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**All-Payer Claims Database**

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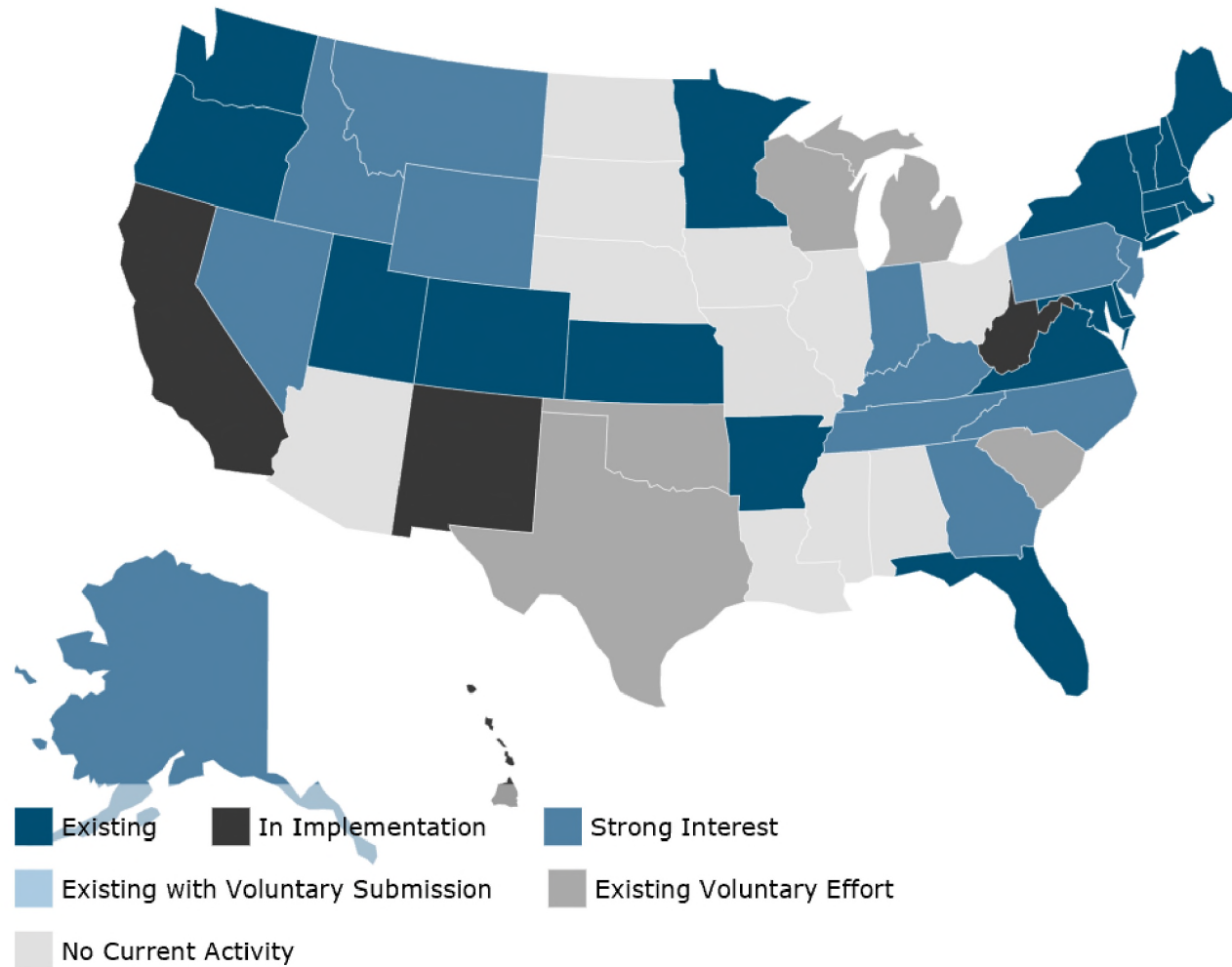
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*Helping people. It's who we are and  
what we do.*

# Background

- Comprehensive, longitudinal, multi-payer datasets to provide research and policy opportunities for improving the health care delivery system.
- Collects both billed and paid charges.
- See variations by patient type, geographic location, diagnosis, medical needs, payer, etc.
- Assess public health trends.
- Review trends in specialty care and services.
- The Employee Retirement Income Security Act of 1974 (ERISA) plans are exempt from reporting.
- Proprietary data would be kept confidential.

# All-Payer Claims Database Efforts by State



Nevada is noted as having “high interest” due to SB 472 to establish an APCD in 2019. The bill did not get final legislative approval.

# Many Use Cases

- Consumers
  - Consumer websites primarily focused on cost and quality
- Employers
  - Employer and purchasing coalition efforts
- Providers
  - Accountable Care Organizations and quality
- Researchers
  - Academic and “think tank” research
- Population Health
  - Incidence, prevalence, quality and utilization
- Insurance Departments
  - Regulatory and market use cases
- Medicaid
  - Comparisons between Medicaid and Commercial populations
- Health Reform
  - Medical Home, Accountable Care Organizations and Triple Aim

# Assess Price Differences

## Medicaid and Commercial Payer Price Differences for Outpatient Procedures by Provider Type

Provider Type	Weighted Medicaid Average Price	Weighted Commercial Average Price	Absolute Difference	Relative Difference (Percent)
Primary Care Physician	\$53.07	\$100.67	\$47.60	89.69%
Advanced Practice Nurses (APN)	\$41.90	\$ 68.19	\$26.29	62.75%
Cardiologists	\$61.49	\$126.36	\$64.87	105.49%
General Surgery	\$52.74	\$109.72	\$56.98	108.05%
Obstetrician / Gynecologist (OB/GYN)	\$48.84	\$ 92.72	\$43.88	89.85%
Oncologist	\$62.56	\$120.35	\$57.79	92.37%
Ophthalmologists	\$44.47	\$118.05	\$73.58	165.46%
Orthopedists	\$50.75	\$ 98.23	\$47.49	93.57%
Psychologists / Psychiatrists	\$44.25	\$ 91.92	\$47.67	107.74%

Notes: Weighted Commercial and Medicaid Averages Prices were based on the most common CPT procedures billed for outpatient services. Only CPT procedures that were represented both in Commercial and Medicaid claims are included in the weighted averages. Relative difference percent calculated as (Commercial – Medicaid)/Medicaid x 100.

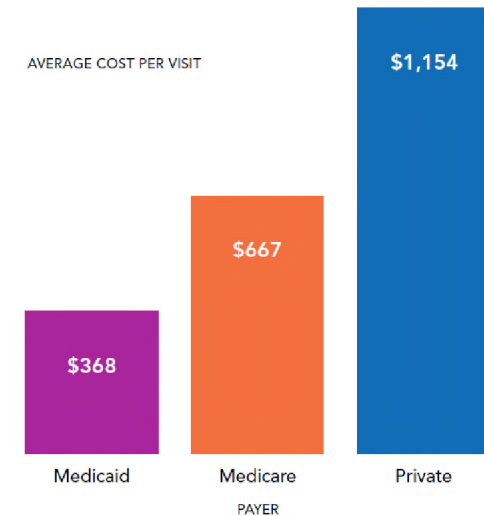


Figure 6. Medicaid and Commercial Payer Price Differences for Outpatient Procedures by Provider Type, 2014. Arkansas Center for Health Improvement. Presented at the NAHDO Annual Meeting, 2017.

# APCD Successes

- Key highlights include:
  - Rhode Island was able to use its APCD to identify \$90 million in potential savings from a reduction in avoidable emergency room visits, and researchers were able to use Virginia's APCD to identify \$586 million in unnecessary spending on low-value services.
- Analysts in Colorado used its APCD to track EpiPen prescription costs, highlighting an increase of \$400 per prescription between 2009 and 2016.

Figure 1. Cost of Potentially Avoidable Emergency Room Visits, Rhode Island, 2013–2014

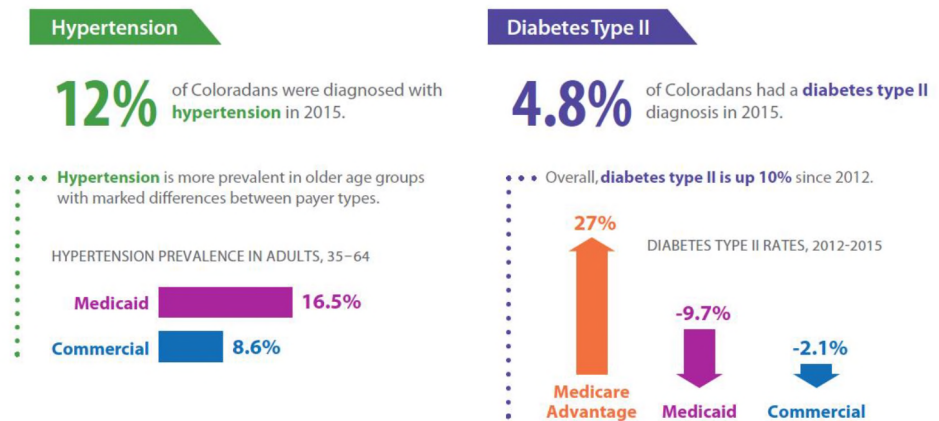


Source: Potentially Preventable Emergency Room Visits, Rhode Island Dept. of Health, [health.ri.gov](http://health.ri.gov).

# APCD Successes, continued

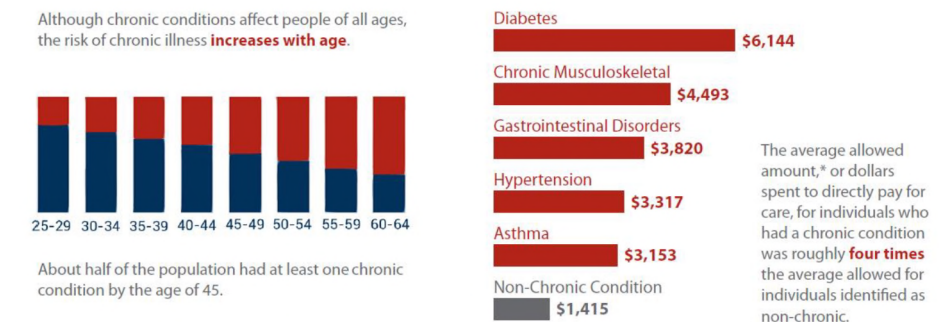
Several states have been able to use APCD data to effectively track chronic disease rates and understand more about the costs behind their treatment.

Figure 3. Chronic Condition Insights, Colorado, 2015



Source: Chronic Conditions in CO, Center for Improving Value in Health Care, [www.civhc.org](http://www.civhc.org) (PDF).

Figure 4. Top Chronic Condition Prevalence in Virginia, 2015



\*Displayed using standardized proxy reimbursement amount.

Source: Chronic Conditions in Virginia, Virginia Health Information, [www.vhi.org](http://www.vhi.org) (PDF).

# Investment

- States use a variety of methods to support their systems:
  - General appropriations (e.g. New Hampshire)
  - Fee assessments on public and private payers (health plans) and facilities (e.g. Vermont)
  - Medicaid match (e.g. Utah)
  - Data sales (e.g. Maine)
- Nevada's proposal in SB 472, 2019 Legislative Session
  - Medicaid match combined with general fund appropriation
    - The estimated cost of establishing the database is \$2 million for implementation (90/10 match) and \$3 million per year for ongoing maintenance (75/25 match).
    - \$75,000 would be needed to support system programming for Medicaid data extracts that would be required to be uploaded to the APCD (90/10 match).
    - Additional staff would be required to oversee the APCD, including one Business Process Analyst 2 for the information technology aspects of the project (75/25 match) and one Management Analyst 3 for the fiscal and operational aspects of the project (50/50 administrative match).
    - Additional staff would be needed for the DHHS Office of Analytics. Requested staff would include two Economist 2s, one Biostatistician 2, and one Biostatistician 3 (50/50 administrative match).



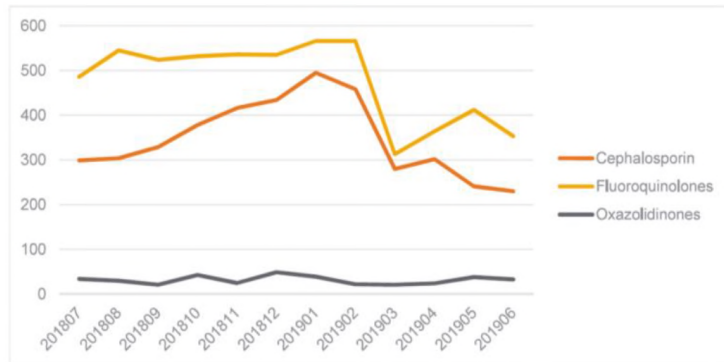
# Barriers and Solutions

Barriers	Solutions
Funding of data collection at the expense of analytics	Open source measures and analytic tools to help reduce analytic costs
Lack of definitions and source codes for APCD measures	Standards for underlying data and APCD measures to facilitate reporting and comparability
Conflicts about APCD uses (quality improvement versus public reporting)	An open, transparent, and inclusive process to ensure that all stakeholder needs are addressed
Lack of timeliness of APCD data—how old is too old?	Best practices from leading States and a Federal-State partnership to guide release/reporting based on evidence
Incomplete data, gaps in data	Full disclosure and documentation to alert users about limitations
Statutory language that may limit flexibility to meet emerging needs, such as supporting HBEs and reporting initiatives	Broad legislation to permit flexibility in data collection and release

# Population Health Data Challenges

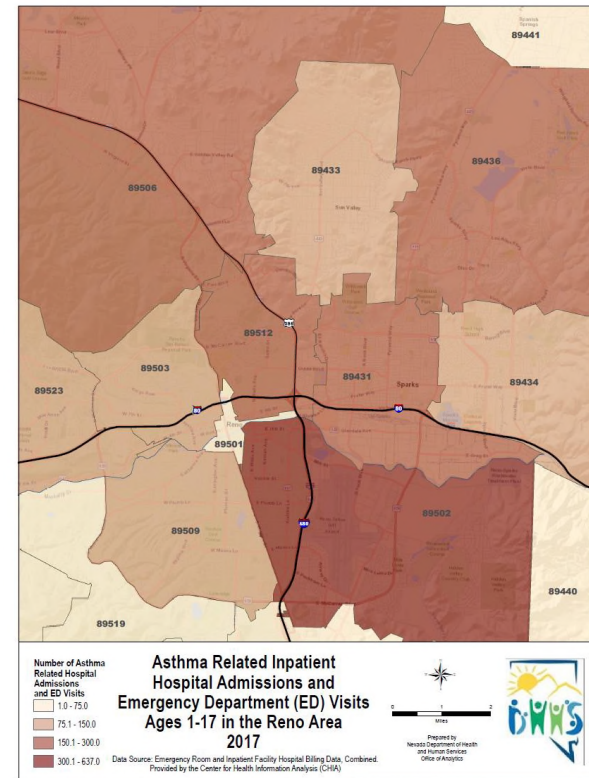
- Some databases are complete and provide data on population health
  - Vital Statistics
  - Reportable Conditions: Communicable/Infectious Disease
- Gaps in population health data
  - Chronic diseases
  - Preventable screenings
  - Non-reportable conditions
  - Prescriptions
- Efforts to address gaps
  - Retrospective abstraction and analysis
    - National Violent Death Reporting System (NVDRS)
  - Surveys
    - Behavioral Risk Factor Surveillance System (BRFSS)
- Claims data can be used to audit other reporting

# Antibiotic Utilization: Fee-for-Services Medicaid, July 1, 2018 to June 30, 2019



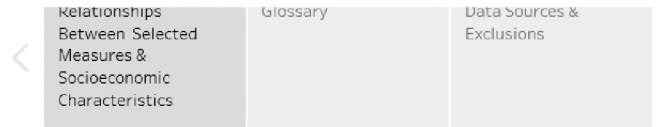
\* PA Criteria effective March 4, 2019

Month	411a Overdose Reported Data						Hospital Billing CHIA (Overdoses)
	Total	Total Reported from Hospitals	Total Reported from Hospitals: Regulatory Definition		Hospital Reported: Matches to CHIA		
			N.	% of CHIA	N.	% of CHIA	
January	83	82	44	13%	40	12%	339
February	162	157	94	28%	79	23%	341
March	119	116	64	19%	71	21%	334
April	144	141	80	24%	83	25%	338
May	115	112	66	16%	70	17%	418
June	100	100	62	16%	54	14%	381
July	136	132	92	25%	91	25%	364
August	107	104	84	23%	80	21%	373
September	124	123	111	30%	92	25%	372
October	157	156	114	32%	112	31%	356
November	132	131	99	31%	82	25%	323
December	181	180	138	39%	108	31%	350
<b>Total</b>	<b>1,560</b>	<b>1,534</b>	<b>1,048</b>	<b>24%</b>	<b>962</b>	<b>22%</b>	<b>4,289</b>



# Relationships between cost, utilization and quality measures in health care - data dashboard

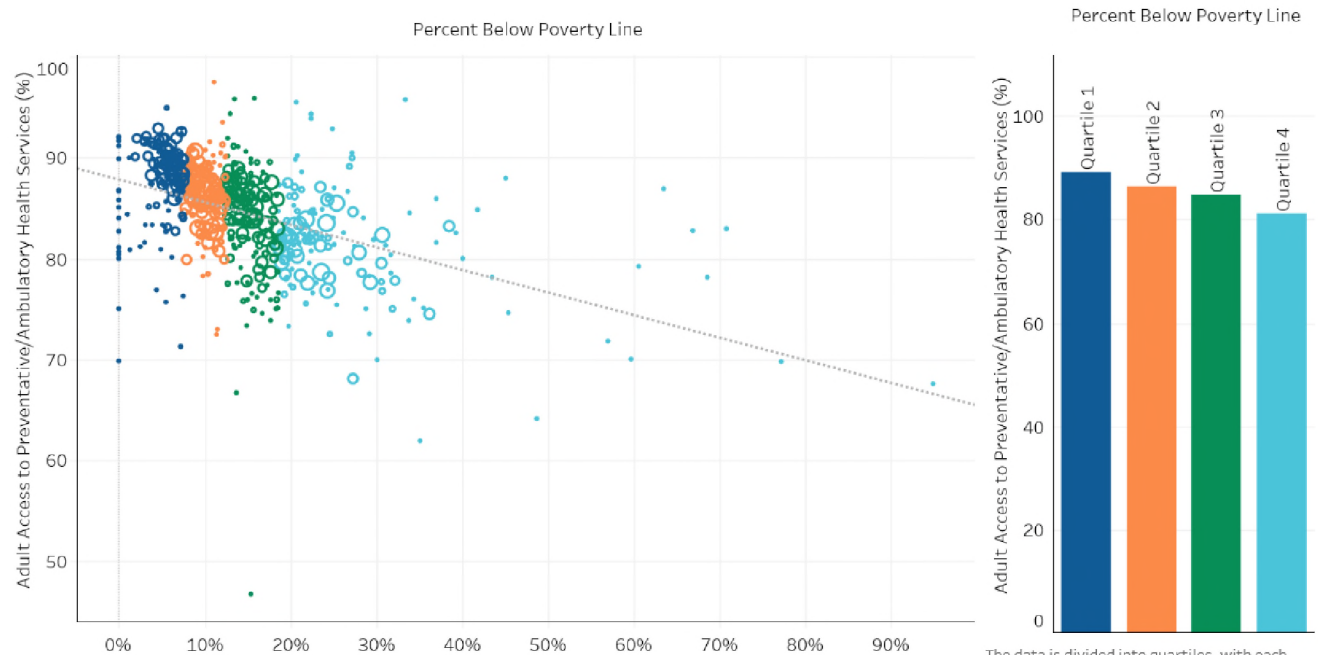
This dashboard allows you to compare ZIP-code level results from a select set of health care quality and cost measures, including adult access to preventative care and total cost per member per month, to socioeconomic characteristics, such as the percent of population living below the poverty line.



Example of APCD use to assess preventative care: Washington State

## Relationships Between Selected Measures & Socioeconomic Characteristics in Washington State (by ZIP Code)

ZIP Code: Highlight Zip Code | Measure: Adult Access to Preventative/Ambulatory H... | Socioeconomic Characteristic: Percent Below Poverty Line



Note: Each circle in the chart above represents a ZIP code. A circle's size corresponds to the population of the ZIP code: A larger circle indicates a larger population of a specific ZIP code.

The data is divided into quartiles, with each quartile comprising 25% of the population for a given census measure. For example, with "Percent Unemployed", Quartile 1 represents the 25% of all ZIP codes with the lowest rate of unemployment, ranging from 0% to just under 5% unemployed. Quartile 4 represents the 25% of ZIP codes with the highest

# References

- APCD Council: <https://www.apcdouncil.org/>
- <https://www.statnews.com/2018/06/05/every-state-needs-database-all-health-insurance-claims/>
- Expanding and Enhancing All-Payer Claims Database System Capacity in States: <https://www.ahrq.gov/data/apcd/confrpt.html>

# Questions?

# Contact Information

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# Acronyms

- APCD: All-Payer Claims Database
- DHCFP: Division of Health Care Financing and Policy
- DPBH: Division of Public and Behavioral Health
- NVDRS: National Violent Death Reporting System
- BRFSS: Behavioral Risk Factor Surveillance System