

# The Arkansas All-Payer Claims Database (APCD) Data Validation Reporting



All-Payer Claims  
Database

December, 2017

ADMINISTERED BY **ACHI**  
ARKANSAS CENTER FOR HEALTH IMPROVEMENT

# Introduction

This packet contains information for submitting entities (SEs) introducing the **data validation summary** and **detail reporting** provided with each data submission.

# About ACHI

- The Arkansas Center for Health Improvement (ACHI) is a nonpartisan, independent health policy center dedicated to improving the health of Arkansans
- Established in 1998, creating a much needed intersection between research and policy
- ACHI has proven experience in the management and integration of health data to support research and health policy

# ACHI's Mission, Vision & Values

## Mission Statement

To be a catalyst for improving the health of Arkansans through evidence-based research, public issue advocacy, and collaborative program development.

## Vision Statement

To be a trusted health policy leader committed to innovations that improve the health of Arkansans.

## Core Values

Trust, Innovation, Initiative, Commitment

# ACHI Major Accomplishments

Year	Accomplishment
2000	Tobacco Settlement Proceeds Act
2003	Act 1035 of 2003 – Arkansas Health Data Initiative (HDI)
2006	ARHealth Networks established
2006	Act 8 of 2006 - Clean Indoor Air Act
2009	Act 180 of 2009 - Tobacco Excise Tax
2009	Act 394 of 2009 - Graduated Driver License regulations
2009	Act 308 of 2009 - Primary Seat Belt Law
2010	Establishment of the Office of Health Information Technology (OHIT) and State Health Alliance Records Exchange (SHARE)

# ACHI Major Accomplishments

## *continued*

Year	Accomplishment
2011	Act 197 Of 2011 – Fluoridated Drinking Water
2011 – Present	Multi-payer Arkansas Health Care Payment Improvement Initiative (ACHPII)
2012	Arkansas Workforce Strategic Plan
2013 – present	State Innovation Model – Population Health
2013 – present	Arkansas Health Care Independence Program and Health Insurance Marketplace
2015	Act 1233 of 2015 – Arkansas Healthcare Transparency Initiative

# What Will Be Submitted?

Submitting entities must provide the following data categories unless granted an exemption:

- Member Enrollment data
  - Unique identifiers (no personal identifiers)
  - Demographic and geographic information
- Medical claims
- Pharmacy claims
- Dental claims
- Provider data
- Control Counts
- Look-up tables

# Arkansas Insurance Department (AID) Rule 100\*

- Further defines covered individual thresholds for submitting entities
- Describes test data and historical files
- Provides exemption process for submitting entities
- References the Data Submission Guide (DSG) for technical specifications
- Provides phased data submission timeline
- Defines DSG change process

*\* “Rule 100, page XI: Arkansas Healthcare Transparency Initiative Standards” issued pursuant to Act 1233 of 2015 of the Arkansas 90th General Assembly.*



# DATA VALIDATION REPORTING

# Data Validation Levels

- Submitted data is evaluated through two data validation levels
  - Level 1: Data Intake Confirmation
    - Filename requirements and contents
    - Encryption and signature validation
    - File layouts – header and trailer record checks
    - Number of files per submission
    - Record and column counts
  - Level 2: Field Level Validation
    - Executed after data file passes Level 1
    - Produces Data Validation Summary and Detail Reports

*Instructions in this package focus on Level 2 only.*

# Data Validation Report Types

- Two data validation reports will be produced for every file submitted
  - Data Validation Summary Report
    - Provided in Microsoft Excel format
    - Includes data type, length, value validation results
    - Provides field level pass/fail indicators
    - Provides file level pass/fail indicators
  - Data Validation Detail Report
    - Provided in pipe delimited .dat text file
    - Includes 1000 examples of each data issues. Examples are not mutually exclusive – a field can be represented multiple times if more than one issues exists
    - Includes data element ID, file row number, and error descriptions

# Data Validation Pass/Fail Criteria

- A submitted file is failed at the file level if any one required field fails validation
- A field will fail validation if the data type, data length, data value, data dependency, OR when threshold criteria are not met
- Threshold criteria are evaluated after data exception requests
- Optional fields are evaluated though not included in the file failure criteria

# Data Validation Report Delivery

- Data validation reports are provided via the submitting entity's Web Portal
- Data Validation Summary and Detail reports are provided in two encrypted zipped packages
- The zipped packages are encrypted with the submitting entity's public RSA key for data delivery and signed with the ARAPCD\_DSA Private Key. A detached signature file is included for verification
- Upon delivery, the submitting entity can download, unzip, and decrypt the data validation report packages for review



# Data Validation Report Delivery

- Data validation report file naming convention (after decryption)
  - Summary Reports
    - *ARAPCD\_99999\_TEST\_201511230\_201511\_01\_01\_ELG\_DV\_Summary.xlsx*
  - Detail Reports
    - *ARAPCD\_99999\_TEST\_201511230\_201511\_01\_01\_ELG\_DV\_Detail.dat*



# How to Read The Validation Reports

- Identify the data elements (by data element ID) that failed in the APCD Summary Validation reports
- Find the all rows with the failed data element ID in the Arkansas APCD Detail Validation file
- Address the identified issues in the submitted data and resubmit the data file
- If you are unable to resolve the data quality issues, file an exception with the Arkansas APCD team. If accepted, we will turn off the requirements for those fields for your entity code so your files can pass



# DATA VALIDATION SUMMARY REPORT



# Data Validation Summary Report



## Data Validation Summary Report

Entity Code	99999
Payer Name	ACHI Test Entity
File Name	ARAPCD_99999_TEST_20170130_201511_01_01_CLM_20170130_120107.dat
Data Source	Medical Claims Data
Record Count	108779
Coverage Period	11/1/2015 - 11/30/2015
DSG Version	4.1.2015
Environment	Production
FileLogId	6307
FileLogDate	1/30/2017 12:01:15 PM
DV Processed Date	1/30/2017 12:15:38 PM
Data Validation Result	<b>FAIL</b>

Data Element ID	Data Element Name	Data Type Failures	Data Length Failures	Data Value Failures	Dependency Check Failures	Dependency Flag	Failed Dependency Non Empty	Optional Column Flag	Total Records For Calculation	Total Unique Records Failed	Required Threshold	Calculated Threshold	Data Validation Result
MC999	UniqueRowId	0	0	2	0	False	0	Required	108779	2	100.000000	99.998161	Fail
MC001	Submitter	0	0	0	0	False	0	Required	108779	0	100.000000	100.000000	Pass
MC002	NationalPlanId	108779	108779	0	0	False	0	Optional	108779	108779	0.000000	0.000000	Pass
MC003	InsuranceType/ProductCode	0	0	0	0	False	0	Required	108779	0	98.000000	100.000000	Pass
MC004	PayerClaimControlNumber	0	0	0	0	False	0	Required	108779	0	99.000000	100.000000	Pass



# Data Validation Summary Report

## Header Definitions

Header Field	Definition
Entity Code	Code assigned by Arkansas APCD representing the submitting entity
Payer Name	Submitting Entity Name
File Name	Name of submitted file represented in the Data Validation reporting
Data Source	Submitted File Category Values: <div style="display: flex; justify-content: space-around;"> <span>Member Eligibility Data</span> <span>Dental Claims Data</span> </div> <div style="display: flex; justify-content: space-around;"> <span>Medical Claims Data</span> <span>Provider Data</span> </div> <div style="display: flex; justify-content: space-around;"> <span>Pharmacy Claims Data</span> </div>
Record Count	Count of data detail (DD) records on the file, not including headers and trailers
DSG Version	Current DSG version used for validation
FileLogID	Internal flag representing submission
FileLogDate	Date data file was picked up from SFTP site
ETL Complete Date	Date data validation was complete
Data Validation Result	Overall data validation result

# Data Validation Summary

## Report Definitions

Report Field	Definition
Data Element ID	Identifying number from Arkansas APCD Data Submission Guide (DSG) representing the field
Data Element ID Name	Name/high level descriptor of field from Arkansas APCD DSG
Data Type Failures	Number of rows failing because the field (represented by the Data Element ID) was not in the correct data type required in the Arkansas APCD DSG
Data Length Failures	Number of rows failing because the field (represented by the Data Element ID) did not have the length required in the Arkansas APCD DSG
Data Value Failures	Number of rows failing because the field (represented by the Data Element ID) did not have the data values required in the Arkansas APCD DSG.
Dependency Check Failures	Number of rows failing because the field (represented by the Data Element ID) was not calculated with the dependencies required in the Arkansas APCD DSG. If value is -1, dependency check has not been applied (for testing purposes only)
Dependency Flag	Indicates if a dependency is required for the data element. Values: TRUE – a dependency is required FALSE – no dependency is required

# Data Validation Summary Report Definitions, Cont.

Report Field	Definition
Failed Dependency Non Empty	Data should not be contained in a data element if the dependency criteria is not met. This quantity represents the unique number of records that did not meet the defined dependency but contained data.
Optional Column Flag	Indicates if the data element was optional or required. Values: Required – field is required Optional – field is optional
Total Records for Calculation	Total number of records in submitted file. This will match the total data detail (DD) record count
Total Unique Records Failed	The number of records failing validation.
Required Threshold	Indicates data coverage threshold required in Arkansas APCD DSG and after exceptions. Optional fields are not measured by using this field.
Calculated Threshold	Indicates data coverage threshold found in field based on the following algorithm: $(\text{Total Records for Calculation} - \text{Total Unique Records Failed}) / (\text{Total Records for Calculation})$
Data Validation Results	Indicates if field passed or failed data validation.  Values: PASS FAIL

# DATA VALIDATION DETAIL REPORT

# Data Validation Detail Report Example

## Detail Report Content Example Exported into Excel

recKey	RowNumber	EntityCode	PayerName	DataSource	FileName	DataElementID	DataElementName	DataValue	FailedCheck
1	1	99999	ACHI Test Entity	Member Eligibility Data	ARAPCD_99999_TEST_20151230_201511_01_01_ELG.dat	ME002	NationalPlanId		Optional Column Failed DataLength Validation Check. Maximum Field Length is 30 characters.
2	2	99999	ACHI Test Entity	Member Eligibility Data	ARAPCD_99999_TEST_20151230_201511_01_01_ELG.dat	ME012	IndividualRelationshipCode	02	REQUIRED Column Failed DataValue Validation Check. The expected DataValue was not found in the Lookup Reference.
3	3	99999	ACHI Test Entity	Member Eligibility Data	ARAPCD_99999_TEST_20151230_201511_01_01_ELG.dat	ME017	MemberZipCode	720320001	REQUIRED Column Failed DataLength Validation Check. Required Fixed Field Length is 5 characters.

## Provided Format - Pipe Delimited .dat File

```

recKey|RowNumber|EntityCode|PayerName|DataSource|FileName|DataElementID|DataElementName|DataValue|FailedCheck|DateTimeStamp
1|1|99999|ACHI Test Entity|Member Eligibility Data|ARAPCD_99999_TEST_20151230_201511_01_01_ELG.dat|ME002|NationalPlanId||Optional Column Failed DataLength Validation Check. Maximum Field Length is 30 characters.|3/9/2016 9:30
2|2|99999|ACHI Test Entity|Member Eligibility Data|ARAPCD_99999_TEST_20151230_201511_01_01_ELG.dat|ME012|IndividualRelationshipCode|02|REQUIRED Column Failed DataValue Validation Check. The expected DataValue was not found in the Lookup Reference.|3/9/2016 9:30
3|3|99999|ACHI Test Entity|Member Eligibility Data|ARAPCD_99999_TEST_20151230_201511_01_01_ELG.dat|ME017|MemberZipCode|720320001|REQUIRED Column Failed DataLength Validation Check. Required Fixed Field Length is 5 characters.|3/9/2016 9:30

```

*Note, optional fields are included as failures though they do not count against the overall file status. They are identified as Optional in the FailedCheck column*

# Data Validation Detail Report Definitions

Report Field	Definition
reckKey	Row Number of Data Validation Detail Report File
RowNumber	Source data row upon which the data validation error occurred
EntityCode	Code assigned by Arkansas APCD representing the submitting entity
PayerName	Submitting Entity Name
DataSource	Submitted File Category Values: <div style="display: flex; justify-content: space-around;"> <div style="text-align: left;"> <p>Member Eligibility Data</p> <p>Medical Claims Data</p> <p>Pharmacy Claims Data</p> </div> <div style="text-align: left;"> <p>Dental Claims Data</p> <p>Provider Data</p> </div> </div>
FileName	Name of submitted file represented in the Data Validation reporting
DataElementID	Identifying number from Arkansas APCD Data Submission Guide (DSG) representing the field
DataElementName	Name/high level descriptor of field from Arkansas APCD DSG
DataValue	Field value failing data validation check
FailedCheck	Data validation description
DateTimeStamp	Date and time validation report was processed

# Web Portal File Retrieval



# APCD Website Homepage



Arkansas All-Payer Claims Database

Administered by



With support from the  
Arkansas Insurance Department  
Health Insurance Rate Review Division

Home

Reports & Maps

Resources

Governance

Web Portal

About the APCD

Search this website

Search

## Welcome to the Arkansas All-Payer Claims Database (APCD)

There is a growing demand and need for transparency of healthcare information in Arkansas to promote high-value care and advance research. Consumers, employers, and policymakers are advocating for greater reporting on the prices of healthcare services as a way to encourage consumers to choose low-cost, high-quality providers and to promote competition based on value. The Arkansas All-Payer Claims Database (APCD) is a dynamic tool that will enable the state to further its transparency objectives by collecting healthcare data from public and private sources and empowering Arkansans with information to better understand how and where healthcare is being delivered and how much is being spent. Please see the "How to Use the APCD Website" box below to learn how to navigate the Arkansas APCD website.

### What's New?

- Click here for a [current status](#) on the Arkansas APCD

### Reports and Maps

Click below to view initial reporting available from the Arkansas APCD.

[Start Here!](#)

### Proposed Rule and Data Submission Guide

- Check out the new [Act 1233, AID Proposed Rule 100](#)
- Check out the new APCD [Data Submission Guide](#)

### Data Submitters and Data Requesters

Click below to access the Arkansas APCD Web Portal.

[Start Here!](#)

### How to Use APCD Website

Below is a summary of the tabs listed at the top of the Arkansas APCD page, each representing different content areas of the website:

- Visit the [Reports and Maps](#) to view reports on the price and utilization of select procedures
- Visit the [Resources](#) find additional information on healthcare transparency efforts in Arkansas and the national-level
- Visit the [Governance](#) to learn more about Arkansas APCD oversight and governing authority
- Visit the [About the APCD](#) to find out more about the Arkansas APCD project, including contact information, [frequently asked questions](#), a listing of data sources and more

### Health Care System Transparency

The Arkansas APCD is an exciting initiative that builds upon increased efforts at health care system transparency in Arkansas. Click here to read the latest [issue brief](#) on health care data transparency and click here to see additional resources on transparency efforts at the state and national-level.



# User Name and Password



Arkansas All-Payer Claims Database

Administered by  
**ACHI**

With support from the  
Arkansas Insurance Department  
Health Insurance Rate Review Division

Home Reports & Maps Resources Governance **Web Portal** About the APCD

Search this website Search

[Home](#) / [Web Portal](#)

## Web Portal: Data Submitter and Data Requester Access

The Arkansas All-Payer Claims Database (APCD) Web Portal provides authorized, secure access for data submission and data release.

### Signing up for a Web Portal Account

To request an account, please contact [APCD Technical Support](#).

To submit an online technical support question, please [fill out our online contact form](#), and somebody from our technical support team will reach out to you within 48 business hours.

### Log into the Web Portal

User Name:

Password:

Log In

Forgot your password? [Click here](#)

© 2015 Arkansas Center for Health Improvement (ACHI), 1401 West Capitol Avenue, Suite 300, Little Rock, AR 72201  
achiapcd@uams.edu | 501-526-2252 (fax)  
[Contact Us](#) | [Terms of Use](#) | [Privacy Policy](#)



# Web Portal Dashboard

Upon logging into the Web Portal, users will be directed to the *Web Portal Dashboard*. Within this page, users may access the following tabs:

- Upload Files
- Retrieve Files
- Account History
- Technical Support

# Web Portal Setup

## Account Overview



Arkansas All-Payer Claims Database

Administered by



With support from the  
Arkansas Insurance Department  
Health Insurance Rate Review Division

Home Reports & Maps Resources Governance **Web Portal** About the APCD

Search this website Search

Home / [Web Portal](#) / Web Portal Dashboard

### Web Portal: Dashboard

Welcome to the Arkansas All-Payer Claims Database (APCD) Web Portal Dashboard! [Click here](#) to log out.



**Account Overview**

**Organization**  
ACHI Test Entity  
**Entity Code**  
99999  
**Account Type**  
Submitter  
**Contact Email**  
  
**Contact Phone**  
:

#### Account Notifications

You have 22 files that are now available for download that have not yet been downloaded. These files will be available until 3/21/2016. Please download these files as soon as possible by visiting the [Retrieve Files](#) tab.

Upload Files Retrieve Files Account History **Technical Support**

If you have new .ZIP files to upload on behalf of your organization, please add them here, and then click the 'Upload File(s)' button. Note that ONLY .ZIP files will be accepted.

Please choose which .ZIP files you'd like to upload:

© 2016 Arkansas Center for Health Improvement (ACHI), 1401 West Capitol Avenue, Suite 300, Little Rock, AR 72201  
arapcd@uams.edu | 501-526-4306 (phone) | 501-526-2252 (fax)  
[Contact Us](#) | [Terms of Use](#) | [Privacy Policy](#)



# Web Portal Setup

## Account Overview

Under the *Account Overview* on the left side of every page, users will be able to see the following entity-specific information:

- Organization: Submitting entity (SE)
- Entity Code: NAIC Company Code
- SFTP Account: SFTP path associated per SE Code
- Account Type: Automated to reflect SE
- Contact Email: Email for SE personnel
- Contact Phone: Phone number for SE personnel

# Web Portal Setup

## Retrieve Files

Under the *Retrieve Files* tab, users will be able to retrieve and view files produced by the APCD.

- Data Validation Reporting
- Other files uploaded from APCD to the SE

# Web Portal Setup

## Retrieve Files



Arkansas All-Payer Claims Database

Administered by  
**ACHI**

With support from the  
Arkansas Insurance Department  
Health Insurance Rate Review Division

Home Reports & Maps Resources Governance **Web Portal** About the APCD

Search this website

Home / [Web Portal](#) / Web Portal Dashboard

### Web Portal: Dashboard

Welcome to the Arkansas All-Payer Claims Database (APCD) Web Portal Dashboard! [Click here](#) to log out.

**Account Overview**

Organization  
ACHI Test Entity  
Entity Code  
99999  
Account Type  
Submitter  
Contact Email

Contact Phone

#### Account Notifications

You have 10 files that are now available for download that have not yet been downloaded. These files will be available until 3/21/2016. Please download these files as soon as possible by visiting the [Retrieve Files](#) tab.

[Upload Files](#) **Retrieve Files** [Account History](#) [Technical Support](#)

Any files that have been prepared for you by the Arkansas APCD will be available for you to retrieve here.

Uploaded File	Available Downloads
ARAPCD_99999_TEST_20151230_201511_01_01_CLM_DV Uploaded on 3/7/2016 Expires on 3/21/2016	<input type="button" value="Summary File"/> Not downloaded <input type="button" value="Detail File"/> Not downloaded
ARAPCD_99999_TEST_20151230_201511_01_01_DNT_DV Uploaded on 3/7/2016 Expires on 3/21/2016	<input type="button" value="Summary File"/> Not downloaded <input type="button" value="Detail File"/> Not downloaded
ARAPCD_99999_TEST_20151230_201511_01_01_ELG_DV Uploaded on 3/7/2016 Expires on 3/21/2016	<input type="button" value="Summary File"/> Not downloaded <input type="button" value="Detail File"/> Not downloaded
ARAPCD_99999_TEST_20151230_201511_01_01_PHM_DV Uploaded on 3/7/2016 Expires on 3/21/2016	<input type="button" value="Summary File"/> Not downloaded <input type="button" value="Detail File"/> Not downloaded
ARAPCD_99999_TEST_20151230_201511_01_01_PRIV_DV Uploaded on 3/7/2016 Expires on 3/21/2016	<input type="button" value="Summary File"/> Not downloaded

Detail file button will not display if the file passes





# Web Portal Setup

## Notifications

Above the tabs will appear any *Notifications* related to the Retrieve Files tab.

- Count of new files available for download that have not been downloaded and their newest expiration date
- Technical Support contact information changes
- Technical Support phone number changes
- Technical Support email address changes
- APCD web portal changes



# Web Portal Setup

## Account History

Under the *Account History* tab, users will be able to view detailed information regarding their specific accounts.

Actions listed include:

- Successful login to the APCD Web Portal
- File Successfully Uploaded (with name of file)
- Verification of Technical Support Request submission