

ARKANSAS APCD DATA USERS GROUP

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HEALTHCARE
TRANSparency
INItiative

Agenda

- Welcome
- Topics
 - Methodologies for Quantifying Race/Ethnicity Assignment in Arkansas Medicaid Data
 - Methodologies for Using Member IDs versus APCD 'Hash IDs'
 - Methodologies using Cancer Data for Colorectal Cancer and other Screenings
 - Latest APCD Release Information and Data Tips
- Questions/Discussion

Arkansas APCD Team

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Methodologies for Quantifying Race/Ethnicity Assignment in Arkansas Medicaid Data

Methodologies for Quantifying Race/Ethnicity Assignment in Arkansas Medicaid Data

- ME021 (Race)
 - See Appendix H: Race
<https://achiapcd.atlassian.net/wiki/spaces/ADRS/pages/395968631/Appendix+H+Race>
- ME025 (Ethnicity)
 - See Appendix I: Ethnicity
<https://achiapcd.atlassian.net/wiki/spaces/ADRS/pages/395804808/Appendix+I+Ethnicity>

ME021 (Race) in Medicaid

- February 2020

Code	Description	Distinct Beneficiaries	Percent of Total
1002-5	American Indian or Alaska Native	8,380	0.8%
2028-9	Asian	10,348	1.0%
2054-5	Black or African American	206,827	20.4%
2076-8	Native Hawaiian or Other Pacific Islander	4,445	0.4%
2131-1	Other	24,846	2.5%
9999-9	Unknown	195,885	19.3%
2106-3	White	562,530	55.5%

- Unknown is problematic

ME025 (Ethnicity) in Medicaid

- February 2020

Code	Description	Distinct Beneficiaries	Percent of Total
13	Hispanic or Latino - American Indian or Alaska Native	99	0.0%
15	Hispanic or Latino - Black or African American	145	0.0%
34	Hispanic or Latino - Other or Blank (no race selected)	10,245	1.0%
17	Hispanic or Latino - White	41,542	4.1%
05	Not Hispanic or Latino - Black or African American	29,024	2.8%
07	Not Hispanic or Latino - White	85,860	8.4%
23	Unknown - American Indian or Alaska Native and White	5,937	0.6%
35	Unknown - Other or Blank (no race selected)	180,999	17.7%
27	Unknown - White	442,523	43.2%

- Unknown is problematic

Combined ME021 and ME025

- If ME025 is a code associated with Hispanic or Latino then assign Race/Ethnicity as Hispanic/Latino; else use ME021

Race/Ethnicity Combined	Beneficiaries	Percent of Total
American Indian or Alaska Native	8,282	0.8%
Asian	10,297	1.0%
Black or African American	206,685	20.4%
Hispanic/Latino	53,439	5.3%
Native Hawaiian or Other Pacific Islander	4,406	0.4%
Other	23,071	2.3%
Unknown	185,939	18.3%
White	521,280	51.4%

- Unknown is still problematic

Methodologies for Using Member IDs Versus APCD 'Hash IDs'

Methodologies for Using Member IDs Versus APCD ‘Hash IDs’

- Enrollees/individuals are connected in the following ways across data file types:

Enrollees/Individuals Connections	Usage
Enrollees within a carrier or payer	Tracks enrollee experience within a carrier or payer over time
Enrollees across carriers or payers	Tracks enrollee experience across different carriers or payers over time
Enrollees/individuals between claims-based and non-claims-based data (when available)	Associates health statistics outcome information with claims information (e.g., individuals on Arkansas Cancer Registry data with enrollees from claims-based data)

Resource: [Arkansas APCD Data Attribute Supplement for Data Requesters](#)

Distinguishing Individuals

- Two key data elements used to distinguish enrollees:
 - **Enrollee ID** – ID assigned by carrier or non-claims-based data source
 - Claims-based data member IDs – ME107, MC137, PC107, DC056
 - Non-claims-based data patient or member IDs – birth certificate numbers, death certificate numbers, patient control numbers, file or case numbers
 - **APCD Unique ID** – A hashed version of the last name and date of birth for each enrollee/individual on both claims-based and non-claims-based data

Enrollee Connections Within Carrier/Payer

When connecting enrollees to claims data within carriers or payers, use the **SE_ID** (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.

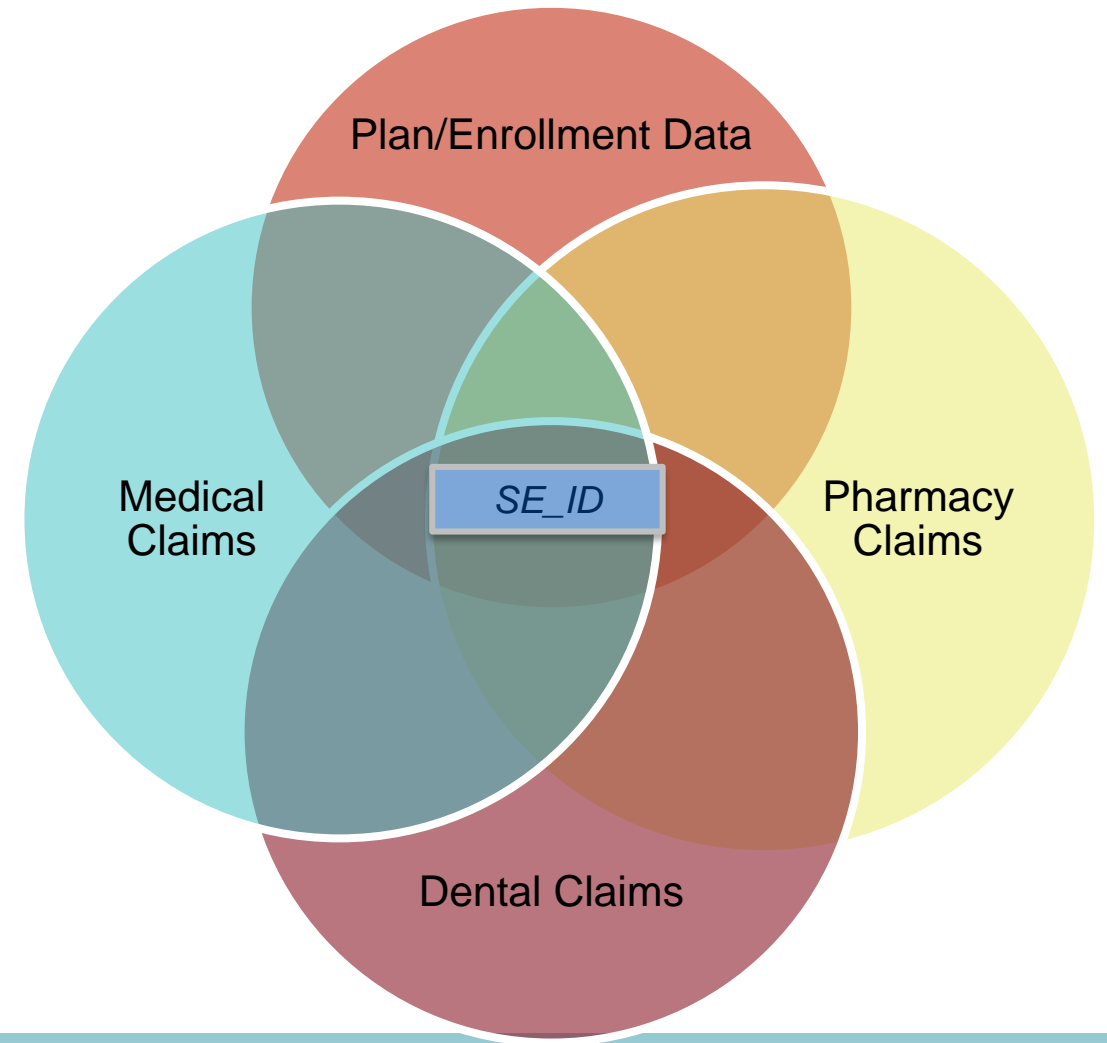
For example:

SE_ID (Entity ID + Enrollee ID) = Carrier A 123 (John Smith)

SE_ID (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 ID can also be referred to as Member ID.*



Enrollee Connections Across Carriers/Payers

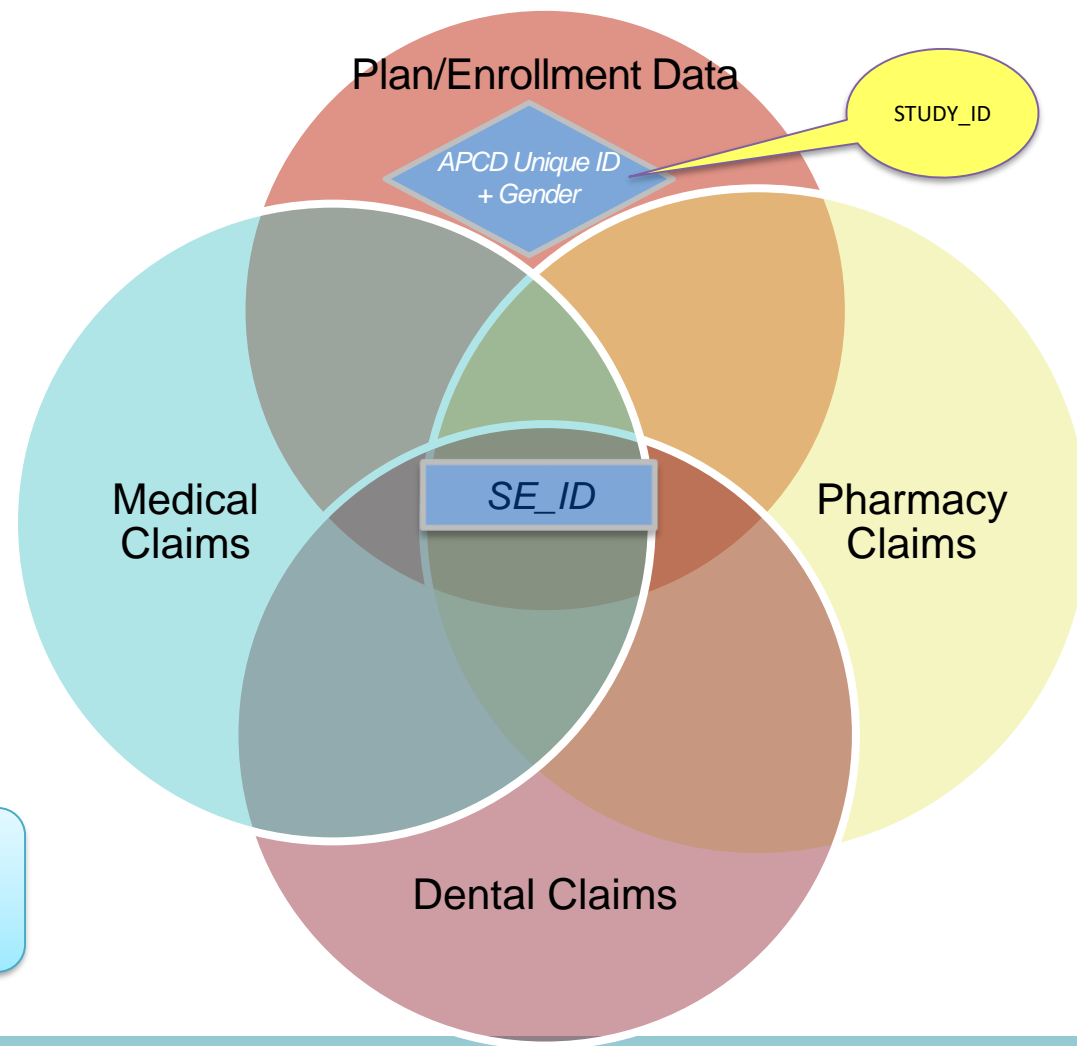
When connecting enrollees across carriers or payers, use the **STUDY_ID** (APCD Unique ID (ME998) + Gender (ME013)). The STUDY_ID is also known as the ‘Hash ID.’

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.

To link enrollees across carriers or payers:

1. Find enrollees with the same ‘STUDY_ID’ within the plan/enrollment data file level (use other data as needed to strengthen the linkage).
2. Once a linkage has been established, use SE_ID to find associated data on other data file types.

Note: Individuals can have multiple STUDY_IDs across a single SE_ID because of name changes or data quality issues. Include other data in grouping to better distinguish the individual.



Across Carriers/Payers Connection Example

Possible Order	#		SE_ID		STUDY_ID (aka Hash ID)		Approach
		File Type	Entity ID	Member ID	APCD_Unique_ID	Gender	
1	1	Enrollment/Member	83470	12ABC244	XZ\$#aJz27%=	F	Join member to medical claims on SE_ID
	2	Medical Claims	83470	12ABC244	n/a		
2	3	Enrollment/Member	83470	3995026	XZ\$#aJz27%=	F	Look for other medical claims within carrier using STUDY_ID. NOTE, use other data to verify member. This could be a 'collision'.
	4	Medical Claims	83470	3995026	n/a		
3	5	Enrollment/Member	99CAR1	6204081	XZ\$#aJz27%=	F	Look for pharmacy claims by joining on STUDY_ID
	6	Pharmacy Claims	99CAR1	6204081	n/a		
4	7	Enrollment/Member	83470	12ABC244	86@!luVx%i8=	F	This member record has a conflicting STUDY_IDs. If no other data can be used to confirm the member belongs the SE_ID group, it is recommended that they be dropped.

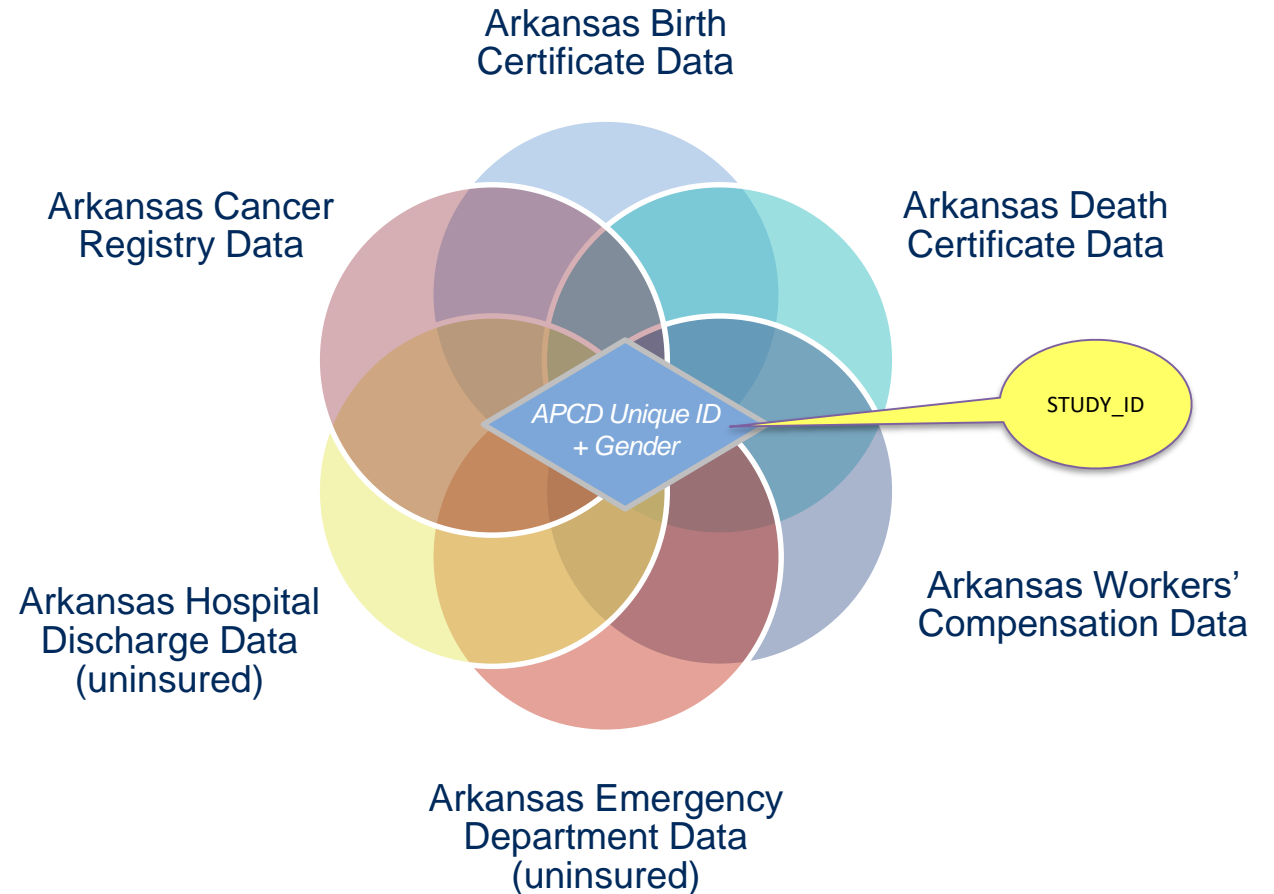
Individual Connections Across Non-Claims-Based Data Types

When available:

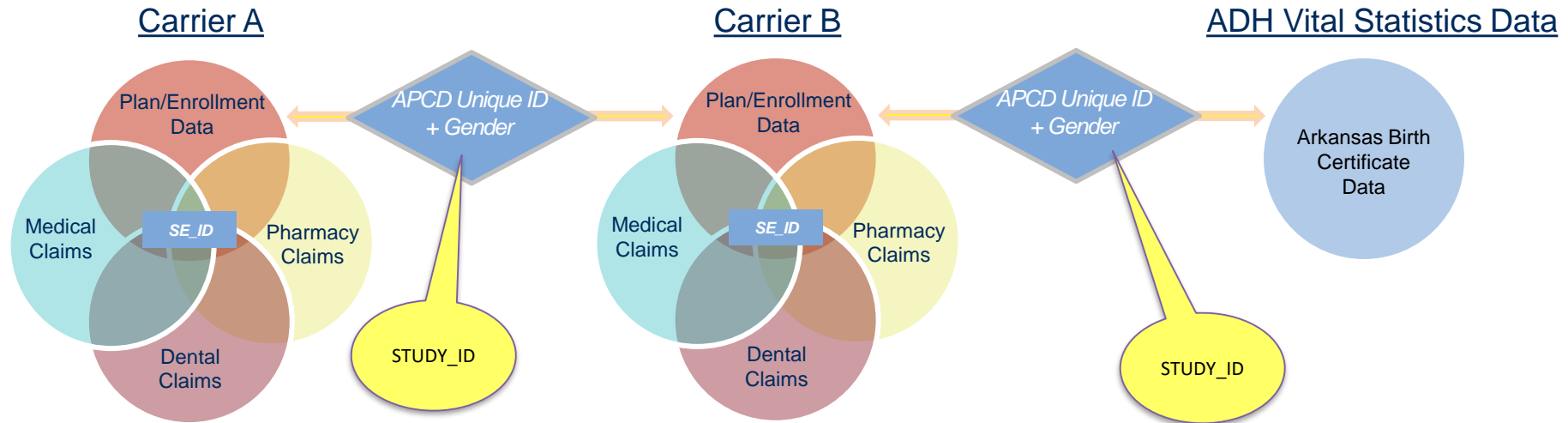
The STUDY_ID can identify unique individuals across non-claims-based data types with high accuracy.

To link individuals across non-claims-based data types:

1. Find individuals with the same STUDY_ID within each non-claims-based data type.
2. Once a linkage has been established, use source-specific individual IDs to find associated data on other data file types.



Connections Across Source Types



Data linkages example:

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

Summary: Methodologies for Using Member IDs Versus APCD ‘Hash IDs’

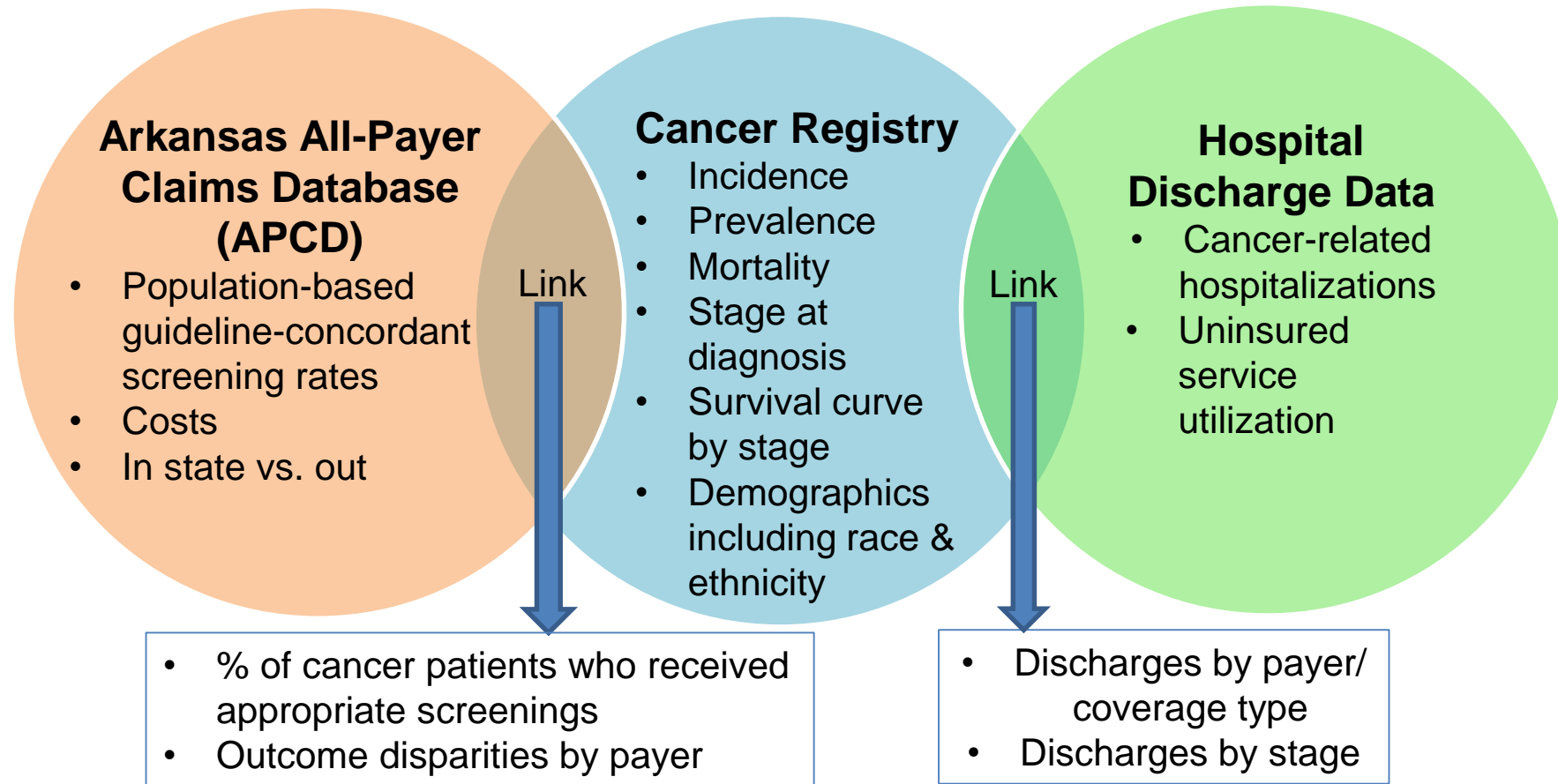
- Use SE_ID when connecting enrollees within a carrier/payer
- Use STUDY_ID when connecting enrollees across carriers/payers
- Use STUDY_ID when connecting enrollees to individuals across claims-based-data and non-claims-based-data
- Use STUDY_ID when connecting enrollees within a carrier/payer when grouped by key data that represent a single enrollee
 - e.g. service dates, procedures, diagnoses, but different SE_IDs are present
- Use SE_ID when connecting enrollees within a carrier/payer when grouped by key data that represent a single enrollee
 - e.g. service dates, procedures, diagnoses, but different STUDY_IDs are present

Methodologies for Using Cancer Data for Colorectal Cancer and Other Screenings

ACHI Cancer Analyses Overview

- Objective is to assess statewide incidence, prevalence, stage at diagnosis, mortality, and guideline concordant screenings
- Primary data sources are the Arkansas Department of Health Cancer Registry and the Arkansas APCD
- Analyses will focus on some of the most prevalent cancer types including breast, lung/bronchus, colorectal, prostate, and cervical

Cancer analysis data sources, potential linkages, and outcomes of interest



Example: Arkansas Colorectal Cancer Incidence by Age, 2017

Age	Count
0-29	7
30-39	33
40-49	124
50-59	286
60-69	433
70-79	368
80+	267
TOTAL	1,518

Example: Colorectal Cancer Screening Utilization, Patient Ages 50–75, 2017

Measure	
Study population (Commercial, Medicaid, and Medicare, continuously enrolled)	467,925
Patients with a stool-based test	23,182 (5%)
Proportion of patients who had a stool-based test with a colonoscopy within 6 months	2,673 (12%)

- Analysis was done in context of updated policies recommending colorectal cancer screenings for 45–49 year old individuals, including stool-based at-home tests

Key Considerations When Using Cancer Registry Data

- Cancer registry lists by tumor or incidence, not by individual
- When identifying patients with cancer of interest, SEER Recode variable should be used
- Lastdate is either date of death, or last date seen for cancer related follow-up
 - For survival analysis, use last date and cause of death to determine if patient has passed

Key Considerations When Using Cancer Registry Data (continued)

- For staging (stage of cancer), use:
 - For dx in 2004–2015, use devss2000 (Derived SEER Summary Stage 2000)
 - For dx in 2001–2003 and 2016–2017, use summarystg00 (SEER Summary Stage 2000)
 - For dx in 2018+ use summarystg17 (SEER Summary Stage 2018)
- To determine prevalence, we use a 5-year period of time for each year in question
- Age-weighting can be done on incidence using U.S. standard population

Relevant sources

- Cancer registry data dictionary: http://vic-sql01/Reports/report/HDI_SSRS_Rpt/TABLE_DD
- NAACR registry info (identifying fields in cancer registry): <http://datadictionary.naaccr.org/default.aspx?c=10&Version=21>
- Stage descriptions (see previous): <https://seer.cancer.gov/tools/staging/eod/general-instructions.pdf>
- SEER Recodes: https://seer.cancer.gov/siterecode/icdo3_dwhocheme/index.html
- 2000 U.S. Standard Million for age-weighting: <https://seer.cancer.gov/stdpopulations/stdpop.19ages.html>

Latest APCD Release Information and Data Tips

Release Information

- Available APCD data
 - Current APCD Data: Jan. 1, 2013, through December 31, 2020
 - Release Notes available [here](#):
 - Overall coverage dates
 - Source-specific release notes (problematic submitting entities)
 - Inclusion of previously omitted submitters



**Always check the Arkansas APCD
Data Issues and Tips page for the
latest information!**

Data Tips

- Utilize searchable Arkansas APCD [data dictionaries](#) & [tip sheets](#)
- Highlights (be sure to review them all!):
 - Resolved Issues
 - [Issue 0022: Subscriber DOB and Age for 99HSM1](#)
 - [Issue 0016: APCD Unique IDs \(United\)](#)
 - [Issue 0020: Problematic APCD Unique ID Values in 67369D \(Cigna Webster Dental\)](#)
 - Featured Tips/Issues
 - [Tip 0087: Inpatient and Institutional Definition Expansion](#)
 - [Issue 0080: Delta Dental Open Enrollment Segments](#)
 - [Tip 0093: Identifying Duplicate Claims across Carriers](#)

APCD Technical Support

- Reach out to adrs@achiapcd.atlassian.net for questions about data requests, data use, or pricing
- For general requests, use support@achiapcd.atlassian.net.
- Something special!
 - If you are interested in a one-on-one meeting with the Arkansas APCD team, reach out to us through our technical support email above

Call to Action

- Sign up for ACHI Newsletter
- Follow on social media: ACHI and the Arkansas Healthcare Transparency Initiative featuring the Arkansas APCD



- Check out the blog posts on ACHI website
- Next users group meeting: January 26, 2022

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