

CHIA USER WORKGROUP

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Agenda

- Announcements:
 - APCD Release CY 2020 Updates
 - FY20 Case Mix Release Projections
- Website Updates
- User Support Questions
 - COVID-19 Vaccine Status Codes
 - Clarification of Case Mix Between Table Linkage fields
 - Observation Stay Procedures
 - Expected Acute Care Inpatient Discharge Volume Differences between Case Mix and MA APCD
- Q&A

MA APCD CY 2020 (Release 10.0)

- Available for request
- Applicants with *approved projects* that require updated APCD data (CY 2020 Data) 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 2020 Data** includes data on services from January 2016 – December 2020 with six months of claim runout.

Case Mix FY21 Release

CURRENT RELEASE TIMEFRAMES FOR EACH FILE:

- Inpatient (HIDD)

Available for request

- Emergency Department (ED)

August 2022

- Outpatient Observation (OOD)

September 2022

- Applicants with *approved projects* that require newly available year(s) of Case Mix Data (e.g., FY 19) 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.



Website Release Updates

- Updates on the production of APCD and Case Mix databases and status of data requests are now posted to CHIA's website!
 - **Aim #1** is to provide weekly or bi-weekly status update on CHIA data products as they are in development.
 - **Aim #2** is to provide applicants with information about expected fulfillment status for individual data requests.
 - Request IDs will be communicated to Data Requestors via email.
- Please visit <http://www.chiamass.gov/status-of-data-requests/> to see the current status of releases.

USER QUESTIONS

Vaccination Status



Question: Last year, the Centers for Medicare and Medicaid (CMS) announced that new ICD-10-CM diagnosis codes would be implemented to distinguish vaccination status. Are those codes currently submitted by hospitals for patients in case mix data or by carriers for its members in the MA APCD medical claims?

Answer: Three new diagnosis codes were implemented into ICD-10-CM for reporting COVID-19 vaccination status. The CDC notes that these codes should not be used for individuals who are not eligible for the COVID-19 vaccines, as determined by the healthcare provider.

Two new ICD-10-CM codes have been created for underimmunization for COVID-19 status:

Z28.31 Underimmunization for COVID-19 status

- Code Z28.310, **Unvaccinated for COVID-19**, may be assigned when the patient has not received at least one dose of any COVID-19 vaccine.
- Code Z28.311, **Partially vaccinated for COVID-19**, may be assigned when the patient has received at least one dose of a multi-dose COVID-19 vaccine regimen, but has not received the full set of doses necessary to meet the Centers for Disease Control and Prevention (CDC) definition of “fully vaccinated” in place at the time of the encounter.

*A third new code describes **other** underimmunization status:*

- Code Z28.39, **Other under immunization status**, includes delinquent immunization status or lapsed immunization schedule status

The implementation date of these diagnosis codes, in addition to seven new procedure codes for COVID-19 related therapeutics, was **April 1, 2022** (see: <https://www.cms.gov/medicare/icd-10/2022-icd-10-cm>). According to the CDC (see: https://ftp.cdc.gov/pub/Health_Statistics/NCHS/Publications/ICD10CM/2022/icd10cm-tabular-2022-April-1.pdf)

Therefore, the codes will appear in the next FY2022 case mix data and the release of the MA APCD which will include calendar year 2022 data.

Continued





Answer (continued): Three new COVID-19 diagnosis codes for underimmunization can be used in combination existing ICD-10-CM underimmunization codes which provide specificity on the reason why the immunization was not carried out. **See table below.** Also, the CDC advises, when applicable, these codes can be used in combination with code Z71.85 (**encounter for immunization safety counseling**).

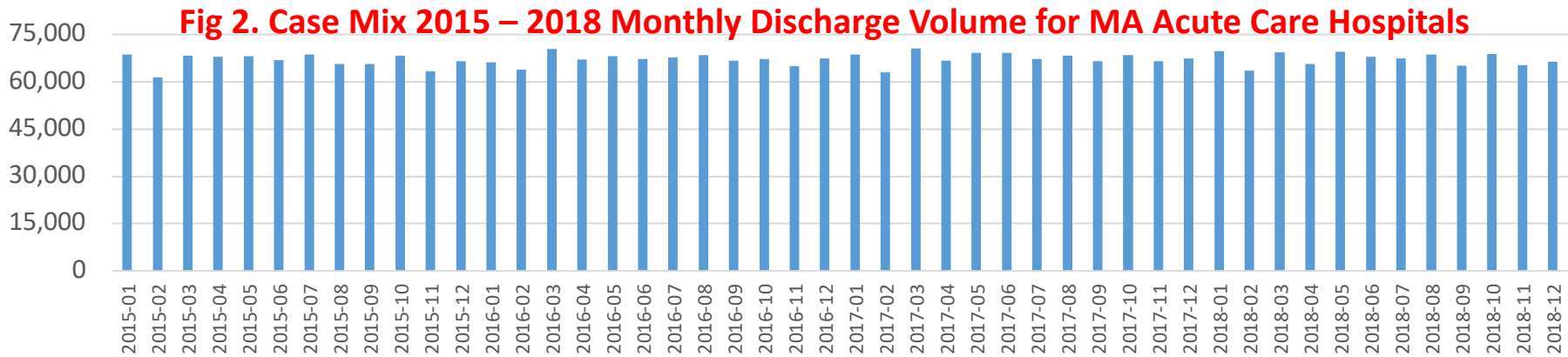
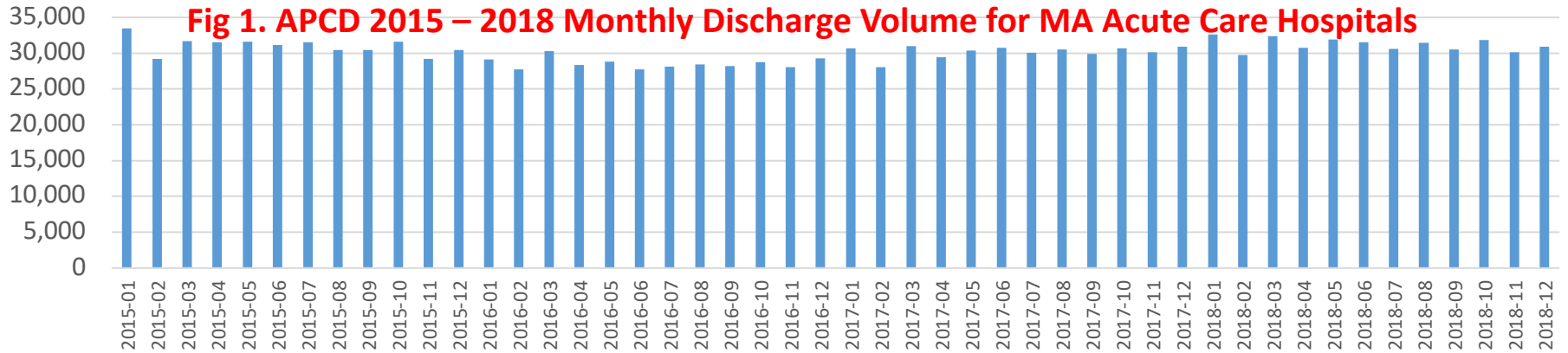
ICD-10-CM Codes for Immunization Not Carried Out and Underimmunization (as of 4/2022)

Diagnosis Code	Full Description
Z28	Immunization not carried out and underimmunization status
Z280	Immunization not carried out because of contraindication
Z2801	Immunization not carried out because of acute illness of patient
Z2802	Immunization not carried out because of chronic illness or condition of patient
Z2803	Immunization not carried out because of immune compromised state of patient
Z2804	Immunization not carried out because of patient allergy to vaccine or component
Z2809	Immunization not carried out because of another contraindication
Z281	Immunization not carried out because of patient decision for reasons of belief or group pressure (<i>Immunization not carried out because of religious belief</i>)
Z282	Immunization not carried out because of patient decision for other and unspecified reason
Z2820	Immunization not carried out because of patient decision for unspecified reason
Z2821	Immunization not carried out because of patient refusal
Z2829	Immunization not carried out because of patient decision for other reason
Z283	Underimmunization status
Z2831	Underimmunization for COVID-19 status
Z28310	Unvaccinated for COVID-19
Z28311	Partially vaccinated for COVID-19
Z2839	Other underimmunization status
Z288	Immunization not carried out for other reason
Z2881	Immunization not carried out due to patient having had the disease
Z2882	Immunization not carried out because of caregiver refusal (<i>Immunization not carried out because of guardian refusal, or Immunization not carried out because of parent refusal Excludes (Z28.1) immunization not carried out because of caregiver refusal because of religious belief</i>)
Z2883	Immunization not carried out due to unavailability of vaccine (<i>Delay in delivery of vaccine, or Lack of availability of vaccine, or Manufacturer delay of vaccine</i>)
Z2889	Immunization not carried out for other reason
Z289	Immunization not carried out for unspecified reason

Question: I am still trying to decide whether to apply for case mix data or the MA APCD to analyze hospital inpatient care. An explanation was already provided on the overall reduction in commercial claims due to Gobeille. Is there information on the specific magnitude of difference in discharge volume when comparing the Massachusetts acute care hospitals in case mix to their volume in the MA APCD?



Answer: In comparing the monthly hospital inpatient discharge volume for acute care hospitals by month in the MA APCD for a three-year period (see Figure 1 below) to the discharge volume in case mix (see Figure 2 below), the case mix monthly discharge volume for Massachusetts acute care hospitals is on average 55% higher than the monthly discharge volume for Massachusetts acute care hospitals in the MA APCD.



Continued

Answer (continued): Even with the impact of Gobeille, the age group distribution for the case mix inpatient discharges (see Figure 1 below) and the age group distribution for the MA APCD (see Figure 2 below) are similar. Both have a high proportion of infants and elderly.



However, the case mix data has a higher proportion of infants since there are instances in claims data where a newborn's delivery claim might be rolled into the mother's claim. In the case mix data, all newborns have a separate discharge record from the mother.

Fig 1. Case Mix Inpatient Discharge Age Distribution by Year for MA Acute Care Hospitals

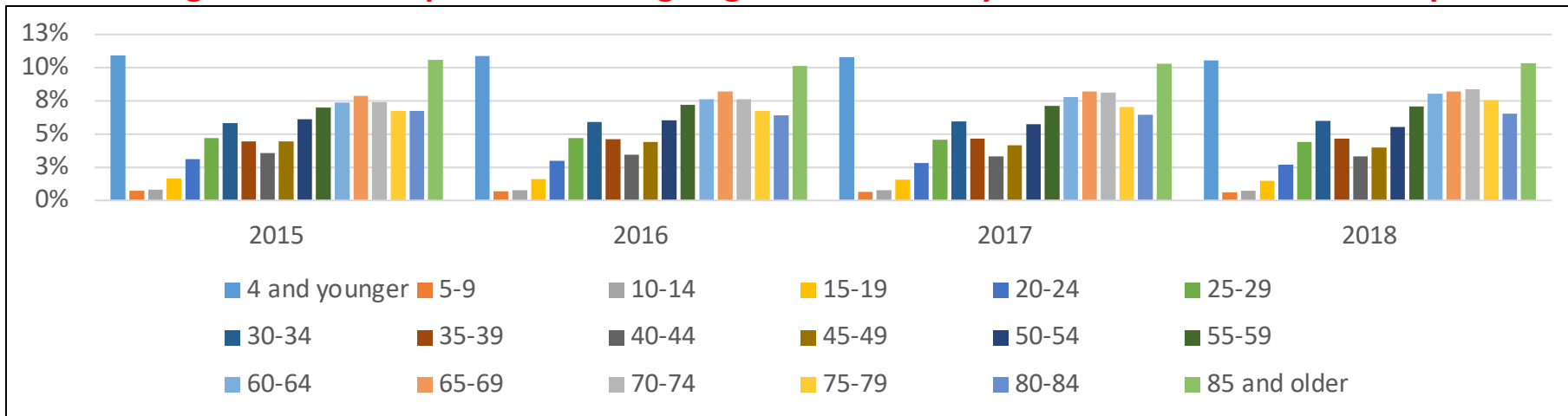
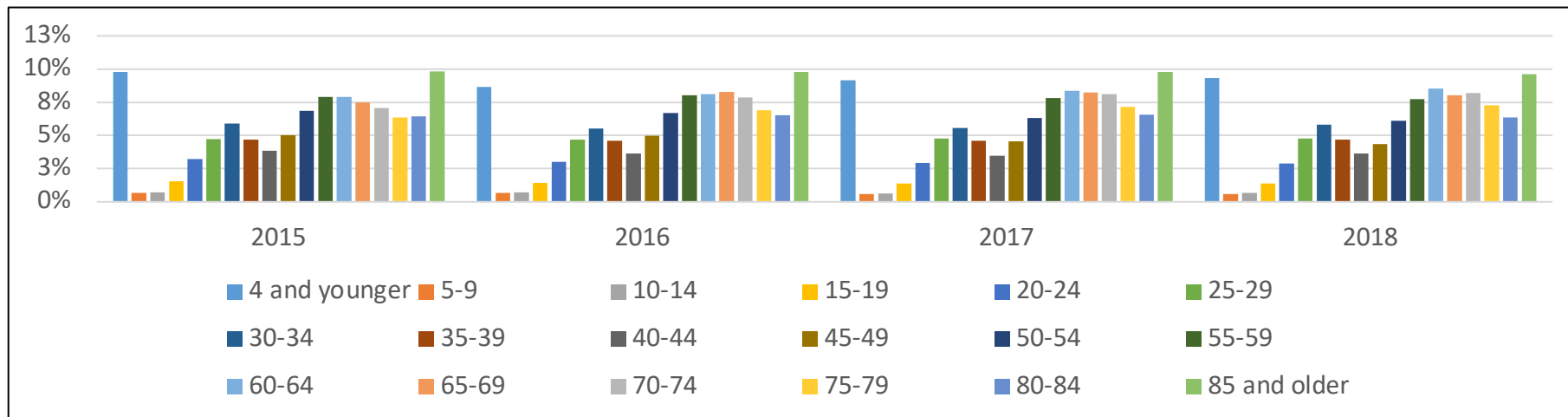
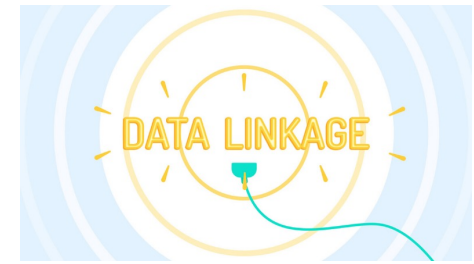


Fig 2. MA APCD Inpatient Discharge Age Distribution by Year for MA Acute Care Hospitals



Question: I have received the case mix data and am looking for information on how to link the tables. In the discharge data and emergency department data, I noticed a Record Type 20 key field in some of the tables but not in others, and in the observation stay data a Record Type 01 key field in some tables but not in others. How do I proceed?



Answer: All information concerning the linkage of case mix data fields, their definitions, formatting and discussions of data quality can be found on the CHIA website at the following link below. This page includes a link to archived documentation on older data and a link to previous webinar slides.

<https://www.chiamass.gov/case-mix-data/>

Annual Release Overview

CHIA's Case Mix annual releases include one year's worth of hospital data submissions. The annual release process includes:

- **Data Intake and Internal Processing**

CHIA works with approximately 70 Massachusetts hospitals throughout the year to ensure valid, high quality quarterly data submissions. Hospitals are required to deliver their submission files within 75 days after the end of each quarter. CHIA runs each file through a series of file- and field-level edits to confirm formatting and to check for data quality issues. CHIA has a strict limit on errors, expecting the files to be 99% error-free. CHIA notifies providers if their file(s) do not pass these intake edits and requires resubmissions.

- **Release Creation**

To prepare each annual release, CHIA compiles the four quarters of data submissions and completes a four week quality assurance validation process with the providers to test the completeness and quality of select fields. If data submission fixes are required, hospitals spend time fixing, validating and resubmitting data files. Following receipt of all files, CHIA loads the data into the Case Mix Data Warehouse and performs a series of steps including data cleaning and creation of derived fields. Release creation can take from eight to twelve weeks depending on whether we identify issues during testing.

- **Data Quality and Release Assurance Testing**

CHIA's quality assurance team performs an eight to ten week quality assurance validation process to test the completeness and quality of select fields as well as any new product features and enhancements. If updates are required as a result of testing, CHIA performs comprehensive regression testing. After

Request Case MixData	
Government Entities	Non-Government Entities
Case Mix Documentation	
Hospital Inpatient Discharge Database (HIDD)	
• FY21 Documentation Manual (PDF) Word	
• FY21 Release Notes (PDF) Word	
Emergency Department Database (EDD)	
• FY20 Documentation Manual (PDF) Word	
• FY20 Release Notes (PDF) Word	
Outpatient Observation Database (OOD)	
• FY20 Documentation Manual (PDF) Word	
• FY20 Release Notes (PDF) Word	
Case Mix Documentation Archive	

Question: Does the outpatient observation stay data use the same coding nomenclature as the outpatient emergency department visit data (both CPT codes and HCPCS codes) or does it use the same coding nomenclature as the inpatient hospital discharge data (ICD-10-PCS codes)?



Answer: CMS has extensive documentation describing the uses of observation stay for outpatient surgery. Since certain surgical procedures are performed either in the inpatient setting or in observation stay, the observation stay data does include ICD-10-PCS codes. However, like the outpatient emergency data, observation stay also has CPT codes, with fields for up to five CPT codes.

If you are applying for inpatient hospital discharge data to study a particular surgical intervention, you may want to contact CHIA in advance to determine if a significant volume of those procedures are performed in observation stay and therefore warrant applying for both the inpatient discharge data and the observation stay data.

In addition to principal and associated procedures, the observation stay also has fields that provide information on the surgeon performing the procedures, with additional coding options if the procedure is performed by a nurse.

Where can I find past User Workgroup Presentations?

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

MA APCD / Case Mix Meeting Presentations

2019 Presentations	
2019 MA APCD Presentations	2019 Casemix Presentations
<p>MAAPCD Tuesday, November 26, 2019</p> <ul style="list-style-type: none">• Presentation (PDF) Word	<p>Please Note:</p> <p>The Case Mix Workgroup Meeting for December 2019 was cancelled.</p>
<p>MAAPCD Tuesday, September 24, 2019</p> <ul style="list-style-type: none">• Presentation (PDF) PPT	<p>Case Mix Tuesday, October 22, 2019</p> <ul style="list-style-type: none">• Presentation (PDF) PPT
<p>MAAPCD Tuesday, July 23, 2019</p> <ul style="list-style-type: none">• Presentation (PDF) PPT	<p>Case Mix Tuesday, August 27, 2019</p> <ul style="list-style-type: none">• Presentation (PDF) PPT

When is the next User Group meeting?

- The next User Group will meet Tuesday, June 28.

MA APCD Workgroup

Tuesday,
November 24, 2020 @ 3:00 p.m.

[Join a Meeting](#)

Case Mix Workgroup

Tuesday,
December 22, 2020 @ 3:00 p.m.

[Join a Meeting](#)

- <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

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 and/or casemix.data@state.ma.us.

Questions?

- Questions related to MA APCD:
apcd.data@chiamass.gov
- Questions related to Case Mix:
casemix.data@chiamass.gov

REMINDER: Please include your **IRBNet ID#**, if you currently have a project using CHIA data.