

# All-Payer Claims Database Myth Busting: Claims is More Than Cost

June 10, 2026



# Speakers



Madelynn Valu  
Program Director  
Civitas Networks for Health



Norm Thurston  
Executive Director  
National Association of Health  
Data Organizations (NAHDO)



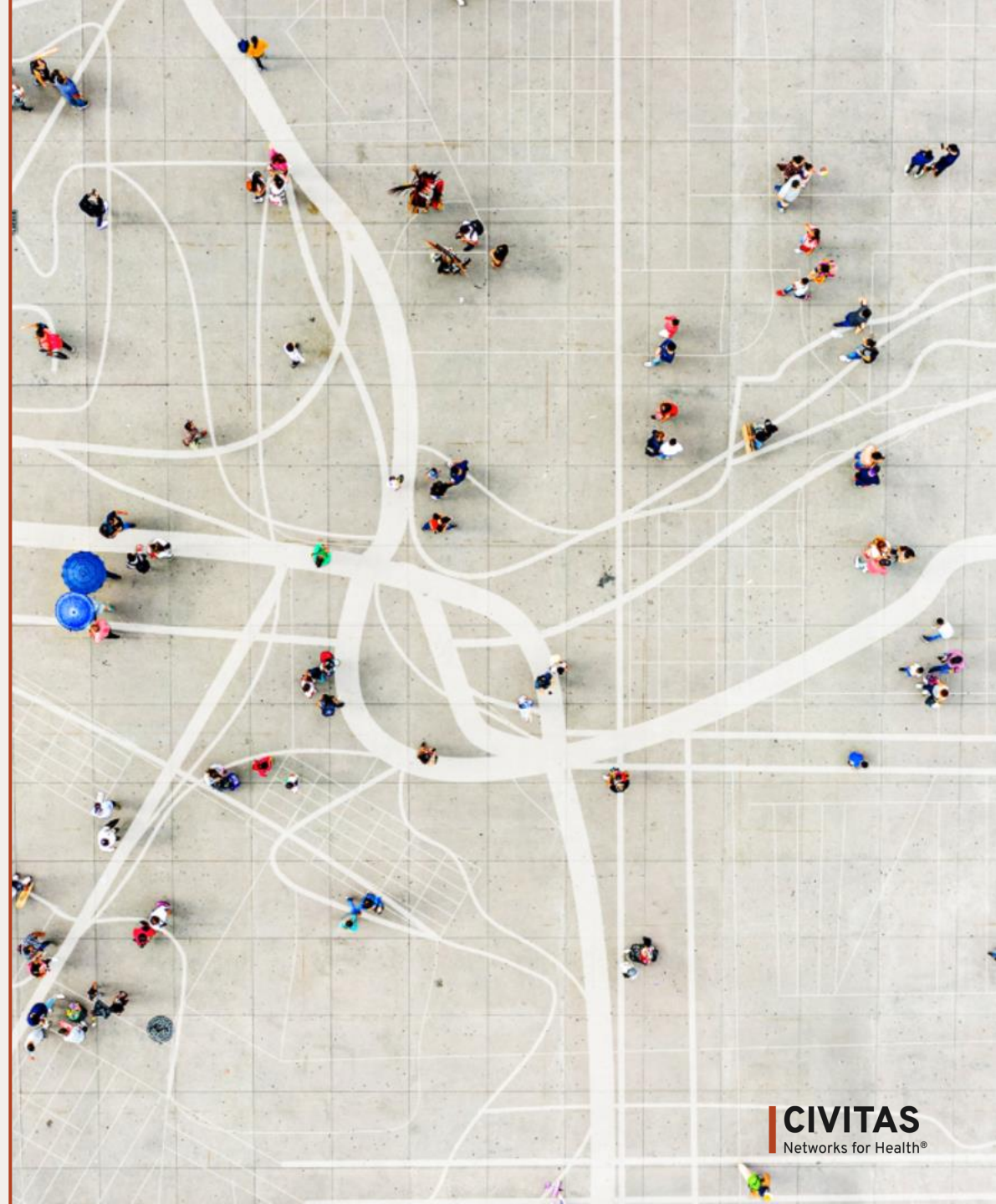
Kristin Paulson  
President & CEO  
Center for Improving Value in  
Health Care (CIVHC)



Kyle Russell  
CEO  
Virginia Health Information (VHI)

# Housekeeping Reminders

- This is a webinar where all participants are automatically muted and your video is not displayed.
- If you would like to ask a question, please use the Q&A function on the right-side taskbar.
- This webinar is being recorded, and the recording will be shared after today's event.
- For questions following the webinar, please reach out to [contact@civitasforhealth.org](mailto:contact@civitasforhealth.org).



# Agenda

- Introduction to Civitas Networks for Health + Value of APCD Membership
  - *Madelynn Valu, Program Director, Civitas Networks for Health®*
- Introduction to the National Association of Health Data Organizations (NAHDO)
  - *Norm Thurston, Executive Director, NAHDO*
- APCD 101 – What’s in a Claim
  - *Norm Thurston, NAHDO*
- Beyond Cost Data
  - *Kristin Paulson, President & CEO, Center for Improving Value in Health Care (CIVHC)*
  - *Kyle Russell, CEO, Virginia Health Information (VHI)*
- Use Case Examples
  - *Kristin Paulson, CIVHC*
  - *Kyle Russell, VHI*



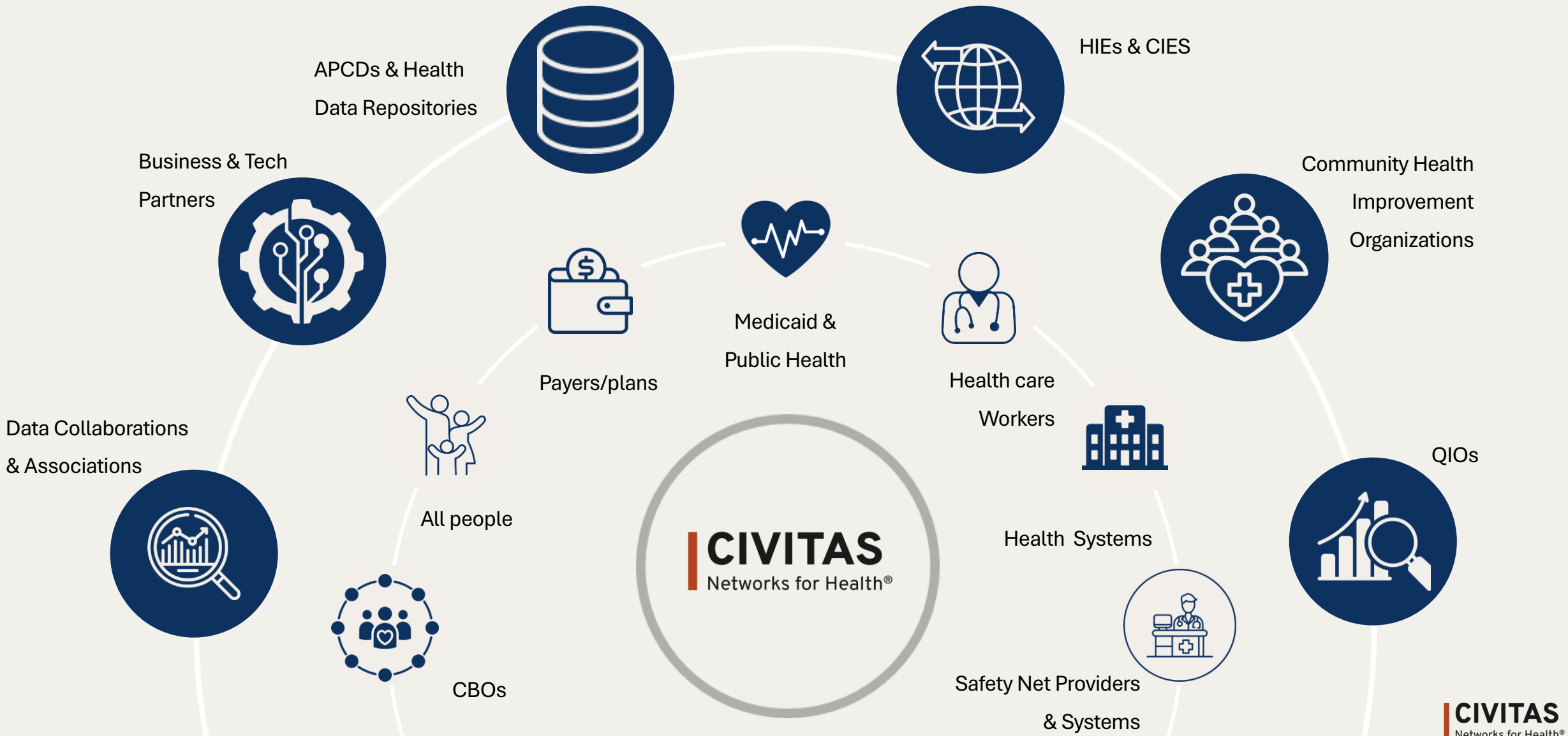
# About Civitas Networks for Health<sup>®</sup>

*Who we are, who we serve, and about what we do*

# Who We Are

- Civitas members include a wide range of organizations:
  - Health Information Exchanges (HIEs)
  - Health Data Utilities (HDUs)
  - Community Information Exchanges (CIEs)
  - Regional Health Improvement Collaboratives (RHICs)
  - All-Payer Claims Databases (APCDs)
  - Quality Improvement Organizations (QIOs)
  - Strategic Business and Technology Partners
  - Affiliated Associations
- We work together at the local, regional, state, and national levels
- Together, we invest in data-driven multistakeholder collaboration to enhance health, addressing cost, equity, quality, and safety

# Who We Serve



# Expert Convenors

- Civitas provides a unique platform that connects collaborators working on health improvement across the country
- We believe that local communities should lead and influence national progress on health
- We offer forums for shared learning, education, networking, and advocacy, and have proven our strength at helping our members in the ever-changing health landscape



# Civitas APCD Membership

As health care systems increasingly rely on data to drive decision-making, APCDs serve as a foundational data asset.

APCDs complement clinical sources like EHRs and HIEs by providing financial and utilization insights across care.

Collaboration is central to Civitas's approach. Civitas is committed to a strong partnership with NAHDO to advance shared priorities in data access, interoperability, and price transparency.



# NAHDO & The APCD Council



## About NAHDO

The National Association of Health Data Organizations is a non-profit association that is dedicated to improving health care data collection and use. NAHDO members lead in hospital discharge data reporting systems and APCDs. NAHDO is an affiliate member of Civitas.

## About the APCD Council

The APCD Council, a program of NAHDO, is a learning collaborative of government, private, non-profit, and academic organizations focused on improving the development, deployment, and operation of APCDs.

# NAHDO-Civitas APCD-Related Advocacy



Civitas is a member of NAHDO, and the organizations have been working together for the past year to strengthen our federal advocacy on behalf of APCDs.

- Overlap in membership between Civitas and NAHDO
- Civitas' leadership in federal advocacy + NAHDO's deep relationship with APCD programs
- Through its Government Relations and Advocacy Committee, Civitas organized a subcommittee specifically to work on APCD-related advocacy
- Federal APCD priorities: Access to ERISA, federal employee, and Medicare FFS data; elevate the role of APCDs in health care price transparency policy; assess TIC machine-readable files (MRF) implementation guidance and technical specifications for prescription drugs; improve access to and interoperability of hospital discharge data



# What Are Claims Data?

A medical or pharmacy claim is the core element of an APCD. APCDs also receive data on providers, enrollment history, non-claims payment and other ancillary data. Claims data can be used to create comprehensive, retrospective, and longitudinal episodes of care.

The anatomy of a claim:

- Patient (Identity\* and demographic information)
- Provider (IDs, name, and place of service)
- Diagnoses
- Procedures and Services (Including dates)
- Payment (Billed and actual, coordination of benefits)

# Questions Claims Data Can Answer

<b>Patients</b>	<b>Provider</b>
<ul style="list-style-type: none"><li>• Who received care?</li><li>• What services did they receive?</li><li>• Where did they receive care?</li><li>• How much did they have to pay?</li><li>• Do they follow appropriate care patterns?</li></ul>	<ul style="list-style-type: none"><li>• Who provided health care services?</li><li>• Why were those services needed?</li><li>• How much was charged, what was negotiated, and what did insurance cover?</li><li>• How far are patients travelling for care?</li></ul>
<b>Cost of Care</b>	<b>Quality of Care &amp; Population Health</b>
<ul style="list-style-type: none"><li>• Has spending changed over time?</li><li>• What's driving increases in spending?</li><li>• How do payments for a service differ by setting, location, and plan?</li><li>• Is TCOC in line with expectations?</li></ul>	<ul style="list-style-type: none"><li>• Is the ED used as a primary source of care?</li><li>• Are mental health services accessible?</li><li>• Are screenings provided on schedule?</li><li>• Is follow up care provided appropriately?</li><li>• What does a facility's case mix look like?</li></ul>

# What Data is Collected by the Colorado APCD?

## Claims:

- Medical Claims
- Professional Claims
- Pharmacy Claims
- Dental Claims
- Vision Claims
- Eligibility Files
  - Including premium, deductible, and employer contribution
  - ERISA indicator

## Non-Claims:

- Drug Rebate File
  - Brand, Specialty, Generic by count and spend
  - By therapeutic class
- Alternative Payment Models
  - NCP-CDL
  - Aggregated NCP file (CT), narrative contract file (AC), capitation file (CF)
- Value-Based Pharma Contracts
- Prescription Drug Affordability Board

## Value Add:

- Geocoding
- ACS Census data
- Medicare RBP
- Unique ID
- Sequencing Algorithm
- John's Hopkins ACG Grouper

# Alternative Payment Models

- Non-Claims or Alternative Payment data is essential to capture the full costs of care and to understand progress away from FFS payments.
  - Standard collection allows for cross-state comparisons and more effective multi-state collaboration.
- In 2025, CIVHC adopted the Non-Claims Payment Common Data Model (NCP-CDL) from NAHDO, adding the Expanded NCP framework to the HCP-LAN framework and the Expanded NCP framework.
  - HCP-LAN framework focuses on the level of risk assumed by the providers.
  - Expanded framework (funded by Milbank) focuses on ID-ing the purpose of the spending.
- NCP-CDL includes a monthly capitation file that tracks capitation costs and spend down to the individual person level, providing greater transparency into APM structures and spend.
- NCP-CDL files are collected annually (CF monthly) through our standard submission portal.
- AC and CT files (Colorado specific) are collected through direct submission of excel templates to CIVHC intake teams.

# HCP-LAN Categories

Category 1	Category 2	Category 3	Category 4
<i>FFS - no link to quality or value</i>	<i>FFS - linked to quality and value</i>	<i>APMs built on FFS structure</i>	<i>Population-based payments</i>
	<p><b>A:</b> Foundational payments for infrastructure and operations (Care coordination fees, HIT investment payments)</p>	<p><b>A:</b> APMs with shared savings (upside only)</p>	<p><b>A:</b> Condition-specific population-based payments (PMPMs, PMPY for specific care, payment for specialty services)</p>
	<p><b>B:</b> Pay for reporting (bonuses or penalties)</p>	<p><b>B:</b> APMs with shared savings and downside risk (episodes, bundles with upside and downside risk)</p>	<p><b>B:</b> Comprehensive population-based payments (global payments, % of premium, etc.)</p>
	<p><b>C:</b> Pay for performance (bonuses for quality performance)</p>		<p><b>C:</b> Integrated finance and delivery (global payments, % of premium in integrated systems)</p>
		<p><b>N:</b> Risk-based payments not linked to quality</p>	<p><b>N:</b> Capitated payments not linked to quality</p>

	<b>Expanded Non-Claims Payments Framework</b>	<b>Corresponding HCP-LAN Category*</b>
<b>1</b>	<b>Population Health and Practice Infrastructure Payments</b>	
a	Care management/care coordination/population health/medication reconciliation	2A
b	Primary care and behavioral health integration	2A
c	Social care integration	2A
d	Practice transformation payments	2A
e	EHR/HIT infrastructure and other data analytics payments	2A
<b>2</b>	<b>Performance Payments</b>	
a	Pay-for-reporting payment	2B
b	Pay-for-performance payment	2C
<b>3</b>	<b>Payments with Shared Savings and Recoupments</b>	
a	Procedure-related, episode-based payments with shared savings	3A
b	Procedure-related, episode-based payments with risk of recoupments	3B
c	Condition-related, episode-based payments with shared savings	3A
d	Condition-related, episode-based payments with risk of recoupments	3B
e	Risk for total cost of care (e.g., ACO) with shared savings	3A
f	Risk for total cost of care (e.g., ACO) with risk of recoupments	3B
<b>4</b>	<b>Capitation and Full Risk Payments</b>	
a	Primary Care Capitation	4A
b	Professional Capitation	4A
c	Facility Capitation	4A
d	Behavioral Health Capitation	4A
e	Global Capitation	4B
f	Payments to Integrated, Comprehensive Payment and Delivery Systems	4C
<b>5</b>	<b>Other Non-Claims Payments</b>	
<b>6</b>	<b>Pharmacy Rebates</b>	

# How Claims Data is Being Used

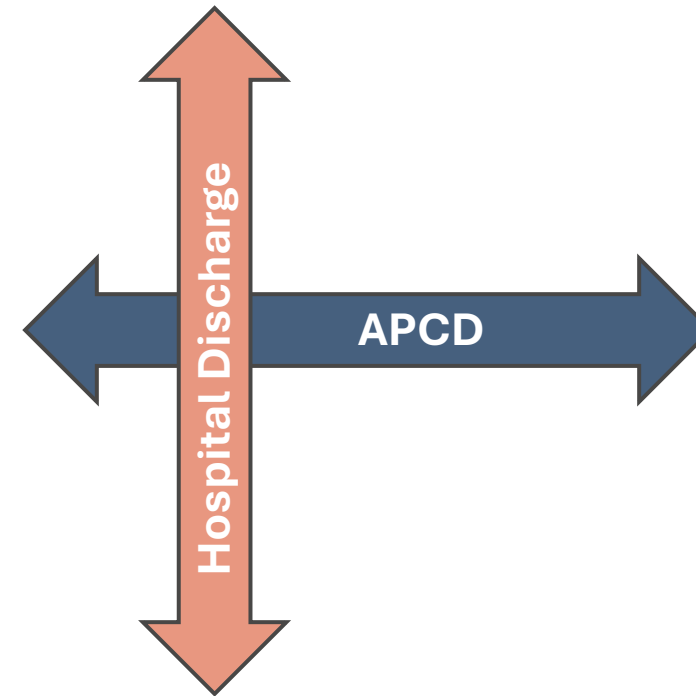
- Study emergency department utilization patterns to improve care coordination and inform state licensure policies.
- Analyze the health impacts of living near fracking wells by distance and age.
- Demonstrate improved outcomes and reduced costs for medically complex children.
- Evaluate the effect of the Affordable Care Act (ACA) on the stability of coverage among Medicaid beneficiaries and commercial payers.
- Track shifts in care delivery during and after COVID-19, including increased telehealth use, effects of delayed care on hospital sustainability and workforce burn out, improved access to behavioral health and primary care services.
- Allows employers to negotiate lower provider rates and improve employee benefits.
- Track impacts of plan benefit changes on case mix and provider availability.
- Determine the impact of Community Health Workers on chronic disease management.

# How Non-Claims Data is Being Used

- Report on primary care investment by payer and plan across all reimbursement models and categorize by type of reimbursement.
- Determine progress towards goal of 50% APM spend by 2030.
- Model COVID vaccine rollout through identification of high-risk populations.
- Provide evidence on costs and utilization of high-cost drugs to the State PDAB.
- Track uptake and impact of Value Based Pharmaceutical Contracts by payer.
- Model the impact of Medicaid policy changes on access to care for members in different census tracts across the state by socioeconomic status, housing and food stability, medical and behavioral complexity.
- Examine relative reimbursement rates to inform Medicaid rate setting.
- Creation of de-ID data sets to support state and federal policy evaluation.
- Evaluate geographic access to primary care across the state and determine infrastructure needs.

## How APCDs Compliment Hospital Discharge Databases

- **APCDs** contain comprehensive, longitudinal data across all types of care. This makes them well-suited for analyzing care patterns and pinpointing opportunities to improve value
- **Hospital discharge**/provider claims are typically comprehensive for a given care setting (like inpatient or ED) and are the best resources for deep dives to understand true utilization patterns
- Both APCDs and Hospital Discharge Databases are useful utilization tracking systems that **focus on record breadth and code completeness**



Claims systems are like Swiss army knives- a versatile tool to address a wide variety of use case questions and are easily structured for analytics

# Using the APCD for Payment Benchmarking-Balance Billing

Type of Claim	Service Category	Type of Code	Service Code	Service Description	Geographic Area	Median Allowed Amount	Median Billed Amount	Median Allowed Amount (CPI Adjustment for 2024)	Median Billed Amount (CPI Adjustment for 2024)	Median Allowed Amount (CPI Adjustment for 2025)
Professional	Anesthesia	CPT/HCPCS	00100	Anesth, procedures on spit glands	Eastern	\$617	\$1,730	\$709	\$1,989	\$728
Professional	Anesthesia	CPT/HCPCS	00100	Anesth, procedures on spit glands	Northern	\$551	\$2,055	\$634	\$2,362	\$650
Professional	Anesthesia	CPT/HCPCS	00103	Anesth, plastic surgery on eyelid	Central	\$354	\$659	\$407	\$757	\$418
Professional	Anesthesia	CPT/HCPCS	00103	Anesth, plastic surgery on eyelid	Eastern	\$512	\$1,023	\$589	\$1,176	\$604
Professional	Anesthesia	CPT/HCPCS	00103	Anesth, plastic surgery on eyelid	Northern	\$368	\$1,575	\$423	\$1,811	\$434
Professional	Anesthesia	CPT/HCPCS	00104	Anesth, electroshock	Central	\$441	\$762	\$507	\$876	\$520

<https://www.scc.virginia.gov/regulated-industries/companies/life-health-companies/balance-billing/>

## Overview

- Developed by the State Corporation Commission (SCC) in partnership with Virginia Health Information (VHI)
- Provides *median allowed* and *billed amounts* for healthcare services by region and procedure code
- Includes CPI-adjusted benchmarks for 2024 and 2025 to reflect current payment expectations

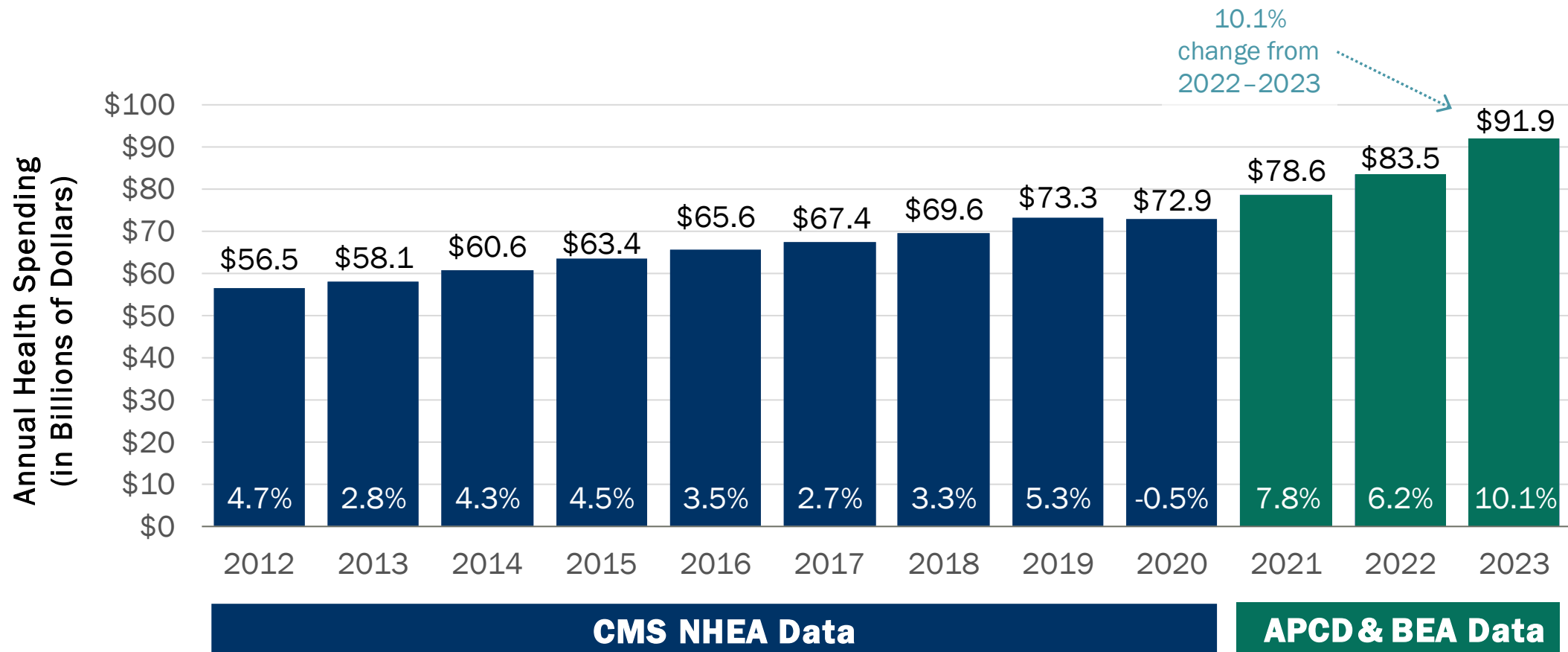
## Why It Matters

- Serves as a reference point for identifying cost outliers for out of network services
- Enhances analysis of provider-level variation and potential overbilling
- Supports cost transparency and balance billing protections (used in arbitration cases)

## Example:

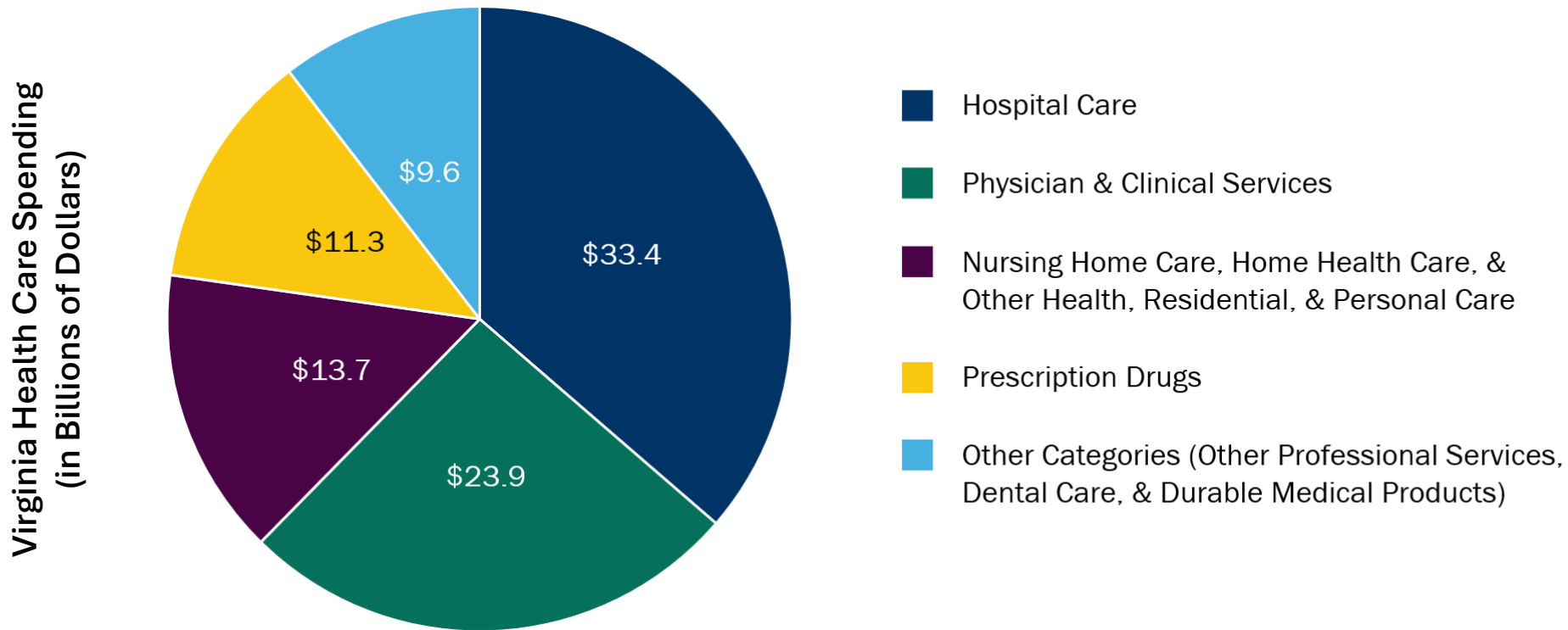
- *CPT 00103 – Anesthesia for plastic surgery on the eyelid (Eastern VA)*
  - **2025 Median Allowed:** \$604
  - **2025 Median Billed:** \$1,207
  - **Allowed-to-Billed Ratio:** 0.50
  - Used as reference point if provider submits out of network claim for 2-3x allowed/billed amounts and arbitration is needed to resolve

# Examples of Cost Analysis- Healthcare Spending Report



<https://www.onpointhealthdata.org/docs/resources/tracking-virginias-2023-health-care-spending-and-employment-trends.pdf>

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An aerial photograph of a public square or plaza. The pavement is light-colored and features a complex, white, line-art design that resembles a stylized tree or a network of paths. The design consists of thick, white lines that branch out and curve across the square. Numerous people are scattered throughout the square, some walking, some standing in groups, and some sitting on the ground. The overall scene is bright and open, suggesting a public gathering space.

# APCD Use Cases & Impact

# Use Case- Primary Care Workforce



Research Article | Original Research

## Using State All-Payer Claims Data to Identify the Active Primary Care Workforce: A Novel Study in Virginia

Alison N. Huffstetler, Roy T. Sabo, Martin Lavallee, Ben Weibel, Paulette Lail Kashiri, Jacquelyn Britz, Mark Carro Ashley M. Edwards and Alex H. Krist

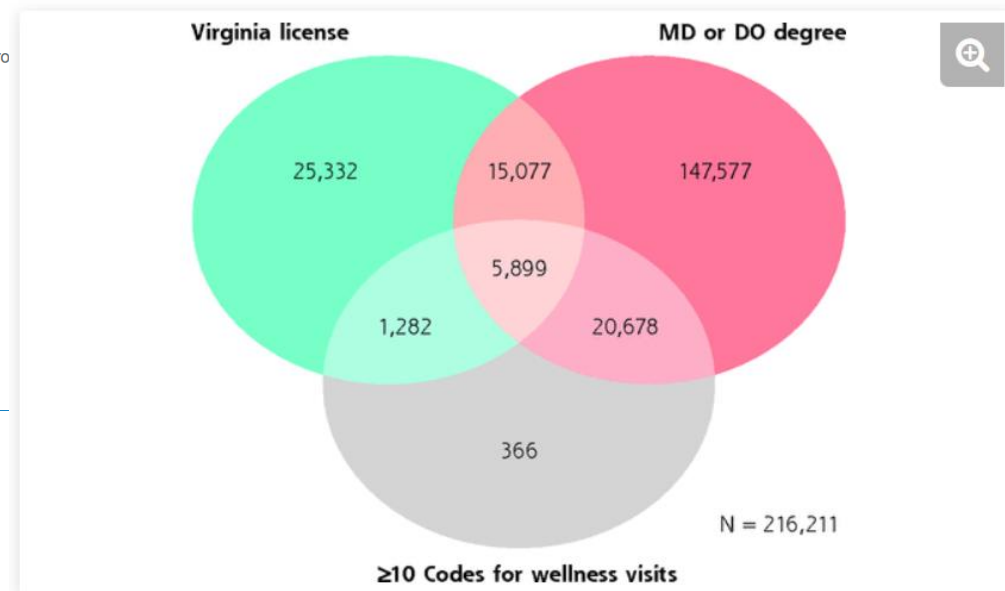
The Annals of Family Medicine September 2022, 20 (5) 446-451; DOI: <https://doi.org/10.1370/afm.2854>

Article Figures & Data eLetters Info & Metrics PDF

### Abstract

**PURPOSE** Primary care is the foundation of the health care workforce and the only part that extends life and improves health equity. Previous research on the geographic and specialty distribution of physicians has relied on the American Medical Association's Masterfile, but these data have limitations that overestimate the workforce.

<https://www.annfammed.org/content/20/5/446>



Download figure | Open in new tab | Download powerpoint

# Non-Claims Payment- Serious Demand!

- Significant interest in analyzing **total investment and payment to primary care**
- Pharmacy rebates via APCD are set to serve as the backbone data source for Virginia's ongoing efforts to establish a **Prescription Drug Affordability Board**
- APCDs are incredible vehicles for taking in a wide variety of "administrative" data and making it usable for policy and strategic decision-making

Types of Non-claims Payment files

Annual  
Quality  
Payments

Pharmacy  
Rebates

Capitation  
Payments

# CO APCD and HIE Program Data

Looked at patients in clinics with and without HIE services.

By combining claims with HIE program data, CIVHC was able to demonstrate:

- 29.5% decrease in Medicaid enrollee emergency room visits compared to control.
- 1/3 the increase in Medicaid inpatient admissions compared to control (21.1% vs 62.5% increase).
- Directionally consistent changes in Medicare and Commercial populations.

Article

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## Impact of Provider Health Information Exchange Services on Patient Utilization of Emergency Room and Inpatient Practices in Colorado

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Darcy Holladay Ford, Rachel Jardim, Kimi Landry, Megha Jha, Isaac Nwi-Mozu, Kelly Joines and Matthew Isiogu

Special Issue

[Current Trends and Prospects of Critical Emergency Medicine](#)

# CO APCD and USRDS (De-Identified)

## JAMA Health Forum™

[Home](#) | [JAMA Health Forum](#) | [Vol. 5, No. 12](#)

### Original Investigation



## Medicare Enrollment and Spending Among Patients Initiating Dialysis After the Affordable Care Act

Virginia Wang, PhD, MSPH<sup>1,2,3,4</sup>; Lauren E. Wilson, PhD<sup>1</sup>; Neil P. Rowen, BSPH<sup>5</sup>; [et al](#)

» [Author Affiliations](#) | [Article Information](#)

# CO APCD and Community Program Data

## **Project Angel Heart:**

- Used PAH program data with claims to determine the ROI of a food as medicine nonprofit. Evaluation led to the program more than doubling in size and serving the entire state instead of just Denver.

## **Colorado Food Cluster:**

- Using community qualitative surveys, claims data, grocery store data, employment data, school attendance, and more to look at the impact of a food-as-utility model on high-need, low-income families.

## **Colorado Village Collaborative:**

- Used surveys and program data with claims to demonstrate the impact of a tiny house village on the health, health care access, and medication adherence of the newly housed population.

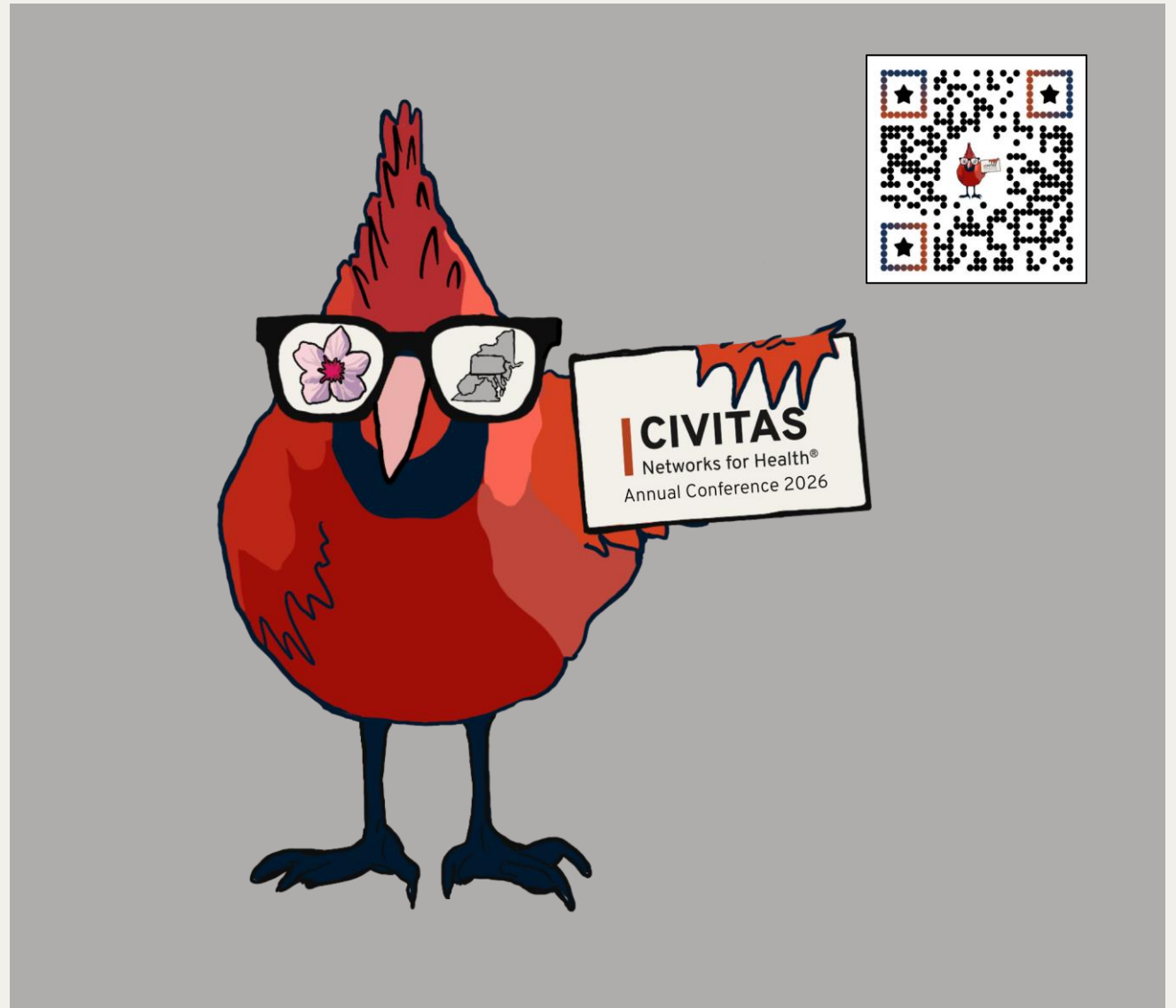
## **Carol's Wish:**

- Combined financial navigation program data with claims to show the out-of-pocket savings and increased access to care for women with gynecological cancers.

# Early Bird Registration for the Civitas 2026 Annual Conference is Open!

Join 750+ leaders from across the health data and improvement ecosystem. Hosted in collaboration with our Mid-Atlantic Host Committee, just minutes from Washington, D.C. in Arlington, VA.

- [Registration is open](#) – secure your spot today at a discounted rate!
- There will be multiple APCD-focused sessions at the conference – [explore the agenda](#)
- Plan early and save with [discounted hotel and flight options](#)
- Interested in sponsoring? Review the [Sponsorship Prospectus](#) and email [contact@civitasforhealth.org](mailto:contact@civitasforhealth.org) if you're interested in learning more



An aerial photograph of a public square or plaza. The ground is paved with light-colored tiles. A complex network of thick, white, hand-painted lines crisscrosses the square, creating a maze-like pattern. Numerous people are scattered throughout the square, some walking, some standing in small groups, and some sitting on the ground. The overall scene suggests a public space designed for community interaction and movement.

Questions?

# Stay Connected!



**Scan for Civitas Resources**

[www.civitasforhealth.org](http://www.civitasforhealth.org)