

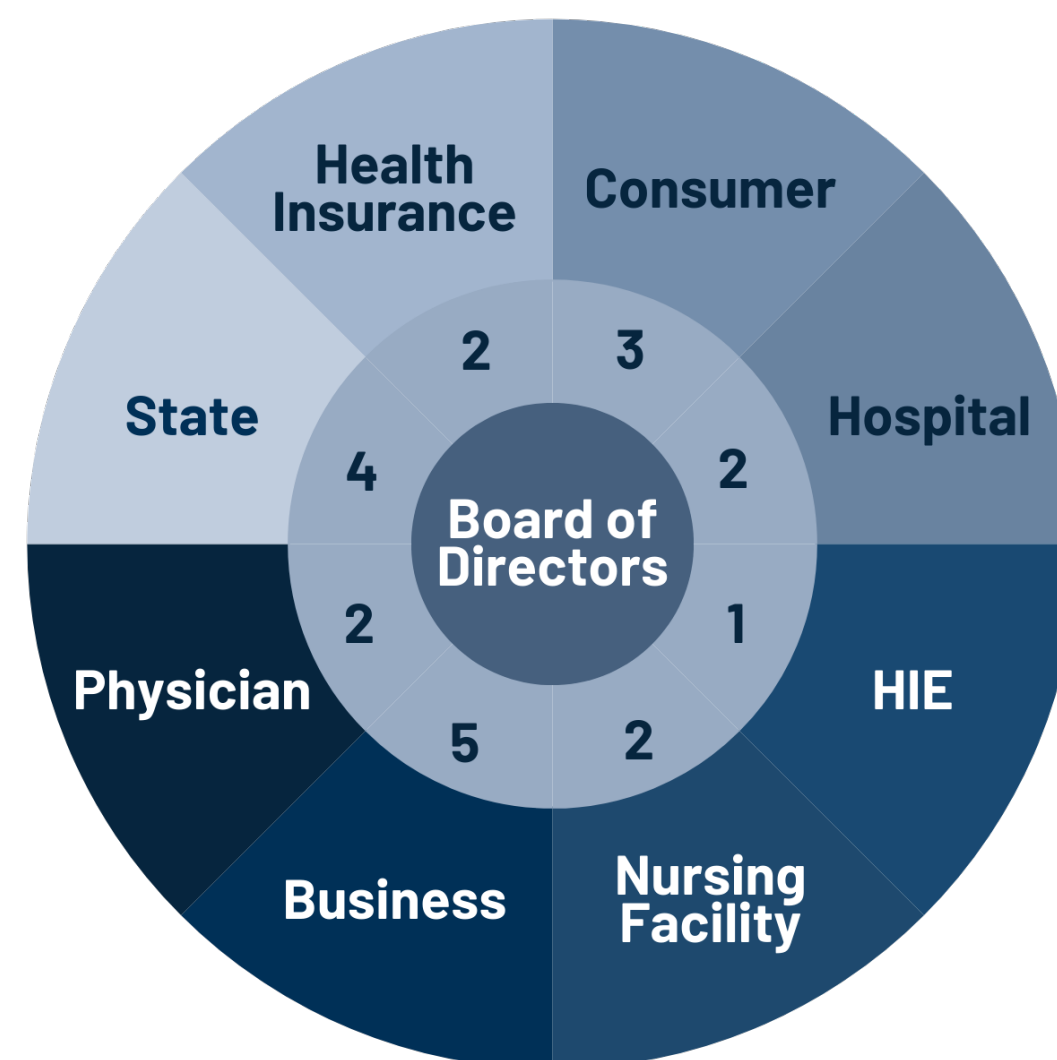
# Virginia Data to Support Maternal Health

Kyle Russell  
Chief Executive Officer



# Virginia Health Information (VHI)

- Independent 501(c)(3) non-profit established in 1993
- Unbiased public-private partnership focused on transparency
- Administers VA healthcare data reporting requirements- highlights include (but not limited to):
  - ✓ Hospital Discharge Database
  - ✓ State HIE and
  - ✓ APCD



# Health Data Organizations

## Social Benefit

- Local focus **drives change faster** based on Virginia's needs
- Serving as public-private intermediary **builds trust** which results in greater data sharing
- Private nimbleness with public **accountability**



# How VHI Has Evolved

A few major highlights. There have been many other steps along the way built on a strong foundation

1993

1993- VHI founded, Patient Level Data System established

1994

1994- VHI inherited EPICS from the Virginia Health Services Cost Review Council

2013

Virginia All-Payer Claims Database (APCD) created

2017

Virginia Emergency Department Care Coordination (EDCC) Program established

2019

VHI becomes statewide Virginia HIE via ConnectVirginia

# Programs Covered Today:

- 1. Patient Level Data (PLD) System**
- 2. All-Payer Claims Database (APCD)**
- 3. Emergency Department Care Coordination (EDCC) Program**
  - For each- scope, relevance to maternal care, gaps and primary steps to address
  - Not covered: several other important Virginia health data infrastructure programs!

# Patient Level Data (PLD) System

**Snapshot-** The Who/What/When and Where of every inpatient hospital discharge in the Commonwealth of Virginia (data elements)


**Use Case Example-** What is the geographic distribution of L&D discharges that had serious complications in 2023?

<b>Key Stats</b>	System created in 1993, roughly 6-9 months data lag, approximately 800-900k discharges a year
<b>Biggest Strengths</b>	100% comprehensive data on inpatient, data quality is reliable, 1 record - 1 discharge format (easy to use)
<b>Largest Gap</b>	The data is limited to inpatient only
<b>Opportunities to Improve</b>	Expand the program to ED and other outpatient services consistent with the vast majority of other states (42 out of 50)






# Patient Level Data (PLD) System

## Virginia included

Healthcare system variability and inpatient maternal mortality in the United States

[M.A. Mohamed](#) , [K. Venkatesh](#), [...], and [H. Hoffman](#)  [View all authors and affiliations](#)

[Volume 17, Issue 4](#)

 Contents |  PDF / ePub |  Cite article |  Share options |  Information, rights and permissions |  Metrics

### Abstract


**OBJECTIVE:**

To examine the association of inpatient maternal mortality with variability in healthcare services delivery such as hospital size, urban/rural designation, teaching/non-teaching status, regional location, and insurance coverage.

**METHODS:**

This is a pooled, cross-sectional analysis of the National Inpatient Sample (2012–2014). Information on

## Virginia not included

**Original Investigation** | Emergency Medicine 

March 13, 2023

### Maternal Emergency Department Use Before Pregnancy and Infant Emergency Department Use After Birth

Catherine E. Varner, MD, MSc<sup>1,2,3</sup>; Alison L. Park, MSc<sup>4</sup>; Joel G. Ray, MD, MSc<sup>4,5,6</sup>

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

*JAMA Netw Open.* 2023;6(3):e232931. doi:10.1001/jamanetworkopen.2023.2931

### Key Points

**Question** What is the association between maternal prepregnancy emergency department (ED) use and infant ED use in the first year of life?

**Action:** VHI is working with key stakeholders to actively pursue expansion of the Virginia PLD program regs to include outpatient facility care via a federal funds only budget amendment in the 2025 GA

# All-Payer Claims Database (APCD)

**Snapshot-** A research friendly database with a wide variety of information on almost all types of care for a little under 6 million Virginia residents ([data elements](#))

**Use Case Example-** What variations in care occurred 30 days after ED visits for expecting mothers in 2023?

<b>Key Stats</b>	Began operation in 2013, billions of historical claims, facilitates research requests for organizations across the country, lag is 6-9 months (1 year for CMS FFS)
<b>Biggest Strengths</b>	It is the closest thing to a magic 8 ball for health data in terms of its flexibility, data spans all settings of care and is linked together by individual, includes how much was spent on each service
<b>Largest Gap</b>	No ERISA (large private employer)/FEHBP/TRICARE/Uninsured lives. No dental claims in Virginia
<b>Opportunities to Improve</b>	Virginia has one of the lowest federal match rates on its APCD in the country, price transparency and dental claim requirements are outdated, historical limitations on linkage



# All-Payer Claims Database (APCD)

## 2023 Taskforce on Maternal Health Data and Quality Measures

### **Recommendation 1: Improve the Virginia All-Payer Claims Database (APCD)**

The Virginia All-Payer Claims Database (APCD) is a program under the authority of the Virginia Department of Health (VDH) that collects paid medical and pharmacy claims for roughly five to five and a half million Virginia residents with commercial, Medicaid, and Medicare coverage across all types of healthcare services. It is housed within Virginia Health Information (VHI). The data from the APCD is only available for claims paid between January 2011 and December 2021. The Task Force recommends to:

- Maintain an updated dataset – through most recently completed quarter of the current year, if possible
- Utilize the VHI and APCD as a centralized maternal health access point for the public, policymakers, providers, and payors alike
- Standardize a dataset specific to maternal health patients, including race/ethnicity, socioeconomic status, age, region, present/chronic health conditions, clinical interventions, and clinical outcomes
- Ensure that data can be disaggregated as appropriate, such as to reflect urban versus rural outcomes, and stratified by sociodemographic indicators to identify disparities
- Improve the captured data to include social determinants of health indicators, patient care plan adherence, and any missing information as listed in the two prior bullets (bullets three and four of this recommendation)

# All-Payer Claims Database (APCD)

## Recent maternal health related requests-



Analyzing the prevalence, treatment, and geographic distribution of perinatal mental health issues and resulting care access across Virginia



Studying maternal risk-appropriate care aimed at reducing severe maternal morbidity



Identifying markers of quality of care and negative health outcomes for pregnant and birthing individuals, and their babies in Virginia from 2018 to 2023 based on maternity care desert status

**Action:** VHI is working to request a 2025 budget amendment to modernize the programs federal match which will allow for reduced claims lag, more public reporting on maternal healthcare, greater linkage and new data non-claims based payments

# Emergency Department Care Coordination (EDCC) Program

**Snapshot-** Every provider and plan in the Commonwealth can be notified in real time that their patient or member was seen in the hospital, learn what they were treated for, and help connect them with resources to coordinate future care

**Use Case Example-** Did any of pregnant patients go to the ED last night?

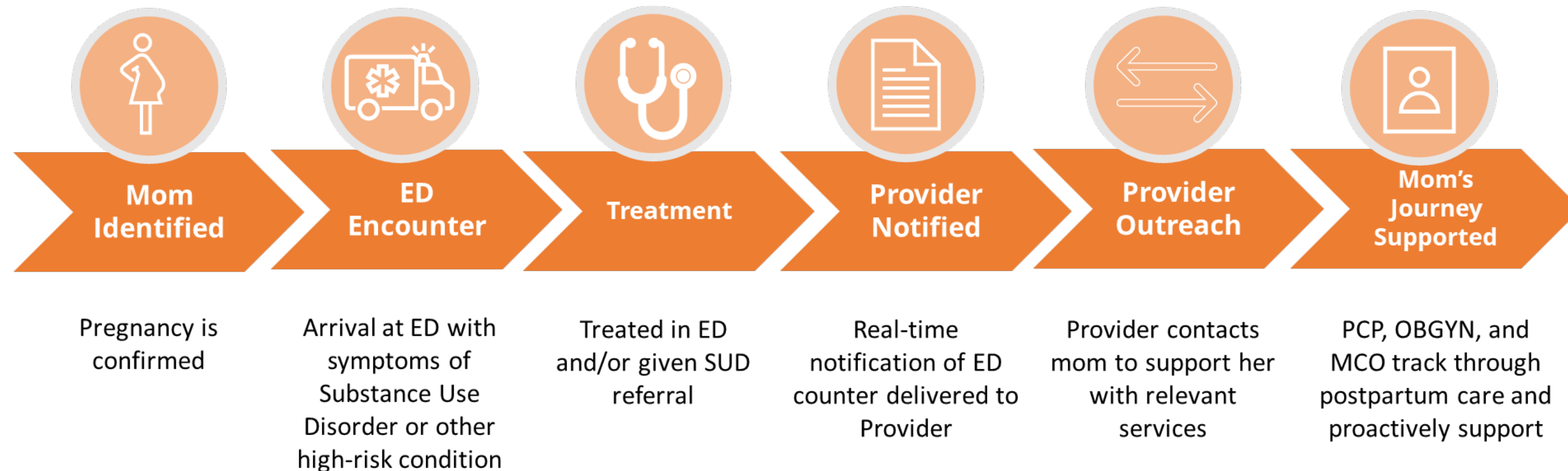
<b>Key Stats</b>	Created in 2017, mandates real time connectivity for hospitals and plans, patient/member files in excess of 6 million lives and growing
<b>Biggest Strength</b>	Near real time data exchange (no lag), participation mandate for all EDs/plans, large provider network for sharing new information
<b>Largest Gap</b>	Historically limited to ED/Inpatient only, ADT/HL7 data is not as complete per record as claims, there can be technical resource limitations for smaller practices to participate
<b>Opportunities to Improve</b>	Expand data collection consistent with Smartchart legislation (2024) and additional encounters, current and future data underused for population health and research

# EDCC Program Impact Example

- **Family Insights Virginia based clinics support families and individuals with treatments for a diverse spectrum of mental health needs**
- **Complete Care Model:** Family Insights' value-based model integrates physical, mental, and social health for holistic care
- **EDCC Integration:** Real-time alerts through the EDCC program allow timely interventions, improving care coordination and reducing unnecessary ER visits
- **Impactful Results:**
  - 25% reduction in ER visits
  - 35% reduction in hospitalizations
  - 32% decrease in inpatient behavioral health use
- **Real-World Example:** Identified a patient making multiple ER visits for sinusitis and facial pain, which were linked to untreated dental abscesses and anxiety. By coordinating care for a daytime visit with a dentist, we addressed both physical and mental health needs, reducing unnecessary ER visits.



# EDCC Program Maternal Workflow Example



"Virginia Premier utilizes the several scheduled reports to assign members to 'HR Maternity CM' team. We have found the reports to be beneficial by utilizing these reports daily to assign members, initiate CM services, and follow up needed for the members that are on the reports." - Jamie Edwards

"For my team in outreach, we use the pregnancy ED reports to identify members for our 'Welcoming Baby Outreach' maternity program. The staff can pull the reports themselves and look up the member to begin outreach to identify if there has been a miscarriage/loss." - Katie Mass

EDCC  
Program



Smart Chart  
Network

The Commissioner shall ensure that the Program:

Receives real-time patient visit information from, and shares such information with, **every hospital emergency department** in the Commonwealth



Receives real-time patient visit information from, and shares such information with, **every hospital in the Commonwealth**

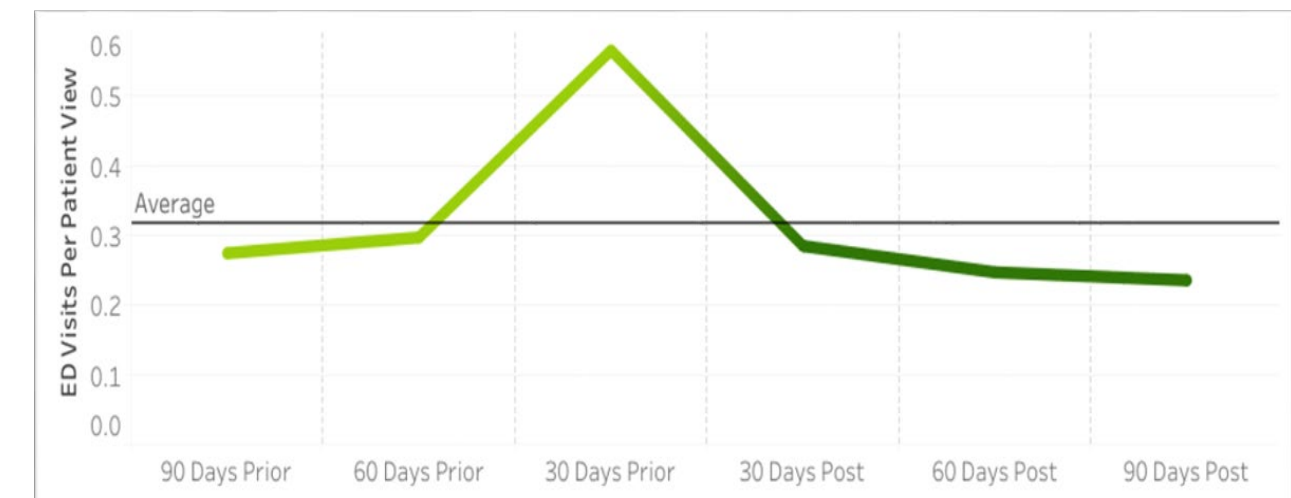
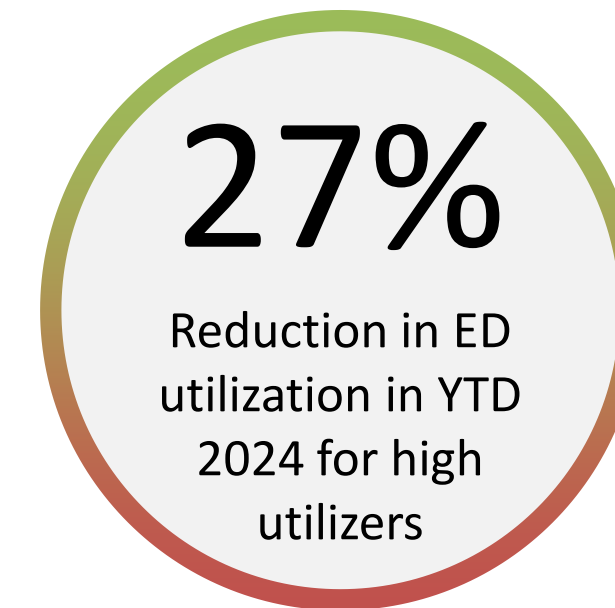
Provides... care management personnel with **care coordination plans and discharge and other treatment and care coordination information...**



Provides... care management personnel **with care coordination plans, lab results, images, and discharge and other treatment and care coordination information...**

# EDCC Program Opportunities

- **Get connected** if you are not already- [EDCCPsupport@vhi.org](mailto:EDCCPsupport@vhi.org)
- **Join a** local or the statewide users **collaborative** once connected!
- **Funding-** always needed, 1-time grants for provider organizations to connect or integrate with the program are very high impact
- Please reach out with additional maternal health use cases that leverage **new data requirements**, VHI will keep taskforce aware of progress in 2025 and appreciate your support





# Thank You!

Contact: [kyle@vhi.org](mailto:kyle@vhi.org)

LinkedIn: [linkedin.com/company/virginia-health-information/](https://www.linkedin.com/company/virginia-health-information/)

