

CHIA USER WORKGROUP

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Agenda

- Announcements:
 - APCD Release 9.0/10.0 Updates
 - FY20 Case Mix Release Projections
 - Data Release and Application Update
- Website Updates
- Application Reminders
- User Support Questions
 - Observation Stay Procedures
 - Interfacility Transfers
 - Condition Present on Admission
 - DRG Versions
- Q&A

MA APCD Release 9.0/10.0

- Available **Late Fall / Early Winter**
- Applicants with *approved projects* that require updated APCD data (Release 9.0/10.0) 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.
- **Release 9.0/10.0** includes data on services from January 2015 – 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)

Mid-Fall 2021

- 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.



Data Release and Application Updates

Due to Governor Baker's emergency actions to limit the spread of COVID-19 CHIA's workforce will be remote, for now. This arrangement will limit CHIA's ability to produce and deliver data extracts. At this time, CHIA is releasing data and providing extracts to requestors.

During this time, CHIA will continue to accept and review data applications for both Case Mix and All-Payer Claims Database (MA APCD) datasets. Review committees, DRC and DPC, will continue their meetings remotely as necessary.

Due to CHIA's physical office being closed, applications will be accepted without a fee. After receipt of the application, CHIA will issue an invoice which will allow applicants to remit payment online.

If you are a Data User that has a CHIA hard drive in your possession, please keep the hard drive at this time while CHIA's physical office is closed.

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.

APPLICATION REMINDERS

Fee Waiver Request Reminders

1. If you're submitting a request for a fee waiver, remember to include the fee remittance form in your application package on IRBNet.
2. Remember to submit supporting documentation (if required).
3. If you're requesting a financial hardship waiver, remember to submit information detailing your project's financial situation (examples: project budget, grant funding, organizational / departmental funding). Also request to pay a specific price that you reasonably believe you're able to afford to contribute.
4. CHIA generally does not offer full financial hardship fee waivers. We expect all applicants to have made an attempt to find funding to cover the full cost of the data fees.
5. Fee waiver requests can take some time to process – especially financial hardship requests.

USER QUESTIONS

Question: I am applying for the inpatient hospital discharge data and am concerned about the magnitude of procedures I might be missing by not including the outpatient observation stay data in my request. What types of procedures are performed in observation stay and are these any of the same types of procedures that might be performed in an inpatient care setting?

Inpatient vs Outpatient Procedures

Answer: Yes, although at a smaller volume, many of same procedures performed in the hospital inpatient care setting also appear in the outpatient observation stay data, including percutaneous transluminal coronary angioplasty, oophorectomy, prostatectomy, hysterectomy, knee arthroplasty, hip replacement, spinal fusion, to name a few. The following table shows a ranking of the top ICD-10-PCS procedures using AHRQ’s Clinical Classifications Software (CCS) Groupings for procedures performed FY2015 through FY2020.

Comparison of Top 10 CCS Procedure Code Groups in Observation Stay and Inpatient Discharge Data

Rank	Observation Stay Top 10 CCS Procedure Categories	Rank	Inpatient Discharge Top 10 CCS Procedure Categories
1	Diagnostic cardiac catheterization; coronary arteriography	1	Respiratory intubation and mechanical ventilation
2	Upper gastrointestinal endoscopy; biopsy	2	Blood transfusion
3	Appendectomy	3	Prophylactic vaccinations and inoculations
4	Tonsillectomy and/or adenoidectomy	4	Other procedures to assist delivery
5	Fetal measurement and monitoring	5	Other vascular catheterization; not heart
6	Other OR procedures on vessels other than head and neck	6	Diagnostic cardiac catheterization; coronary arteriography
7	Other OR procedures on mouth and throat	7	Other therapeutic procedures
9	Prophylactic vaccinations and inoculations	9	Fetal measurement and monitoring
9	Cholecystectomy and common duct exploration	9	Upper gastrointestinal endoscopy; biopsy
10	Insertion; revision; replacement; removal of cardiac pacemaker or cardioverter/defibrillator	10	Other therapeutic procedures on muscles and tendons

Continued 

Answer (continued): While observation stay data does have many of the same ICD-10-PCS procedures found in the inpatient care setting, as you can see in Figure 1 below, from FY2016 to FY2020, only on small volume of observation stays had such procedures. In Figure 2 below, you will see that the percent of patients with such codes has trended downward from 10% in FY2016 to 6% in FY2020.

Inpatient vs Outpatient Procedures

Figure 1. FY2016 to FY2020 Volume of Observation Stays with ICD-10-PCS Procedures

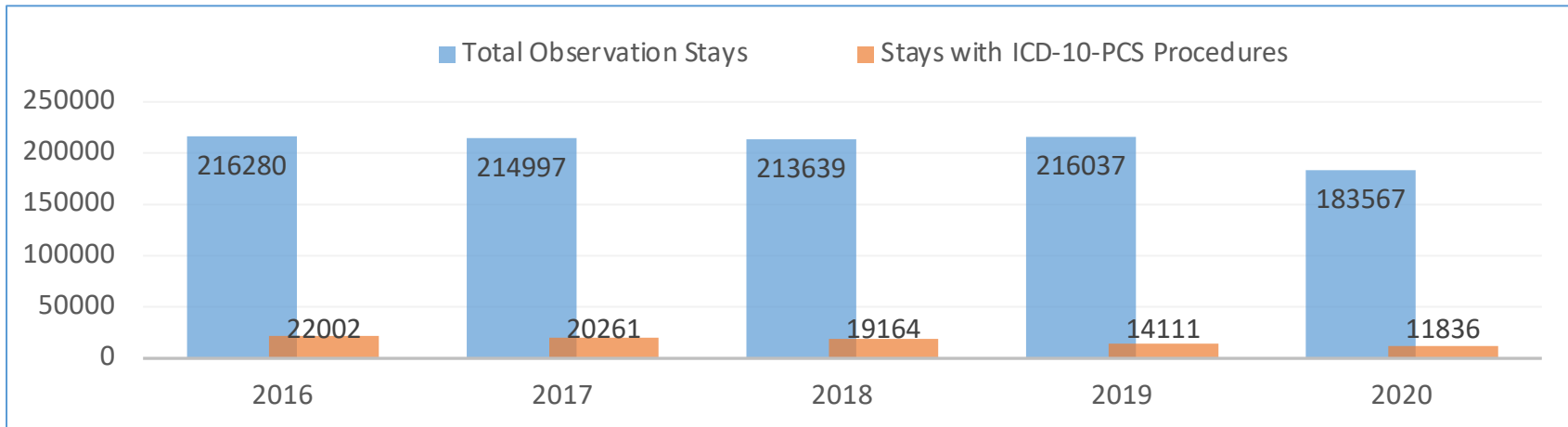
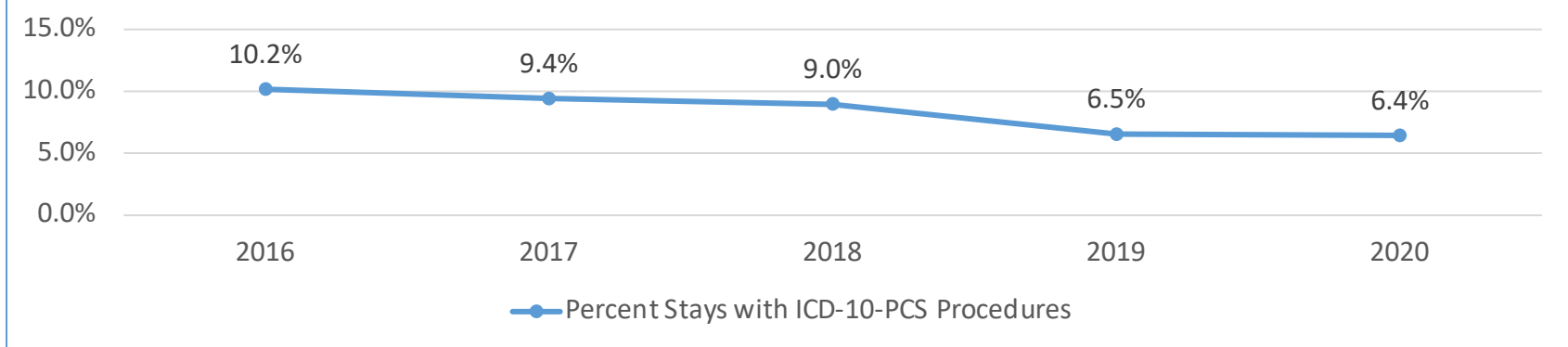


Figure 2. Downward Trend in Percent of Stays with ICD-10-PCS Procedures



Continued 

Answer (continued): Given the lower and moderate complexity of many observations, the highest volume of procedures are recorded in CPT codes for tests performed during the stay and for the stay itself.

Inpatient vs Outpatient Procedures

FY2016 to FY2020 Top 10 CPT Procedure Codes in Outpatient Observation Stay Data

CPT Code	Description	2016	2017	2018	2019	2020
99218	Initial observation care, per day, for evaluation and management of patient which requires these 3 key components: A detailed or comprehensive history; A detailed or comprehensive exam; and Medical decision making that is straightforward or of low complexity.	51731	65141	78877	92013	62616
36415	Collection of venous blood by venipuncture	68636	64914	77049	69620	52322
85025	Blood count; complete (CBC), automated (Hgb, Hct, RBC, WBC and platelet count) and automated differential WBC count	21731	29089	38452	62355	55727
80048	Basic metabolic panel (Calcium, total) This panel must include the following: Calcium, total (82310) Carbon dioxide (bicarbonate) (82374) Chloride (82435) Creatinine (82565) Glucose (82947) Potassium (84132) Sodium (84295) Urea nitrogen (BUN) (84520)	31180	32916	39461	47870	37046
80053	Comprehensive metabolic panel This panel must include the following: Albumin (82040) Bilirubin, total (82247) Calcium, total (82310) Carbon dioxide (bicarbonate) (82374) Chloride (82435) Creatinine (82565) Glucose (82947) Phosphatase, alkaline (84075) Potassium (84132) Protein, total (84155) Sodium (84295) Transferase, alanine amino (ALT) (SGPT) (84460) Transferase, aspartate amino (AST) (SGOT) (84450) Urea nitrogen (BUN) (84520)	28607	28266	32159	43636	36737
93005	Electrocardiogram, routine ECG with at least 12 leads; tracing only, without interpretation and report	16916	22726	24369	31959	26995
84484	Troponin, quantitative	9158	11085	16305	28238	27713
99219	Initial observation care, per day, for evaluation and management of a patient, which requires these 3 key components: A comprehensive history; A comprehensive examination; and Medical decision making of moderate complexity. Counseling and/or coordination of care with other physicians, other health care professionals, or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs.	15298	16327	15838	18559	14740
99285	Emergency department visit for the evaluation and management of a patient, which requires these 3 key components within the constraints imposed by the urgency of the patient's clinical condition and/or mental status: A comprehensive history; A comprehensive examination; and Medical decision making of high complexity.	6924	7966	12453	18700	15785
85610	Prothrombin time;	6357	7518	8267	13008	13215

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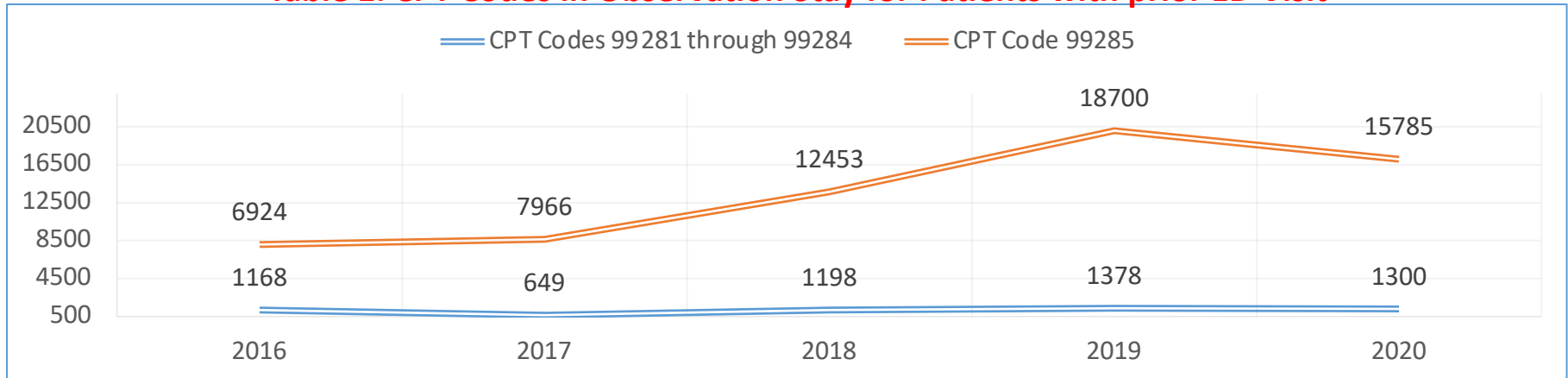
Answer (continued): If the source of the observation stay originates from a prior ED visit, a CPT code for that visit is in the observation stay record (see Table 1 below). CPT code 99285 for high complexity ED visit patients is in the top 10 of CPTs for observation stays. As you can see in Figure 1, while the of low to moderate complexity patients admitted to observation stay from the ED has fluctuated, the number of high complexity ED patients in observation stay has more than doubled.

Inpatient vs Outpatient Procedures

Table 1. CPT Codes in Observation Stay for Patients with prior ED Visit

CPT Code	Description
CPT 99281	ED visit for the evaluation and management of a patient, which requires these 3 key components: A problem focused history; A problem focused examination; and Straightforward medical decision making.
CPT 99282	ED visit for the evaluation and management of a patient, which requires these 3 key components: An expanded problem focused history; An expanded problem focused exam; and Medical decision making of low complexity.
CPT 99283	ED visit for the evaluation and management of a patient, which requires these 3 key components: An expanded problem focused history; An expanded problem focused exam; and Medical decision making of moderate complexity.
CPT 99284	ED visit for the evaluation and management of a patient, which requires these 3 key components: A detailed history; A detailed exam; and Medical decision making of moderate complexity.
CPT 99285	ED visit for the evaluation and management of a patient, which requires these 3 key components within the constraints imposed by the urgency of the patient's clinical condition and/or mental status: A comprehensive history; A comprehensive exam; and Medical decision making of high complexity.

Table 1. CPT Codes in Observation Stay for Patients with prior ED Visit



Question: I am confused by how interfacility transfers are presented in the case mix data. Specifically, is the field 'IdOrgTransfer' intended to represent the source from which the patient who has a discharge record has been transferred from or does it represent the destination to which the patient is being transferred?



Answer: In the case mix filing specifications, hospitals are instructed to use the IdOrgTransfer field to report the transfer organization ID for the facility **from which** the patient has been transferred. This field is reported if the Primary or Secondary Source of Admission is any of the following:

4 - Transfer from an Acute Hospital

7 - Outside Hospital Emergency Room Transfer,

5 - Transfer from an SNF Facility,

6 - Intermediate Care Facility, or

V - Transfer from another facility to a Medicare-approved swing bed

9 - Other (to include Level 4 Nursing Facility) and the transfer facility is a Level 4 Nursing Facility/Rest Home

If the hospital provider, nursing facility/rest home or other facility from which the patient is transferred is outside Massachusetts, then the transfer OrgID reported must be 9999999.

Question: I am applying for the case mix hospital inpatient discharge data. The condition present on admission (POA) indicators are part of the LDS release product given to all approved data applicants. I only intend to import in and store the data elements relevant to my analysis. I typically quantify diagnosis codes and calculate rates without ever using the POA indicators. I had assumed that most conditions are present on admission. I am still in the process of filling out my application and would like to get a sense of the magnitude of diagnosis codes in any given year that are not present on admission and what are the conditions that those diagnosis describe.

Condition Present on Admission (POA)

Answer: From FY2016 to FY2020, the percent of patients discharged with a condition not present on admission has trended upward from 24.3% in FY2016 to 31.3% in FY2020 (See Figure 1 below). Each year, the conditions not present on admission only represent a small proportion of all diagnosis, from 5.1% in FY2016 to 6.0% in FY2020 (See Figure 2 below). The top 10 conditions not present on admission include diagnosis codes for delivery and neonate complications, kidney failure, anemia, palliative care and do not resuscitate. (See Table 1 below).

Figure 1. Percent of Total Discharges with a Condition Not POA

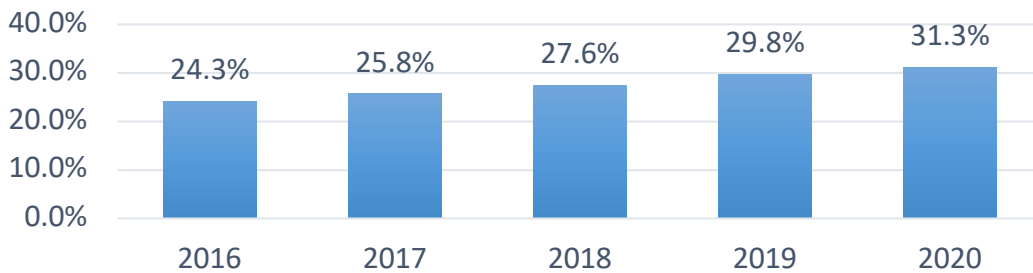


Figure 2. Percent of Total Diagnoses Codes Not POA

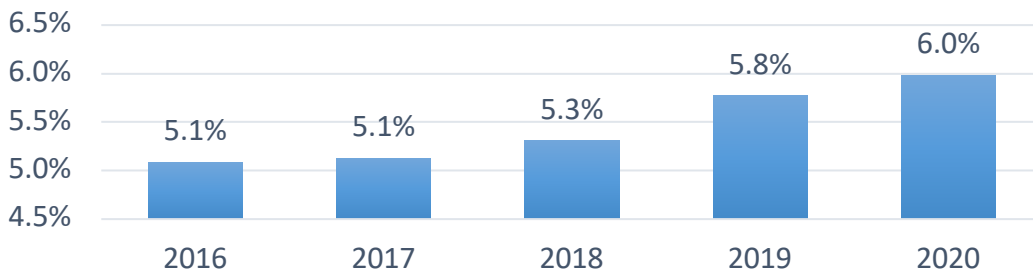


Table 1. Top 10 Conditions Not POA

DX Code	Description
D62	Acute posthemorrhagic anemia
N179	Acute kidney failure, unspecified
O701	Second degree perineal laceration during delivery
E876	Hypokalemia
Z515	Encounter for palliative care
Z66	Do not resuscitate
O76	Abnormality in fetal heart rate and rhythm complicating labor and delivery
I959	Hypotension, unspecified
O700	First degree perineal laceration during delivery
P599	Neonatal jaundice, unspecified

Question: CHIA releases multiple versions of the DRG groupers each year to facilitate longitudinal across year comparison using the same DRG version. In the FY2020 inpatient hospital discharge data, do different version of the APR-DRG group the diagnosis cod for COVID-19 differently?



Answer: The older APR-DRG Versions 30.0 and 34.0 assign more patients with a principal diagnosis of COVID-19 to the surgical DRG (MODERATELY EXTENSIVE O.R. PROCEDURE UNRELATED TO PRINCIPAL DIAGNOSIS). The newer APR-DRGs Version 36.0 assigns those same COVID-19 patients to the medical DRG (RESPIRATORY SYSTEM DIAGNOSIS WITH VENTILATOR SUPPORT > 96 HOURS) or the medical DRG (MAJOR RESPIRATORY INFECTIONS AND INFLAMMATIONS). The table below compares by APR-DRG version the DRG assignment of the patients with a principal DX of COVID-19 in the FY2020 HIDD for the top 10 groupings representing 12,946 of the 13,100 patients.

FY2020 Hospital Inpatient Discharge Data Comparison of COVID-19 Principal Diagnosis Cases by APR DRG Version for the Top 10 Grouping Assignments (n= 12,946 of the total 13,100 principal DX cases)

PRINCIPAL DX COVID	APR DRG Version 36.0	APR DRG Version 34.0	APR DRG Version 30.0	APR DRG Version 26.1	APR DRG Version 20.0	Number of Discharges
U071	137	137	137	137	723	11531
U071	130	951	951	951	710	481
U071	130	130	130	130	723	429
U071	137	951	951	951	710	220
U071	005	004	004	004	004	138
U071	130	951	130	130	723	36
U071	004	004	004	004	004	31
U071	005	005	005	005	005	30
U071	951	951	951	951	710	27
U071	137	951	137	137	723	23

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

When is the next User Group meeting?

- The next User Group will meet Tuesday, November 23.

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 2021, contact Amy Wyeth [amy.wyeth@chiamass.gov]
- If you are interested in **PRESENTING** at a MA APCD or Case Mix workgroup in 2021, contact Amy Wyeth [amy.wyeth@chiamass.gov]
You can present remotely, or in-person at CHIA
- We may be reaching out to some data users with invitations to present, and hope you will consider this!