

CHIA USER WORKGROUP

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Agenda

- Announcements:
 - APCD Release CY 2020 Updates
 - FY20 Case Mix Release Projections
- Website Updates
- User Support Questions
 - Comparing Case Mix Care Setting to CDC Wonder
 - Discharge Status
 - Inpatient Neonate linkage to Mother
- 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 FY20 Release

CURRENT RELEASE TIMEFRAMES FOR EACH FILE:

- Inpatient (HIDD)
Available for request
- Emergency Department (ED)
Available for request
- Outpatient Observation (OOD)
Available for request
- 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

Death Data Place of Death

Question: I have been using the [Centers for Disease Control and Prevention's Wide-ranging Online Data for Epidemiologic Research \(CDC Wonder\)](#) system to compare death certificate data for inpatient, emergency department, and dead-on-arrival care settings to case mix deaths. It is unclear why the numbers don't exactly match.



Answer: The difference is in part attributable to CDC Wonder death certificate data including deaths of Massachusetts residents who may have died in health care settings outside of Massachusetts. Keep in mind case mix is limited to acute care hospitals in Massachusetts. Also, the death certificate data includes data after any autopsy may have been performed. This can also affect a difference or change in how the place of death is reported. The results of the autopsy may have determined that the extent of anatomic derangement rendered the patient physiologically unsalvageable even with the best ED resuscitative efforts. In these instances, the place of death on the death certificate would be reported as "dead on arrival" instead of ED death. Also, a decedent who is a Massachusetts resident may have been confirmed by family on the death certificate to be a non-resident. Even with these death certificate attributes, the magnitude of difference between the case mix ED death count and CDC was only 1.4% in 2018, 0.5% in 2019 and 2.1% in 2020 as shown below.

Figure 1. Years 2018 – 2020 CHIA Case Mix Outpatient ED Deaths of Massachusetts Residents

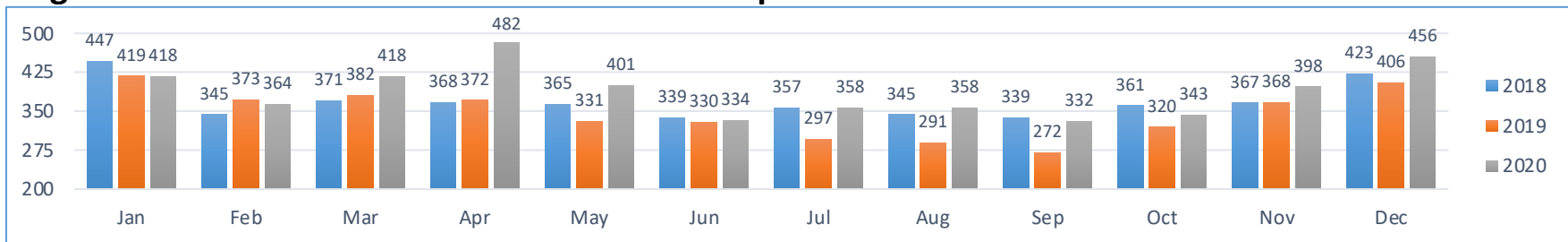
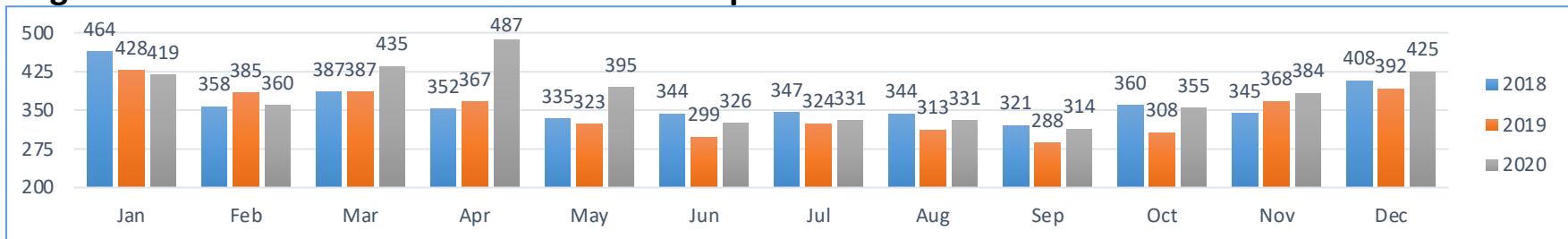


Figure 2. Years 2018 – 2020 CDC Wonder Outpatient ED Deaths of Massachusetts Residents



*Source: CHIA Outpatient Emergency Department Visit Data and Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death 1999-2020 on CDC WONDER Online Database, released in 2021. Data are from the Multiple Cause of Death Files, 1999-2020, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Accessed at <http://wonder.cdc.gov/ucd-icd10.html>

Question: I am currently using the MA APCD to study newborns and would like to apply for the case mix data. In claims data, I am having problems associating newborns with mothers. Before I apply for case mix data, I would like to know the feasibility and the quality of data for linking newborns to mothers.

Answer: *The case mix filing specifications require the mother's social security number be reported on the discharge record for newborns and for infants who are less than 1 year old.*

Non-government data users would have access to this field as an encrypted unique health identification number (UHIN) to link to the mother's UHIN on her discharge record.

*The filing specifications also require the mother's medical record number be reported on the newborn's discharge record. Access to this additional encrypted field is limited to **government data users**. To check the completeness of the mother's encrypted UHIN and mother's encrypted medical record number in the inpatient hospital discharge data, all records were filter for all infants age '0' with the birth weight field population. The available of linkage data using encrypted mother's medical record number is higher, 97.1 % in FY2020 versus 58.3% for encrypted mother's UHIN.*

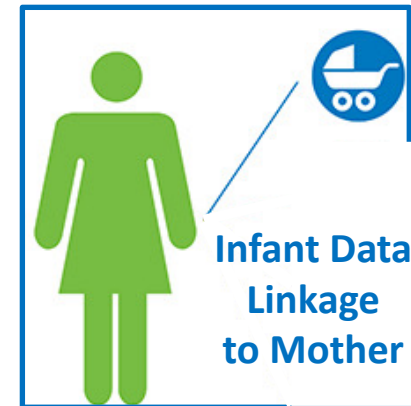


Table 1. FY2017 – FY2020 Percent of Newborn Records with Linkage Data to Mother

Fiscal Year	Neonates Age '0' with Birth Weight Reported	Percent of Records with Mother's Encrypted Medical Record Number	Percent of Records with Mother's Encrypted UHIN
2017	77,061	91.7%	68.1%
2018	84,788	82.7%	58.9%
2019	78,600	88.2%	61.5%
2020	70,507	97.1%	58.3%

Another data repository is available to apply for through the Maternal and Child Health Division of Massachusetts Department of Public Health which links birth certificate and death certificate data. Information on the Pregnancy to Early Life Longitudinal Data System (PELL) is available on the DPH website at: <https://www.mass.gov/service-details/major-projects-of-the-division-of-maternal-and-child-health-research-and-analysis>

Question: I am using both the case mix data and the MA APCD. The case mix data appears to have fewer discharge status coding options than the MA APCD. Why is that?

Patient Discharge Status



Answer: The case mix filing specifications provides a full list of 41 coding options to use for Patient Status Coding. The MA APCD filing specifications instruct data submitters to use the National Uniform Billing Committee’s Patient Status Coding options which includes approximately 43 coding options. Five years of case mix data patient codes were compared to five years of MA APCD discharge status on the top ten codes used, the main difference was that the code still a patient ranked top in the MA APCD and discharged to hospice – home ranked top in case mix.

Case Mix Patient Status	Case Mix Top 10 Status Codes Used
01	Discharged to home/self-care (routine charge).
06	Discharged/transferred to home care of organized home health service organization.
03	Discharged/transferred to skilled nursing facility (SNF) with Medicare certification
20	Expired (patient did not recover).
02	Discharged/transferred to other short term general hospital for inpatient care.
62	Discharged/transferred to an inpatient rehabilitation facility including distinct parts units of a hospital
07	Left against medical advice or discontinued care.
65	Discharged/transferred to skilled nursing facility (SNF) with Medicare certification
50	Discharged/transferred to a Hospice - Home.
63	Discharged/transferred to a long-term care hospital.

MA APCD Discharge Status	MA APCD Top 10 Status Codes Used
01	Discharged to home/self-care (routine charge).
30	Still patient.
06	Discharged/transferred to home care of organized home health service organization.
03	Discharged/transferred to skilled nursing facility (SNF) with Medicare certification
02	Discharged/transferred to other short term general hospital for inpatient care.
62	Discharged/transferred to an inpatient rehabilitation facility including distinct parts units of a hospital.
20	Expired (patient did not recover).
07	Left against medical advice or discontinued care.
65	Discharged/transferred to skilled nursing facility (SNF) with Medicare certification
63	Discharged/transferred to a long-term care hospital.

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, April 26.

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.

Call for Topics and Presenters

- If there is a **TOPIC** that you would like to see discussed at an MA APCD or Case Mix workgroup in 2022, contact Amy Wyeth [amy.wyeth@chiamass.gov]
- If you are interested in **PRESENTING** at a MA APCD or Case Mix workgroup in 2022, contact Amy Wyeth [amy.wyeth@chiamass.gov]
You can present remotely.