X.

Policies and Procedures: Briefly describe your policies and procedures for ensuring that NM APCD data are protected when stored on your servers. Please describe any required employee training in data privacy and security policies and procedures.

We are getting IRB approval from X. The project personnels have taken all required trainings: HIPAA and HITECH training, HIPAA Security Training.

Request Process: Avoiding Common Mistakes

- Have a specific project title and data inclusion criteria
- Changing the project scope
- Be prepared for Data User Agreement
- Knowledge of claims data
- Data security training (HIPAA)

Request Process: Submitting a Request

- Complete Request
- Return data request form with the data dictionary variables requested
- Email to apcd@doh.nm.gov

