



CAIR2 Health Plan HEDIS/Patient Match Flat File Specification

(for Health Plans, Medical Groups, IPAs only)

Last Updated: April 11, 2018

Note: The file specifications outlined in this document have not been finalized or implemented so this document is provided to HPs for planning purposes only.

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CAIR2 HEDIS/Patient Match Flat File Specification

Introduction

Thank you for your interest in exchanging electronic data with the California Immunization Registry (CAIR2). CAIR2 allows health plans, medical groups, or independent practice associations to run patient match queries directly in the CAIR2 user interface. For simplicity's sake, the CAIR2 user role that will be able to run patient match queries for health plans, medical groups or independent practice associations or will be called the 'Health Plan' (from now on abbreviated 'HP') user role.

A first step in the patient query process is for the HP user to login to the CAIR2 HP account and load a patient demographic data file containing patient demographic information along with a HP Member ID into CAIR2 (see **Patient File** below). This first step assigns your HP Member ID to a matching CAIR2 patient. To run a patient match query and return vaccinations, a HP user would then upload a **Query File**. How these files need to be formatted is discussed below.

Disclosure

Please note that the immunization registry statute in CA requires that enrollees whose information will be submitted to CAIR2 must be first disclosed. Therefore, HPs that plan to submit enrollee data to CAIR2 must have a process in place that assures only disclosed patient information will be submitted to CAIR2. If HPs are unsure of the disclosure status of their members, they will need to exclude such enrollees from any HP data submissions.

Data Formats Accepted

CAIR2 accepts fixed length flat text files formatted as described below. Please share this document with your technical staff.

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Flat Files Defined

A fixed length flat file stores data in a plain text file. Each line of the text file holds one record, with each field being a predetermined fixed length. CAIR2 only accepts fixed length text files that specifically follow these specifications.

A fixed record length file is one where each record is the same length, and each field is also a fixed length. In exporting from your electronic system, padding will be needed to achieve this.

For example, the first two records of a file with First and Last Name fields in a flat file might look like this (do not use ** in the file submitted to CAIR2):

```
John****Doe*****  
Roger***Smith*****
```

Note: **The asterisk (*) is used to represent a space.** Please do not use asterisk in files sent to CAIR2.

The patient query process in CAIR2 involves the sequential submission of two different files - first a **Patient File**, then a **Query File**:

1. **Patient File**: The *Patient File* contains member demographic information and a unique **HP Member ID** for each patient. Matching enrollees found in CAIR2 are assigned the **HP Member ID** and any non-matched enrollees in the *Patient File* are added to CAIR2 as new patients along with their associated **HP Member ID**. Note: this **HP Member ID** is specific to your CAIR2 HP account and is not viewable by other CAIR2 users.
2. **Query File**: This file initiates a patient match query that retrieves immunization histories for any matching HP enrollees in CAIR2.

Data Completeness

Because multiple demographic fields are used by the patient matching algorithm in CAIR2, the patient matching process in CAIR2 works best when more demographic fields are sent in the **Patient File**. HPs should send as many of the requested fields as possible to assure that the correct patient is matched. Besides First, Middle, Last Names, Date of Birth and Gender, additional important member fields to send to assure the best chance of matching are **patient address, mother's first, and mother's maiden name**.

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Field Order and Format Requirements

The following tables describe the fields to include in each of the flat files discussed. Files need to be generated using the American Standard Code for Information Interchange (ASCII) character set. ASCII is a character-encoding scheme based on the ordering of the English alphabet. Special characters should not be included in names. Each line of data needs to be terminated with a carriage return/line feed.

Each table contains Column, Data Type, Pos #, R/SE, Default and Notes information.

- *Column*: The name of the data element.
- *Data length*: Each field's data should be left-justified and padded with blanks to the specified length. If the data in a field is numeric (e.g., dates, zip-code, telephone number, SSN, CVX code) only numeric digits should be entered and padded with blanks as needed.
- *Pos #*: The position of the start of the field in the flat file.
- *R/SE*: R = Required field. SE = Strongly Encouraged field. (see above)
- *Default*: Default value that will appear in CAIR2 if the field is blank.
- *Notes*: Description of the column and code sets to use (where applicable).

Character Fields

These fields must be left justified and padded with blanks to reach the field length specified.

Date Fields

Dates must be entered in this format: MMDDYYYY with leading zeroes (e.g., 01012001).

Null Values

All fields must be present in the flat file with the specified length. If a site is unable to supply information for a specified field, the entire field must be padded with blanks.

CAIR2 recommends submitting as many of the elements listed below for maximum completeness. At a minimum, fields identified with an 'R' in the 'R/SE' column must be submitted for CAIR2 to process the file.

CAIR2 Flat File Transfer Specification

Patient File

Column	Data Length	Pos #	R/SE	Default	Notes
Record Identifier	32	1	R		HP Member ID
Patient Status	1	33	R	'A'	Set to 'A' for 'Active'
First Name	50	34	R		Note: Enrollees with no first name or who have special characters within the name will cause entire patient record not to import. Therefore, please remove or substitute for any special characters.
Middle Name	50	84	SE		
Last Name	50	134	R		Enrollees with no last name or who have special characters within the name will cause entire patient record not to import. Therefore, please remove or substitute for any special characters.
Name Suffix	10	184			JR, III, etc.
Birth Date	8	194	R		MMDDYYYY
Death Date	8	202			MMDDYYYY
Mother's First Name	50	210	SE		
Mother's Maiden Last Name	50	260	SE		
Mother's HBsAg Status	1	310			See code set for Mother's HBsAg Status .
Sex (Gender)	1	311	SE		See code set for Sex (Gender) .
American Indian or Alaska Native	1	312			'Y' if Yes
Asian	1	313			'Y' if Yes
Native Hawaiian or Other Pacific Islander	1	314			'Y' if Yes
Black or African-American	1	315			'Y' if Yes
White	1	316			'Y' if Yes
Other Race	1	317			'Y' if Yes
Ethnicity	2	318			See code set for Ethnicity .
Social Security Number	9	320			Leave blank
Contact Allowed	2	329		02	Controls whether notices can be sent. Use the code set for Contact . If <null> default to '02' - contact allowed.
HP Member ID	32	331	SE		HP Member ID. This ID is assigned to the matching patient for use in queries and can be used to find the patient in the user interface.
Medi-Cal ID	20	363	SE		

CAIR2 Flat File Transfer Specification

Column	Data Length	Pos #	R/SE	Default	Notes
Patient's Responsible Party First Name	50	383			Responsible party would be a parent or guardian or someone responsible for the care of this patient.
Responsible Party Middle Name	50	433			
Responsible Party Last Name	50	483			
Responsible Party Relationship	3	533			See code set for Relationship to the patient.
Street Address Line	55	536	SE		Patient primary address information (i.e. 100 TAFT ST.)
Other Address Line	55	591			Secondary address information (i.e. APT 104, STE 530)
PO Box Route Line	55	646			If patient has PO Box mailing address, enter here.
City	52	701	SE		
State	2	753	SE		2 character state abbreviation, e.g. 'CA'
Zip Code	9	755	SE		5 or 9 digits without separators (padded with blanks if 5) ex. 97123**** or 971235678.
County	5	764			See code set for County .
Phone	17	769	SE		Format as digits only starting with the area code, ex. 6081234567. Extension up to 7 digits allowed.
Sending Organization	12	786	R		This is your HP CAIR2 Org Code .
Has Patient Been Disclosed?	1	798	R		Has Patient been disclosed? Must be 'Y'
Disclosed Date	8	799	R		Date Format: MMDDYYYY
Disclosed By	12	807	R		Acceptable Values: HP CAIR2 Org Code or Other CAIR2 Org Code
Sharing Status	1	819	R		Has Patient agreed to share? Default to 'Y'
Effective Date	8	820	R		Date Format: MMDDYYYY. Use same date as disclosure above.
Updated By	12	828	R		Acceptable Values: HP CAIR2 Org Code or Other CAIR2 Org Code
Filler (required or file will fail)	37	840	R		Filler (required or file will fail)
Total	877				

CAIR2 Flat File Transfer Specification

Query File (input, required for HEDIS patient match report)

Column	Data Length	Pos #	R/SE	Notes
Patient Type	1	1	R	'C' for Commercial, 'M' for Medicaid
HP Member ID	32	2	R	Used to identify HP member during query.
First Name	50	34	R	
Middle Name	50	84	SE	
Last Name	50	134	R	
Birth Date	8	184	R	MMDDYYYY
Total	192			

Query Output Files

Returns two txt files:

Patient Return File

Column	Data Length	Pos #
Record Identifier	32	1
First Name	50	33
Middle Name	50	83
Last Name	50	133
Birth Date	8	183
Total	191	

Immunization Return File

Column	Data Type	Begin Pos #
Record Identifier	32	1
CPT Code	5	33
Vaccine Group	16	38
Vaccine Date Administered	8	54
Total	62	

CAIR2 Flat File Transfer Specification

File Examples

As mentioned previously, each patient records need to be blank filled (i.e., data is left-justified and field is padded with spaces on the right up to the required field length). In the following example, **blanks are represented with the '*' character for illustrative purposes.**

Patient File (example record)

This Information:

Record Identifier:	17727736
Status Active:	A
Name (F, M, L):	Courtney Lee Brown
Birth Date:	9/10/1994
Maiden Name:	Anne Green
HbsAg Status:	Positive
Gender:	Female
Race:	White
Ethnicity:	Not Hispanic
SSN:	(do not send)
Contact Allowed:	Yes
HP Member ID:	ACME33321
Medicaid ID:	MEDID11011
Responsible Party Name (F, M, L):	Tim Daniel Brown
Relationship:	Father
Address:	1234 Test Street, Apt 491 Richmond, CA 94801
PO Box:	PO Box 740
County:	Contra Costa
Phone:	5105555555
Sending Org:	ACMEHP
Disclosed?:	Y
Disclosed Date:	9/10/1994
Disclosed By:	ACMEHP
Sharing Status:	Y
Sharing Date:	9/10/1994
Updated By:	ACMEHP

Results in the following Patient record:

```
17727736*****ACOURTNEY*****
*LEE*****BROWN*****
*****09101994*****ANNE*****
*****GREEN*****3F***Y*NH11122333302AC
ME33321*****MEDID11011*****TIM*****
*****DANIEL*****BROWN****
*****FTH1234*Test*Street*****
*****Apt*491*****PO*Box*740***
*****RICHMOND*****
*****CA94804***CA013510555555*****ACMEHP*****Y09101994ACMEHP*****Y091
01994ACMEHP*****
```

Query Input File (example record)

This Information:

Record ID (HP Member ID):	ACME33321
First Name:	Courtney
Middle Name:	Lee

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Last Name: Brown
Birth Date: 9/10/1994

Results in the following Query File Record:

ACME33321*****COURTNEY*****
LEE*****BROWN*****
*****09101994

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CAIR2 Code Sets

Table Item	Code	Description
Contact	01	No Contact Allowed – Notices are not to be sent.
	02	Contact Allowed – Notices will be sent.
County	CA001	Alameda
	CA003	Alpine
	CA005	Amador
	CA007	Butte
	CA009	Calaveras
	CA011	Colusa
	CA013	Contra Costa
	CA015	Del Norte
	CA017	El Dorado
	CA019	Fresno
	CA021	Glenn
	CA023	Humboldt
	CA025	Imperial
	CA027	Inyo
	CA029	Kern
	CA031	Kings
	CA033	Lake
	CA035	Lassen
	CA037	Los Angeles
	CA039	Madera
	CA041	Marin
	CA043	Mariposa
	CA045	Mendocino
	CA047	Merced
	CA049	Modoc
	CA051	Mono
	CA053	Monterey
	CA055	Napa
	CA057	Nevada
	CA059	Orange
	CA061	Placer
	CA063	Plumas
	CA065	Riverside
	CA067	Sacramento
	CA069	San Benito
	CA071	San Bernardino
	CA073	San Diego
	CA075	San Francisco
	CA077	San Joaquin
	CA079	San Luis Obispo
	CA081	San Mateo
	CA083	Santa Barbara

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Table Item	Code	Description
	CA085	Santa Clara
	CA087	Santa Cruz
	CA089	Shasta
	CA091	Sierra
	CA093	Siskiyou
	CA095	Solano
	CA097	Sonoma
	CA099	Stanislaus
	CA101	Sutter
	CA103	Tehama
	CA105	Trinity
	CA107	Tulare
	CA109	Tuolumne
	CA111	Ventura
	CA113	Yolo
	CA115	Yuba
Ethnicity	NH	Not Hispanic or Latino
	H	Hispanic or Latino
Mother's HBsAg	1	Negative
	2	Not Screened
	3	Positive
	4	Unknown
Race	Y	American Indian or Alaska Native
	Y	Asian
	Y	Native Hawaiian or Other Pacific Islander
	Y	Black or African-American
	Y	White
	Y	Other
Relationship	ASC	Associate
	BRO	Brother
	CGV	Care giver
	CHD	Child
	DEP	Handicapped dependent
	DOM	Life partner
	EMC	Emergency contact
	EME	Employee
	EMR	Employer
	EXF	Extended family
	FCH	Foster Child
	FND	Friend
	FTH	Father
	GCH	Grandchild
	GRD	Guardian

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Table Item	Code	Description
	GRP	Grandparent
	MGR	Manager
	MTH	Mother
	NCH	Natural child
	NON	None
	OAD	Other adult
	OTH	Other
	PAR	Parent
	SCH	Stepchild
	SEL	Self
	SIB	Sibling
	SIS	Sister
	SPO	Spouse
	UNK	Unknown
	WRD	Ward of court
Sex (Gender)	F	Female
	M	Male
	U	Unknown
State Codes	AL	ALABAMA
	AK	ALASKA
	AZ	ARIZONA
	AR	ARKANSAS
	CA	CALIFORNIA
	CO	COLORADO
	CT	CONNECTICUT
	DE	DELAWARE
	DC	DISTRICT OF COLUMBIA
	FL	FLORIDA
	GA	GEORGIA
	OK	OKLAHOMA
	HI	HAWAII
	ID	IDAHO
	IL	ILLINOIS
	IN	INDIANA
	IA	IOWA
	KS	KANSAS
	KY	KENTUCKY
	LA	LOUISIANA
	ME	MAINE
	MD	MARYLAND
	MA	MASSACHUSETTS
	MI	MICHIGAN
	MN	MINNESOTA
	MS	MISSISSIPPI
	MO	MISSOURI

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Table Item	Code	Description
	MT	MONTANA
	NE	NEBRASKA
	NV	NEVADA
	NH	NEW HAMPSHIRE
	NJ	NEW JERSEY
	NM	NEW MEXICO
	NY	NEW YORK
	NC	NORTH CAROLINA
	ND	NORTH DAKOTA
	OH	OHIO
	OR	OREGON
	PA	PENNSYLVANIA
	RI	RHODE ISLAND
	SC	SOUTH CAROLINA
	SD	SOUTH DAKOTA
	TN	TENNESSEE
	TX	TEXAS
	UT	UTAH
	VA	VIRGINIA
	WA	WASHINGTON
	WV	WEST VIRGINIA
	WI	WISCONSIN
	WY	WYOMING
	AS	AMERICAN SAMOA
	FM	FEDERATED STATES OF MICRONESIA
	GU	GUAM
	MH	MARSHALL ISLANDS
	MP	NORTHERN MARIANA ISLANDS
	PW	PALAU
	PR	PUERTO RICO
	UM	US MINOR OUTLYING ISLANDS
	VI	US VIRGIN ISLANDS
	VT	VERMONT

Change History

Published / Revised Date	Version #	Author	Section / Nature of Change
7/20/2017	1.1	SNickell	First draft
8/3/2017	1.11	SNickell	Revised to fix HP Member ID definition
4/11/2018		SNickell	Final, removed add doses option