## Arkansas APCD Data Users Group

Version 1.0.2019

## ARKANSAS

September 2019
All-Payer Claims
Database

## Agenda

- Introductions (5 minutes)
- Existing projects and data use (10 minutes)
- Arkansas APCD tips (10 minutes)
- Questions from the floor (30 minutes)
- What's next for the Arkansas APCD (5 minutes)


## Arkansas APCD Team

- Kenley Money, Director of Information Systems Architecture, ACHI
- Don Poe, APCD Technical Director, ACHI
- Kathy Hart, APCD Project Manager, ACHI
- Gini Ingram, APCD Sr. Technical Business Analyst, ACHI
- Trang Giang, APCD Data Request Manager/Technical Business Analyst, ACHI


## Prevalence of Breast Cancer in Arkansas



## Medicare Type II Diabetes \& HbA1c Testing Rates

Diabetes


HbA1c Testing rates


## One Rural Patient's Journey



In the ER, John undergoes testing and is diagnosed with a heart attack

May 5: John Doe arrives at the De
Queen Medical
Center ER

De Queen to Nashville
31.8 miles

John is taken by ground ambulance to Howard Memorial Hospital for further treatment


John arrives at Howard Memorial, the same day as his initial ER visit

Nashville to Little Rock 128.8 miles


The same day, John is taken by air ambulance to
Arkansas Heart Hospital in Little Rock

## A RURAL PATIENT's JOURNEY



John is admitted to the Heart Hospital that day; receives testing and treatment for his heart attack


## Rural Hospital Closures Since July 2012



## 2017 Spending Profile for Sevier County

Expenses for approximately 17,000 individuals with Medicaid, Medicare or commercial coverage


| Total for 2017 |  |
| :--- | :--- |
| Spending outside of Sevier County | $\$ 58,542,394$ |
| Spending within Sevier County | $\$ 15,026,353$ |
| Medical | $\$ 52,691,341$ |
| Spending outside of Sevier County | $\$ 11,108,081$ |
| Spending within Sevier County | $\$ 5,851,053$ |
| Pharmacy | $\$ 3,918,272$ |
| Spending outside of Sevier County |  |
| Spending within Sevier County |  |

## Target Rural Service Areas



## AR Delta Rural Communities Opioid Response

| Area | Existing Resources | ACHI Analytic Capabilities and Potential Outcomes of Interest |
| :---: | :---: | :---: |
| Providers | - Community Health Needs Assessments (CHNAs) of 11 hospitals <br> - Prescription Drug Monitoring Program (PDMP) <br> - PDMP Drug Enforcement Agency report <br> - Types of treatment providers <br> - Inpatient <br> - Medicated-assisted treatment (MAT) providers <br> - Methadone clinics <br> - Behavioral therapy <br> - Rehabilitation <br> - Provider and community education efforts <br> - Available funding and coordination | - Provider awareness survey / Provider variation analyses <br> - Number of prescriptions <br> - Number of pills per prescription <br> - Hospital and emergency room (ER) visits secondary to drug use <br> - MAT provider activity <br> - Assessment and treatment sites <br> - Faith-based <br> - MAT (drug therapy and counseling) <br> - Inpatient <br> - Border states' resources (evidence of AR patient utilization?) <br> - Mississippi, Louisiana |
| Prescriptions | - Arkansas has second highest opioid prescriptions (105.4 per 100 individuals in 2017, CDC) <br> - Opioid dispensed by prescription <br> - Narcan availability <br> - $1^{\text {st }}$ responders <br> - Schools <br> - Individuals | - All-Payer Claims Database (APCD) and PDMP overlap <br> - Prescription rates by payer for the 9 counties <br> - Narcan prescriptions <br> - Patients' first exposure to opioids - associated diagnoses (i.e., ankle sprains) |
| Diagnoses |  | - Neonatal abstinence syndrome <br> - Maternal diagnosis of drug use |
| Overdose Deaths | - Opioid overdose deaths <br> - Coroner profiles | - Likely opioid overdose deaths of individuals under age 60 review of Death Certificate data (cause of death) <br> - Total SUD overdose deaths |
| Laws and Policies | - X waiver categories and process for physicians, nurse practitioners (NP), and physician assistants (PA) |  |
| Governmental Agency | - Arkansas Department of Human Services (DHS) divisions: Division of Youth Services, Aging and Adult Services, Forensics/Arkansas State Hospital, Division of Medical Services, and Division of Children \& Family Service <br> - Foster care placement secondary to drug use |  |
| Law <br> Enforcement <br> \& Regulatory Boards | - Drug court <br> - Crime statistics for meth, heroine, and marijuana: <br> - Driving under the influence (DUI) <br> - Arrests <br> - Convictions <br> - Board of Medicine Actions related to MD vs. NP or PA provision of MAT (Arkansas Medical Board) | - State Police crash data |

## Emergency Room Visits for Pulaski County Jail Detainee Cohort, 8/1/16-8/1/17



## Inpatient Psychiatric Stays for Pulaski County Jail Detainee Cohort, 8/1/16-8/1/17



## Pulaski County Jail Detainees Found in APCD



## Pulaski County Jail Detainees Found in APCD



## Other Data Use Examples

We want to hear from you.

## Tips and Tools



## Tips and Tools

$A P C D$ Arkansas All-Payer Claims Database

| Home | Reports \& Maps | Resources | Governance | Web Portal | About the APCD |
| :--- | :--- | :--- | :--- | :--- | :--- | Search this website | Search |
| :--- |

Home / Resources / Data Tipsfor Data Requesters

## Data Tips for Data Requesters

The following table contains information about data quality or data nuances that affect data in the Arkansas APCD. This information is provided at the Submitting Entity (SE) level where applicable, otherwise, the issue described affects all SEs. Data requestors should review and consider each of these as they move forward with their stated use of the data. Where possible, issues will be addressed in future Arkansas APCD releases. Issues categorized as "Informational"cannot or will not be addressed. Resolution is being addressed for issues categorized as "Active." Resolved issues are categorized as "Resolved."

| Submitting <br> Entity (SE) | Subject | Update <br> Date | Resolution | Description |
| :--- | :--- | :--- | :--- | :--- |
| All | Alias Fields | 2019-03-01 | Informational | When system changes occur that result in changing member and/or <br> subscriber IDs, the old IDs should be moved to the Alias fields at the end of <br> each member or claim records. The new IDs should populate the original <br> fields. The System ID field should be incremented by 1 to represent ID <br> changes. Data user should use the System ID field as a <br> trigger to determine if a member ID changed. |
| All | APCD Unique ID | 2019-03-01 | Informational | APCD Unique ID (ME998), otherwise called the APCD Hash ID, can be used <br> the align individuals across carriers. Refer to this document for more <br> methodologies and instructions. |

https://www.arkansasapcd.net/Resources/DataTipsForDataRequesters/

## Tips and Tools

## 2019 Data Attribute Supplement for Data Requesters

Version 1.0.2019

https://www.arkansasapcd.net/Docs/282/

## Types of Connections

Beginning on slide 11:

- Enrollees/individuals are connected using three types of linkages across data file types:
- Enrollee identification within a carrier or payer
- Assesses enrollee experience within carrier or payer-specific plans
- Tracks enrollee experience within a carrier or payer over time


## Types of Connections, Continued

- Enrollee identification across carriers or payers
- Tracks enrollee experience across different carriers or payers over time
- Appends concurrent coverage for an enrollee
- Denominates a population for analytics and research
- Links plan/enrollment data across plans that use TPAs or PBMs to administer claims data (these systems may not use the same IDs for the same enrollees)
- Supplements enrollee linkage within carriers or payers when enrollee IDs are modified by marital status changes, plan changes, etc.


## Types of Connections, Continued

- Individual identification between claims-based and non-claims-based data
- Associates health statistics outcome information with claims information (e.g., individuals on Arkansas Cancer Registry data with enrollees from claims-based data)
- Associates uninsured inpatient and emergency department data with claims-based data to assess utilization and/or outcomes


## Enrollee Identification Within a Carrier/Payer

When connecting enrollees to claims data within carriers or payers, use Entity ID* and Enrollee ID to link an enrollee's plan/enrollment data to their claims information.

Important: Because duplicate Enrollee IDs can occur across different carriers or payers (e.g., John Smith on Carrier A has enrollee ID = 123, and Mary Green on Carrier B has enrollee ID = 123), it is important to include the Entity ID representing the carrier when identifying unique enrollees.

For example:
Entity ID + Enrollee ID = Carrier A 123 (John Smith)
Entity ID + Enrollee ID = Carrier B 123 (Mary Green)

*Entity ID is an alphanumeric code that represents a carrier or payer within the plan/enrollment, claims, and provider data.

## Enrollee Identification Across Carriers/Payers

Use APCD Unique ID to link enrollees across carriers or payers. The Arkansas APCD does not contain personal identifiers, however the APCD Unique ID can be used as a proxy.

The APCD Unique ID is a hashed version of the last name and date of birth for each enrollee. Each plan/enrollment record contains the enrollee's APCD Unique ID.

Used with gender, the APCD Unique ID can identify unique enrollees across carriers or payers with high accuracy.
To link enrollees across carriers or payers:

1. Find enrollees with the same APCD

Unique IDs and gender codes within the plan/enrollment data file level (use other data as needed to strengthen the linkage).
2. Once a linkage has been established with the APCD Unique ID, use Entity ID and Enrollee ID to find associated data on other data file types. See the Linkages Across Source Type slide for an example.


## Individual Identification Across Non-ClaimsBased Data Types

## When available:

The APCD Unique ID can identify unique individuals across non-claims-based data types with high accuracy.
To link individuals across non-claims-based data types:

1. Find individuals with the same APCD Unique IDs and gender codes within each non-claims-based data type.
2. Once a linkage has been established with the APCD Unique ID, use sourcespecific individual identifiers to find associated data on other data file types. See the Linkages Across Source Type slide for an example.


## Linkages Across Source Type



## Data linkages example:

1. Identify the enrollees and individuals within the Carrier A data, Carrier B data, and Arkansas Birth Certificate data using the APCD Unique ID and gender.
2. Select Carrier A plan/enrollment data using the selected APCD Unique IDs.
3. Select Carrier A claims-based data using the Entity IDs and Enrollee IDs associated with the selected APCD Unique IDs.
4. Select Carrier B plan/enrollment data using the selected APCD Unique IDs.
5. Select Carrier B claims-based data using the Entity IDs and Enrollee IDs associated with the selected APCD Unique IDs.
6. Select Arkansas Birth Certificate data using the selected APCD Unique IDs.
7. Create analytic dataset with selected data from steps 1 through 6.

## Questions from the Floor

We want to hear from you.

## What's Next for the APCD?

- Updated data - December 2019
- New Data Coverage: January 1, 2013 through June 30, 2019
- Member versioning
- New field, VersionRank, identifying most current record per member per carrier's plan/enrollment. To be used when calculating member months and enrollment spans.


## APCD Technical Support

- Reach out to adrs@achiapcd.atlassian.net for questions about data requests, data use, or pricing.

