

# CHIA USER WORKGROUP

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May 28, 2024

# Agenda

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- Announcements:
  - MA APCD Release CY 2021 and CY2022 Updates
  - Update to the MA APCD Application
  - FY22 Case Mix Release Updates
  
- Website Updates
  - How to Check the Status of Your Release
  
- User Support Questions
  - Target Dates for Case Mix Data Availability
  - Cost of Data Application
  - Transfer Variable Case Mix Dataset
  - Identifying Transfer and Treatment Hospitals in Case Mix
  - Diagnosis and Procedure Codes in Case Mix
  - Deep Dive into Present on Admission Indicators
  - The Impact of Gobeille on Pharmacy and Dental Claims
  
- Q&A

# MA APCD Calendar Years 2021 and 2022

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- Available for request
- Applicants with *approved projects* that require updated MA APCD data (CY 2021 Data or CY2022) should submit to CHIA a completed Exhibit B (*Certificate of Continued Need and Compliance*) of the Data Use Agreement. After submitting a completed Exhibit B, you will receive an invoice (if applicable) for the requested data. Upon payment of the invoice the order for the data will be placed.
- **CY 2021 Data** includes medical, pharmacy, and dental claims incurred between **January 1, 2017, and December 31, 2021, and it includes six (6) months of run-out (paid claims through June 30, 2022)**. In addition to claims data, the release contains relevant reference files including member eligibility, providers, products, and benefit plans. This data encompasses public and private payers as well as fully-insured and self-insured plans. Keep in mind that due to the Supreme Court decision, *Gobeille v. Liberty Mutual*, the self-insured plans are severely reduced starting in 2016. This release also includes MassHealth Medicaid data in the MA APCD for the period of calendar years 2017-2021.

continued



# MA APCD Calendar Years 2021 and 2022 (continued)

- The new **CY 2022 Data** includes medical, pharmacy, and dental claims incurred from **January 1, 2018, through December 31, 2022, and includes six (6) months of run-out (paid claims through June 30, 2023)**. This release also includes MassHealth Medicaid data in the MA APCD for the period of calendar years 2018-2022. As with CY2021, this data encompasses public and private payers as well as fully-insured and self-insured plans. Again, keep in mind that due to the Supreme Court decision, *Gobeille v. Liberty Mutual*, the self-insured plans are severely reduced starting in 2016.
- The new CY 2022 Documentation Guide and Release Notes are available on CHIA's website for your review before using the data.  
<https://www.chiamass.gov/ma-apcd/>

MA APCD Calendar Year 2022 Documentation

- MA APCD CY 2022 Documentation Guide
- MA APCD CY 2022 Release Notes
- MA APCD Government Data Specifications Workbook
- MA APCD Non-Gvnt. Data Specifications Workbook (Limited Data Set-LDS)
- MA APCD CY 2022 MPI Data Exclusion Overview
- MA APCD Master Patient Index

# Updates to the MA APCD Application

When applying for CHIA data, always check the website to download and use the most recent version of the data request application. For example, the MA APCD application was last revised in December 2023 to update the full year date ranges available for purchase.

***See application excerpt below.***

## V. DATASETS REQUESTED

The Massachusetts All-Payer Claims Database (“APCD”) is comprised of medical, pharmacy, and dental claims and information from the member eligibility, provider, and product files that are collected from health insurance payers licensed to operate in the Commonwealth of Massachusetts. This information encompasses public and private payers as well as data from fully-insured and self-insured plans. APCD data are refreshed and updated annually and made available to approved data users. For more information about APCD Data, including available years of data and a full list of elements in the database please refer to layouts, data dictionaries and similar documentation included on [CHIA’s website](#).

Data requests are typically fulfilled on a one time basis, however; certain Projects may require future years of data that will become available in a subsequent release. Projects that anticipate a need for future years of data may request to be considered for a subscription. Approved subscriptions will receive, upon request, the same data files and data elements included in the initial Release annually or as available. Please note that approved subscription requests are subject to the Data Use Agreement, and subject to the limitation that the Data can be used only in support of the approved Project.

1. Please indicate below whether this is a one-time request, or if the described Project will require a subscription.  
 One-Time Request    **OR**     Subscription
2. CHIA is currently filling requests for claims data from 2016 to 2022. Requests made outside of these years may not be fulfilled by CHIA and will be considered on a case-by-case basis. Please specify the years of data that are being requested: \_\_\_\_\_.



# Updates to the MA APCD Application (continued)

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In addition, the December 2023 revision to MA APCD application specifies that the member ZIP code geographic data is now only released at the level of one ZIP code per person per year based on the member's ZIP code reported in the member's earliest submission year month.

***See application excerpt below.***

Exhibit A: CHIA Government All-Payer Claims Data Application

December 2023

ZIP code and state geographic subdivisions are available for Massachusetts residents and providers only. Small population ZIP codes are combined with larger population ZIP codes. One ZIP Code per person (MEID) per year has been assigned based on the ZIP code/state reported in the member eligibility record's earliest submission year month. If the record does not have an MEID, assignment is based on distinct OrgID/Carrier Specific Unique Member ID.

Non-Massachusetts ZIP codes and state codes except for CT, MA, ME, NH, NY, RI, and VT are suppressed.



# Case Mix FY2022 Release

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## \*CURRENT\* RELEASE TIMEFRAMES FOR EACH FILE:

- Hospital Inpatient Discharge Data (HIDD)

**FY2022 Now Available for Request**

- Outpatient Emergency Department Visit Data (ED)

**FY2022 Now Available for Request**

- Outpatient Observation Stay Data (OOD)

**FY2022 Now Available for Request**

- Applicants with *approved projects* using previous years data (e.g., FY 20, FY21) that require newly available year(s) of case mix data (e.g., FY 22) should submit to CHIA a completed Exhibit B (*Certificate of Continued Need and Compliance*) of the Data Use Agreement. After submitting a completed Exhibit B you will receive an invoice (if applicable) for the requested data. Upon payment of the invoice the order for the data will be placed.



continued 

# Case Mix FY2022 Release (continued)

- The Documentation Manuals and Release Notes for the FY2022 case mix data are available on CHIA's website. (<https://www.chiamass.gov/case-mix-data/> ). There have been new updates to the FY2022 ED data release notes.

### Case Mix Documentation

Hospital Inpatient Discharge Database (HIDD)

- [FY22 Documentation Manual \(PDF\)](#) | [Word](#)
- [FY22 Release Notes \(PDF\)](#) | [Word](#)

Emergency Department Database (EDD)

- [FY22 Documentation Manual \(PDF\)](#) | [Word](#)
- [FY22 Release Notes \(PDF\)](#) | [Word](#)  
(Updated 2/13/2024)

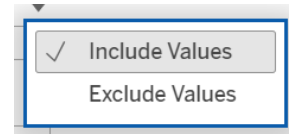
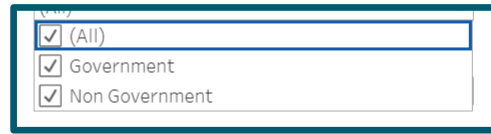
Outpatient Observation Database (OOD)

- [FY22 Documentation Manual \(PDF\)](#) | [Word](#)
- [FY22 Release Notes \(PDF\)](#) | [Word](#)



# How to Check the Status of Your Release

Visit <http://www.chiamass.gov/status-of-data-requests/> to check the status of data extracts and releases. The status website has drop down menus, as shown below, which allow you to narrow your search by request number, applicant type, and extract type.



## Status of Data Extract Requests

Request No. All, Applicant Type All, Data Type All

Priority Number	Request Number	Applicant Type	Extract Type	Status
Null	A430	Non Government	APCD	Complete
	A439	Government	APCD	Complete
1	A426	Non Government	APCD	In Process
	A427	Non Government	APCD	In Process
2	C1059	Non Government	CaseMix HDD	In Process
3	A433	Non Government	APCD	Pending
	A434	Non Government	APCD	Pending
4	C993	Non Government	CaseMix HDD	Pending
	C994	Non Government	CaseMix EDD	Pending
	C995	Non Government	CaeMix OOD	Pending
	C996	Non Government	CaseMix HDD	Pending
	C997	Non Government	CaseMix EDD	Pending
	C998	Non Government	CaeMix OOD	Pending
	C999	Non Government	CaseMix HDD	Pending
	C1000	Non Government	CaseMix EDD	Pending
	C1001	Non Government	CaeMix OOD	Pending
	C1002	Non Government	CaseMix HDD	Pending

Request Number

Applicant Type  
 (All)

Extract Type  
 (All)

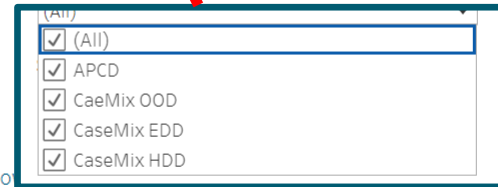
Status  
 Complete  
 In Process  
 Pending

**Instructions:**

Please use the drop down menus to narrow your data selection.

**To find a specific Data Request:**

- 1) Ensure that all field options are on "All" status



# USER QUESTIONS

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Question: When will the 2023 data be available for HIDD and EDD?

**Answer:** The FY 2023 HIDD and EDD are not available yet. The target release dates for HIDD and EDD are June 2024 and August 2024, respectively. Please see the following link for more information:

[Status of Data Requests \(chiamass.gov\)](https://www.chiamass.gov/status-of-data-requests)

Question: I just want to confirm that to obtain the data for 2022 and 2023 HIDD and EDD would cost \$100 for application fee and \$4020 correct?

**Answer:** For information about application for the case mix data, please click on the following link:

<https://www.chiamass.gov/non-government-agency-case-mix-requests/>



Question: Is there a reliable transfer variable in the dataset that is filled out for the majority of patients with meaningful data (not just filled out with "unknown") for both 2022 and 2023?

**Answer\*:**

The HIDD has a transfer variable “IdOrgTransfer” which has a record of all transfers of patients from one hospital to another. In FY 2022, the “IdOrgTransfer” variable showed that 52,689 of the 729,319 total discharges were transfers from one hospital to another. The “IdOrgTransfer” field is only populated when there is a transfer. There are no “Unknowns”.

Additionally, HIDD has the variable “AdmissionSourceCode”, which among others includes these 2 codes:

‘R’ (Transfer from within hospital) &  
‘7’ (Outside hospital ED transfer).

\* Note that the question pertains to HIDD & EDD.

Question: Can I see what hospitals each patient were seen in the ED and what hospital they were admitted to for both 2022 and 2023?

**Answer\*:** Yes, you can.

The EDD has the variable “IdOrgSite”, which is the hospital where the patient was treated, and the variable “Source Of Visit”, which shows where the patient came from, and how the patient got to the Emergency room.

The HIDD has variables “AdmissionSourceCode”, which includes codes ‘R’(Transferred from within the hospital ED) & ‘7’ (Outside hospital ED transfer), and “EDFlagCode”, which includes code ‘2’ (Admitted from the ED).

You can track the patient using the “UHIN” or “Mother’s UHIN” variable in EDD and HIDD. These are buy-ups.

\*Note that the question pertains to EDD & HIDD.



**Question:** I just want to confirm that ICD codes and CPT and billing codes are included in both the 2022 and 2023 dataset?

**Answer\*:** Yes, there are ICD Diagnosis and Procedure codes and CPT codes in the case mix dataset.

The variable “ICDIndicator” in the EDD shows if the diagnosis, Ecodes, & procedure codes are ICD-10. The EDD also has variables “ProcedureCodingType” & “PrincipalDiagnosisCode” that show the procedures and diagnosis.

Similarly, the HIDD includes the variables “ICDIndicator”, “PrimaryDiagnosisCode”, which is the ICD- 10-CM code for the patient’s condition, and “PrincipalProcedureCode”, which is the ICD 10 for the principal procedure provided the patient in the inpatient facility.

\* Please note that the question pertains to HIDD and EDD.

## Present on Admission Indicators

Question: Both the case mix hospital inpatient discharge data (HIDD) and the All-Payer Claims Data (MA APCD) medical claims have present on admission indicator (POA) fields, but there is more POA data in HIDD than MA APCD inpatient claims. What is the reason for this difference and are there any tradeoffs to using one or the other?

Answer: *The POA indicator is a qualifier for each diagnosis code indicating the onset of diagnosis preceded or followed admission. It is important to note that HIDD and MA APCD have different filing specifications. The reasons for the difference in volume of POA data are as follows:*

- ❑ *The magnitude of POA data is larger in HIDD because in the context of “case mix”, **the limit was lifted on the number of associated diagnosis codes in HIDD** to better capture the hospital specific complexity and severity of cases influencing clinical outcomes and charges.*
- ❑ *The **MA APCD is limited to 24 associated diagnosis codes**, therefore there is only a POA indicator for the principal diagnosis codes and the 24 associated diagnosis codes.*
- ❑ *In MA APCD, POA is required when Type of Claim (MC094) = Facility (Code 002) , Admitting Diagnosis (MC039) and Principal Diagnosis (MC041) are populated and is not required when Types of Facility (MC245) is a Skilled Nursing Facility/Long Term Care Facility (Code 2), Designated Cancer Center (Code 5), Designated Inpatient Children’s Hospital (Code 6), Inpatient Rehabilitation Facility (Code 7) or Critical Access Hospital (Code 9).*

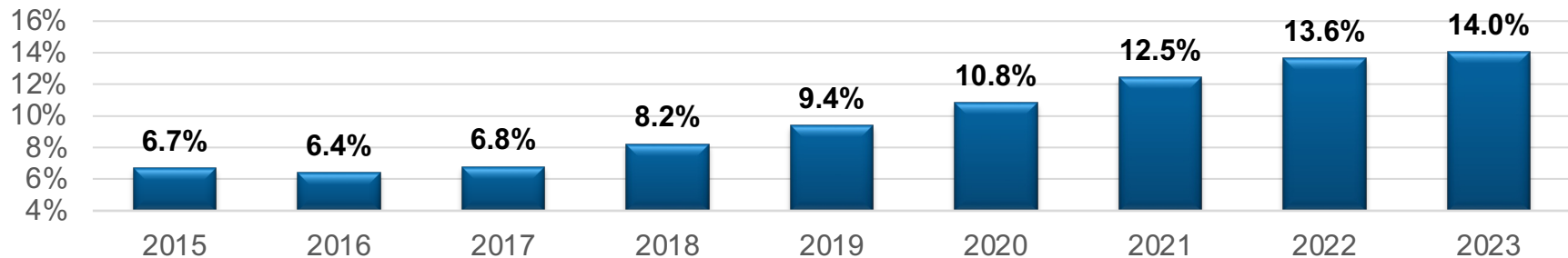


**Present on Admission Indicators**

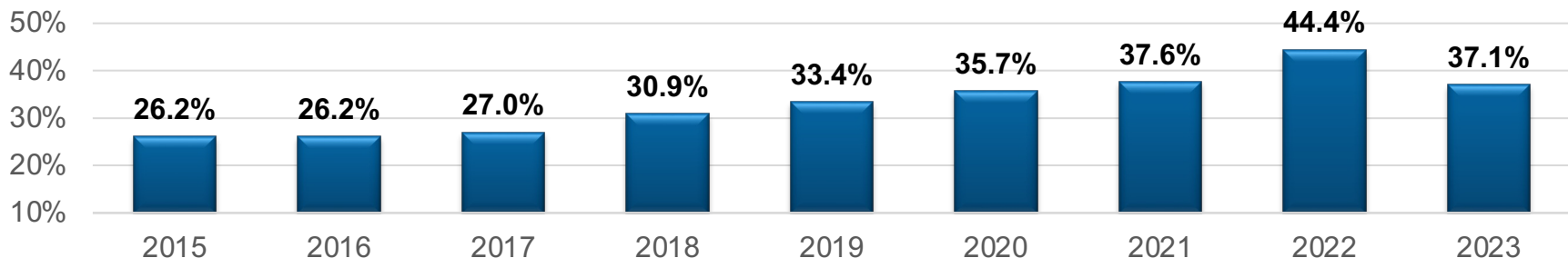
**Answer (continued):** To consider the trade-off when using the POA indicators to capture conditions not present on admission when only 24 associated are used, even though the percentage of HIDD with greater than 24 diagnosis codes has increased from FY2015 to FY2023 (see Table 1 below), in any give year less than 1% of such discharges have conditions **not present on admission**.

Therefore, there is not a significant loss in the ability to measure **not present on admission**, since over 20% of discharges with less than 24 diagnosis codes have conditions not present on admission (see Table 2 below) versus discharges with greater than 24 diagnosis codes where the percent with conditions not present on admission remained less than 1% (significantly smaller) every year from FY2015 to FY2023.

**Table 1. FY2015-2023 Percent of HIDD Records with Greater than 24 Diagnosis Codes**



**Table 2. Percent of HIDD Records with Less than 24 Diagnosis Codes and with Conditions Not Present on Admission**





Question: Gobeille v. Liberty Mutual Insurance Company, decided in 2016, significantly impacted the reporting of medical claims data? What impact did it have on the volume of dental claims and pharmacy claims?

**Gobeille  
Revisited**

Answer: Comparing Pre-Gobeille (CY2015) to CY2023, there was a 66% drop in dental claims (See Table 1 below) and 29% drop in pharmacy claims (See Table 2 below).

**Table 1. Change in Volume of Dental Claims Before and After Gobeille**

Year	Unknown/ Not Applicable	Fully-Insured Commercial Group	Self-Insured Group	Group Insurance Commission	MassHealth Managed Care Organization	Supplemental Policy	Integrated Care Organization or Senior Care Option	Accountable Care Organization (MassHealth Only)
2015	2,191,686	9,059,959	3,155,074	180,486	4,490,982	-	115,319	-
2016	2,117,849	7,076,305	2,149,486	260,143	4,666,216	-	111,592	-
2017	2,520,620	7,322,286	1,610,755	273,447	4,639,729	-	134,981	-
2018	1,822,258	7,760,571	1,263,091	292,157	5,185,791	-	146,932	92,201
2019	1,773,619	7,789,036	1,201,852	306,947	3,841,983	-	172,427	1,428,906
2020	1,114,166	6,221,861	951,138	255,564	1,925,294	-	119,682	1,839,091
2021	1,415,462	7,738,811	1,030,492	333,783	2,639,990	-	165,613	2,527,750
2022	1,565,287	8,053,132	1,058,142	378,782	2,919,683	-	156,492	2,762,031
2023	1,743,189	7,836,123	1,975,940	359,924	2,379,660	3,672	179,996	3,743,470

**Table 2. Change in Volume of Pharmacy Claims Before and After Gobeille**

Year	Unknown/ Not Applicable	Fully-Insured Commercial Group	Self-Insured Group	Group Insurance Commission	MassHealth Managed Care Organization	Supplemental Policy	Integrated Care Organization or Senior Care Option	Accountable Care Organization (MassHealth Only)
2015	111,229,335	17,119,316	10,005,371	770,171	16,978,343	85,742	1,307,399	3
2016	129,897,331	15,734,285	1,790,867	770,327	14,700,985	95,621	1,652	141
2017	117,257,946	16,590,712	3,132,962	744,306	14,836,196	96,602	39,805	524,987
2018	117,935,226	17,202,568	2,997,051	261,666	10,786,269	34,770	108,353	6,427,724
2019	116,394,542	17,011,180	2,426,521	2,322	10,233,883	22,397	120,874	7,392,937
2020	114,524,120	15,728,417	1,720,123	3,018	9,786,254	14,412	114,964	7,698,421
2021	121,098,338	17,219,856	2,560,362	14,815	10,636,783	2,720	423,710	8,617,745
2022	102,102,815	17,008,625	7,153,758	2,170	10,340,126	39,210	1,712,902	8,365,408
2023	78,953,210	22,759,667	6,674,243	6,374	6,698,784	96,530	2,450,689	9,735,583

# Where can I find past User Workgroup Presentations?

- <http://www.chiamass.gov/ma-apcd-and-case-mix-user-workgroup-information/>

## CHIA Data User Workgroup Meeting Presentations

2023 Schedule and Presentations	
Tuesday, January 25, 2023 <ul style="list-style-type: none"><li>• <a href="#">Presentation (PDF)</a>   <a href="#">PPT</a></li></ul>	Tuesday, February 28, 2023 <ul style="list-style-type: none"><li>• <a href="#">Presentation (PDF)</a>   <a href="#">PPT</a></li></ul>
Tuesday, March 28, 2023 <ul style="list-style-type: none"><li>• <a href="#">Presentation (PDF)</a>   <a href="#">PPT</a></li></ul>	Tuesday, April 25, 2023 <ul style="list-style-type: none"><li>• <a href="#">Presentation (PDF)</a>   <a href="#">PPT</a></li></ul>
Tuesday, July 25, 2023 <ul style="list-style-type: none"><li>• <a href="#">Presentation (PDF)</a>   <a href="#">PPT</a></li></ul>	Tuesday, December 5, 2023 <ul style="list-style-type: none"><li>• <a href="#">Presentation (PDF)</a>   <a href="#">PPT</a></li></ul>

- [See archive of previous presentations](#)

## USER SUPPORT MATERIALS

### Linking Claims Data to Member Eligibility ZIP Code Data (March 2023)

- [Claims Linkage to ME One ZIP Code per Year Table \(PDF\)](#) | [PPT](#)

### User Support MA APCD Slides

- [Ambulatory Surgery Centers - May 2021 \(PDF\)](#) | [PPT](#)
- [Trauma Centers - May 2021 \(PDF\)](#) | [PPT](#)
- [Medicare - March 2021 \(PDF\)](#) | [PPT](#)

# When is the next User Group meeting?

- The next User Group will meet Tuesday June 25, 2024.
- <http://www.chiamass.gov/ma-apcd-and-case-mix-user-workgroup-information/>

# Resultant Research Using CHIA Data

- <https://www.chiamass.gov/resultant-research-using-chia-data>



[CHIA Data](#) » [Resultant Research Using CHIA Data](#)

## Resultant Research Using the MA APCD and CHIA's Case Mix Data

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The table below contains a sample of external research publications using CHIA's MA APCD and Case Mix data (by year of publication). Case Mix specific research is highlighted in gray. If you have questions please email [apcd.data@state.ma.us](mailto:apcd.data@state.ma.us) and/or [casemix.data@state.ma.us](mailto:casemix.data@state.ma.us).

# Questions?

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- Questions related to MA APCD:  
[apcd.data@chiamass.gov](mailto:apcd.data@chiamass.gov)
- Questions related to Case Mix:  
[casemix.data@chiamass.gov](mailto:casemix.data@chiamass.gov)

## **REMINDER**

CHIA still receives a high volume of email from data users who do not include their IRBNet ID. If you are in the process of or have already submitted a data application to CHIA through IRBNet <https://www.irbnet.org/release/home.html>, due to the volume of email CHIA receives, please remember to always include your IRBNET ID# in the subject line of your email. Doing so facilitates tracking your application and expediting responses to any questions.