



MA Center for Health Information & Analysis

MA APCD User Workgroup

April 25, 2017

Agenda



- Announcements
- Overview of MassHealth Data Issue
- Application Reminders
- Enrollment Volume in APCD post *Gobeille*
- User Questions
- Q&A

MA APCD Release 5.0



- Application forms are posted on the APCD website:
<http://www.chiamass.gov/application-documents/>
- Data is ready for release now
- Release documentation (including full data specifications and release documentation) has been posted to the APCD website:
<http://www.chiamass.gov/ma-apcd/>

MA APCD Release 6.0



- Target release timeframe is Fall 2017
- More information will be announced at the APCD User Workgroup as we get closer to release
- Make sure you're signed up for CHIA's email list to receive important announcements:

[Sign Up Here](#)

Support for Old APCD Releases



- Due to the amount of IT resources necessary to store and maintain old APCD Releases (Release 3.0 and earlier), our ability to assist users with those datasets is limited
 - The data is no longer available, so we can't give you additional data from those datasets
 - If you're seeing confusing data, or want to confirm what you're seeing isn't an anomaly, our support team isn't able to go into the dataset and confirm what you're seeing is correct or not (unless it's a previously identified issue)

Application Reminders



- Applicants should not use “de-identified” in their application in referring to the data received from CHIA. CHIA datasets are not de-identified as the term is defined by HIPAA.
- Also, make sure your IRB approval is valid for the period you intend to use the data.
- Please remember your application documents must be **signed** by the appropriate people when you submit them on IRBNet.

MassHealth Data Issue



Summary

MassHealth claims for submission periods January 2011 – October 2012 included diagnosis codes that were not correctly associated with each claim line. Due to the inherent nature of the issue there is no ability for a researcher to determine the appropriate diagnoses for affected claims.

All APCD Releases that contain this period are affected.

MassHealth Data Issue



Recommendation

CHIA and MassHealth are recommending that no research, analysis or reporting be done using any diagnosis information for these submission periods.

Action Being Taken

CHIA is in the process of updating the MA APCD with the corrected claims. When that process is complete, corrected data will be available.

MassHealth Data Issue



Next Steps for Affected Users

If you are interested in receiving updated data for MassHealth for submission periods January 2011 – October 2012, please contact CHIA (if you haven't already):

- Scott Curley (Scott.Curley@state.ma.us) or
- Kathy Hines (Kathy.Hines@state.ma.us)



QUESTIONS?

Question: What Year to Year Difference in Enrollment Type Volume should we expect in APCD Release 5.0 Member Eligibility File as a result of *Gobeille v. Liberty Mutual Insurance Company*?

Answer: Release 5.0 includes data submitted from January 2011 through March 2016. Comparing a count of **all distinct MEIDs** for the last four submission periods in the ME File (see Table 1 below), there was a 14.2% decrease in total distinct MEIDs in the last submission year month (201603) attributable to a 60.7% decrease in self-insured (see Table 2).

Table 1. Comparison of ME File Change in Volume of Distinct MEIDs by Enrollment Type

Submission Year Month	Total Distinct MEIDs	Blanks	Unknown/ Not Applicable	Fully-Insured Commercial	Self-Insured	Group Insurance Commission	MassHealth Managed Care Organization	Supplemental Policy Enrollee	Integrated Care Organization or Senior Care Option
201312	17,739,573	7,352	6,394,890	5,149,146	3,602,840	429,229	1,791,665	363,859	592
201412	18,001,355	5,614	6,435,809	5,214,835	3,729,472	456,068	1,777,094	366,557	15,906
201512	17,878,773		6,899,489	4,280,429	3,826,650	431,817	1,857,734	520,960	61,694
201603	15,338,983		6,836,452	4,215,930	1,502,915	434,015	1,883,160	399,134	67,377

Table 2. Comparison of Percent Change in Distinct MEIDs by Enrollment Type for last 3 ME File Submission Years

Submission Year Month	Total Distinct MEIDs	Blank	Unknown/ Not Applicable	Fully-Insured Commercial	Self-Insured	Group Insurance Commission	MassHealth Managed Care Organization	Supplemental Policy Enrollee	Integrated Care Organization or Senior Care Option
201412	1.5%	-23.6%	0.6%	1.3%	3.5%	6.3%	-0.8%	0.7%	2,586.8%
201512	-0.7%		7.2%	-17.9%	2.6%	-5.3%	4.5%	42.1%	287.9%
201603	-14.2%		-0.9%	-1.5%	-60.7%	0.5%	1.4%	-23.4%	9.2%

Answer (continued): When limiting the count of [distinct MEIDs for Massachusetts residents](#), the magnitude of decrease is smaller. Comparing a count of distinct MEIDs for the last four submission periods in the ME File (see Table 3 below), there was a 9.8% decrease in total distinct MEIDs in the last submission year month (201603) attributable to a 52.5% decrease in self-insured (see Table 4).

Table 3. Comparison of ME File Change in Volume of Distinct MEIDs by Enrollment Type for Massachusetts Residents

Submission Year Month	Total Distinct MEIDs	Blanks	Unknown/ Not Applicable	Fully-Insured Commercial	Self-Insured	Group Insurance Commission	MassHealth Managed Care Organization	Supplemental Policy Enrollee	Integrated Care Organization or Senior Care Option
201312	14,585,358	7,147	6,076,440	3,438,738	2,556,582	395,232	1,778,854	331,774	591
201412	14,829,101	5,458	6,157,779	3,531,341	2,600,484	418,293	1,764,089	335,772	15,885
201512	14,849,399		6,520,347	3,050,263	2,552,204	409,696	1,843,201	412,188	61,500
201603	13,388,528		6,490,760	2,975,724	1,211,707	411,784	1,867,829	363,551	67,173

Table 4. Comparison of Percent Change in Distinct MEIDs by Enrollment Type for last 3 ME File Submission Years for Massachusetts Residents

Submission Year Month	Total Distinct MEIDs	Blank	Unknown/ Not Applicable	Fully-Insured Commercial	Self-Insured	Group Insurance Commission	MassHealth Managed Care Organization	Supplemental Policy Enrollee	Integrated Care Organization or Senior Care Option
201412	1.7%	-23.6%	1.3%	2.7%	1.7%	5.8%	-0.8%	1.2%	2,587.8%
201512	0.1%		5.9%	-13.6%	-1.9%	-2.1%	4.5%	22.8%	287.2%
201603	-9.8%		-0.5%	-2.4%	-52.5%	0.5%	1.3%	-11.8%	9.2%

Answer (continued): For researchers who focus on analyzing only those with medical coverage (where ME018 = Yes), when you compare the count of distinct MEIDs of MA residents with medical coverage for the last four submission periods in the ME File (see Table 5 below), there was a 16.1% decrease in total distinct MEIDs in the last submission year month (201603) attributable to a 61% decrease in self-insured (see Table).

Table 5. Comparison of ME File Change in Volume of Distinct MEIDs by Enrollment Type for MA Residents with Medical Coverage

Submission Year Month	Total Distinct MEIDs	Blanks	Unknown/ Not Applicable	Fully-Insured Commercial	Self-Insured	Group Insurance Commission	MassHealth Managed Care Organization	Supplemental Policy Enrollee	Integrated Care Organization or Senior Care Option
201312	8,256,400	5805	1,320,799	2,203,289	2,246,226	389,865	1,758,051	331,774	591
201412	8,530,145	4124	1,560,103	2,231,362	2,220,667	417,404	1,744,828	335,772	15,885
201512	8,8504,71		1,658,961	2,412,160	2,115,152	368,278	1,827,904	407,123	60,893
201603	7,424,986		1,520,503	2,426,853	825,209	370,341	1,851,574	363,551	66,955

Table 6. Comparison of Percent Change in Distinct MEIDs by Enrollment Type for last 3 ME File for MA Residents with Medical Coverage

Submission Year Month	Total Distinct MEIDs	Blank	Unknown/ Not Applicable	Fully-Insured Commercial	Self-Insured	Group Insurance Commission	MassHealth Managed Care Organization	Supplemental Policy Enrollee	Integrated Care Organization or Senior Care Option
201412	3.3%	-29.0%	18.1%	1.3%	-1.1%	7.1%	-0.8%	1.2%	2587.8%
201512	3.8%		6.3%	8.1%	-4.8%	-11.8%	4.8%	21.2%	283.3%
201603	-16.1%		-8.3%	0.6%	-61.0%	0.6%	1.3%	-10.7%	10.0%

Answer (continued): In summary, there is a drop in the self-insured for the last member eligibility submission period (201603) in APCD Release 5.0 (see Table 7 below).

The drop is least pronounced (-9.8%) for only Massachusetts Resident MEIDs regardless of coverage type (combining medical, dental, vision, behavioral, pharmaceutical) and most pronounced (-16.1%) when limiting to only Massachusetts Residents with medical coverage (see Table 8).

Table 7. Comparison of Distinct MEID Volume Change for Self-Insured for All MEIDs, for MA Resident MEIDs, and for MA Resident MEIDs with Medical Coverage

Submission Year Month	ALL MEIDs		MEIDs LIMITED TO MA RESIDENTS		MEIDs LIMITED TO MA RESIDENTS WITH MEDICAL COVERAGE	
	Total Distinct MEIDs	Self-Insured	Total Distinct MEIDs	Self-Insured	Total Distinct MEIDs	Self-Insured
201312	17,739,573	3,602,840	14,585,358	2,556,582	8,256,400	2,246,226
201412	18,001,355	3,729,472	14,829,101	2,600,484	8,530,145	2,220,667
201512	17,878,773	3,826,650	14,849,399	2,552,204	8,850,471	2,115,152
201603	15,338,983	1,502,915	13,388,528	1,211,707	7,424,986	825,209

Table 8. Comparison of Percent Change Distinct MEID Volume for Self-Insured for All MEIDs, for MA Resident MEIDs, and for MA Resident MEIDs with Medical Coverage

Submission Year Month	ALL MEIDs		MEIDs LIMITED TO MA RESIDENTS		MEIDs LIMITED TO MA RESIDENTS WITH MEDICAL COVERAGE	
	Total Distinct MEIDs	Self-Insured	Total Distinct MEIDs	Self-Insured	Total Distinct MEIDs	Self-Insured
201412	1.5%	3.5%	1.7%	1.7%	3.3%	-1.1%
201512	-0.7%	2.6%	0.1%	-1.9%	3.8%	-4.8%
201603	-14.2%	-60.7%	-9.8%	-52.5%	-16.1%	-61.0%

Inpatient



Outpatient

Inpatient Vs Outpatient Coding

Outpatient Care Settings

Outpatient care provided in a hospital outpatient department, community clinic, ambulance or other facility and non-facility settings can be determined in part based on the site of service (**MC037**), on file type (**MC094**) which allows you to distinguish whether the claim is for professional or facility services. and on procedure code modifiers (**MC056, MC057, MC108, MC109**) which in addition to providing additional information on nature of the procedure, such as GG for diagnostic mammography, can provide more detail on the care setting, for example, 90 for outside reference laboratory or SG for ambulatory surgical center.

Question: How do you distinguish inpatient hospital acute care claims from outpatient ambulatory care claims?

Answer: Extensive references are available (see footnotes) in methodology sections, technical appendices, provider libraries from reports and manuals from CHIA, the Health Policy Commission, MassHealth, CMS, ResDAC, and others on inpatient and outpatient codes.

MC037 Facility Site of Service Description

- 21 Inpatient Hospital
- 22 Outpatient Hospital
- 23 Emergency Room – Hospital
- 24 Ambulatory Surgical Center
- 26 Military Treatment Facility
- 31 Skilled Nursing Facility
- 34 Hospice
- 41 Ambulance - Land
- 42 Ambulance – Air or Water
- 51 Inpatient Psychiatric Facility
- 52 Psychiatric Facility-Partial Hospitalization
- 53 Community Mental Health Center
- 56 Psychiatric Residential Treatment Center
- 61 Comprehensive Inpatient Rehab Facility

MC037 Non- Facility Site of Service Description

- 01 Pharmacy
- 03 School
- 04 Homeless Shelter
- 05 Indian Health Service Free-standing Facility
- 06 Indian Health Service Provider-based Facility
- 07 Tribal 638 Free-standing Facility
- 08 Tribal 638 Provider-based Facility
- 09 Prison/ Correctional Facility
- 11 Office
- 12 Home
- 13 Assisted Living Facility
- 14 Group Home
- 15 Mobile Unit
- 16 Temporary Lodging
- 17 Walk-in Retail Health Clinic
- 20 Urgent Care Facility
- 25 Birthing Center
- 32 Nursing Facility
- 33 Custodial Care Facility
- 49 Independent Clinic
- 50 Federally Qualified Health Center
- 54 Intermediate Care Facility/Mentally Retarded
- 55 Residential Substance Abuse Treatment Facility
- 60 Mass Immunization Center
- 57 Non-residential Substance Abuse Treatment Facility
- 62 Comprehensive Outpatient Rehabilitation Facility
- 65 End-Stage Renal Disease Treatment Facility
- 71 Public Health Clinic
- 72 Rural Health Clinic
- 81 Independent Laboratory
- 99 Other Place

References: Center for Health Information and Analytic, Methodology Paper, Relative Price,

<http://www.chiamass.gov/assets/docs/r/pubs/16/RP-Methodology-Paper-9-15-16.pdf>

Centers for Medicare and Medicaid Services, Office of Enterprise Data and Analytics, Medicare Fee-For-Service Provider Utilization & Payment Data Physician and Other Supplier Public Use File: A Methodological Overview, January 19, 2017:

<https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Medicare-Provider-Charge-Data/Downloads/Medicare-Physician-and-Other-Supplier-PUF-Methodology.pdf>

Commonwealth of Massachusetts Health Policy Commission, Technical Appendix B2, Hospital Outpatient, Addendum to 2015 Cost Trends Report: <http://www.mass.gov/anf/budget-taxes-and-procurement/oversight-agencies/health-policy-commission/publications/b2-hospital-outpatient.pdf>

Health Care Cost Institute, 2015 Health Care Cost and Utilization Report, Analytic Methodology V5.0, November 22, 2016:

MassHealth Provider Library: <http://www.mass.gov/eohhs/gov/laws-regs/masshealth/provider-library/provider-manual/>

Research Data Assistance Center (ResDAC) Knowledgebase Articles: <https://www.resdac.org/resconnect/articles>

Valerius, Joanne, Nenna L. Bayes, Cynthia Newby, and Janet IB Seggern. *Medical insurance: An integrated claims process approach*. McGraw-Hill, 2012.

Answer (continued): Different coding nomenclatures are used for inpatient and outpatient procedures but the same nomenclature is used for diagnosis codes.



Inpatient Vs Outpatient Coding

Inpatient Procedure and Diagnoses

Inpatient hospital services and procedures utilize ICD-9-CM or ICD-10-CM (**MC058, MC083-MC088**) and revenue codes (**MC054**) and ICD-9-CM or ICD-10-CM* for diagnoses (**MC040-MC053, MC142-MC153**), admitting diagnosis (**MC039**) and discharge diagnosis (**MC136**).

For inpatient procedures and diagnoses, when Type of Claim (MC094) = Professional (001) or Facility (002) and any of the following fields are populated MC039-MC053, MC058, MC083-MC088, MC142-MC153, the **ICD Indicator** (**MC107**) field whether the diagnoses and procedures on claim are ICD-9-CM or ICD-10-CM

<u>Value</u>	<u>Description</u>
9	ICD-9-CM
0	ICD-10-CM

Outpatient Procedures and Diagnoses

Outpatient services and procedures utilize CPT/HCPCS (**MC055**), procedure code modifiers (**MC056, MC057, MC108, MC109**) and ICD-9-CM or ICD-10-CM* for diagnoses (**MC040-MC053, MC142-MC153**).

For outpatient procedures, when MC055 is populated, the **Procedure Code Type Identifier** (**MC130**) field defines the type of Procedure Code expected in MC055.

<u>Value</u>	<u>Description</u>
1	CPT or HCPCS Level 1 Code
2	HCPCS Level II Code
3	HCPCS Level III Code (State Medicare code).
4	American Dental Association CDT code
5	State defined Procedure Code
6	CPT Category II
7	CPT Category III Code

** Please keep in mind that ICD-9-CM was effective through 9/30/15 and ICD-10-CM is effective from 10/1/15. While both inpatient and outpatient diagnosis care settings share the same nomenclature, inpatient procedure codes are based on ICD-9-CM/ICD-10-CM and outpatient procedures remain based on CPT/HCPCS, with no switch to the outpatient coding rubric.*

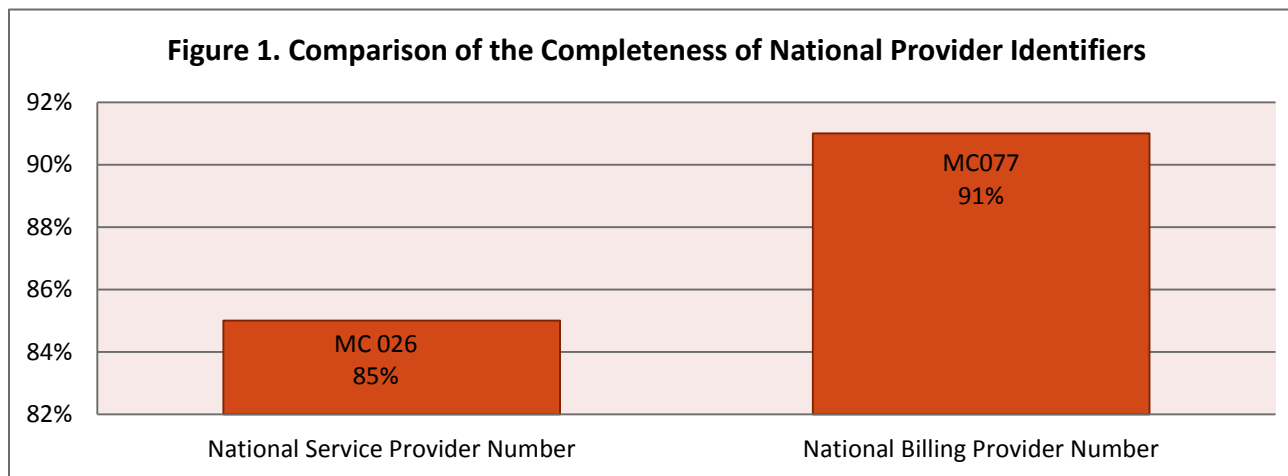
Answer (continued): For those seeking to identify Massachusetts inpatient acute care hospitals the APCD, the highest version of following fields can be used:



Inpatient Vs Outpatient Coding

- MC077 – National Billing Provider Number
- MC018 – Admission Date
- MC020 – Admission Type
- MC021 – Admission Source
- MC027 – Entity Type (Filter by Code 2 for non-person entity)
- MC034 – Service Provider State (Filter by MA for Massachusetts)
- MC036 - Type of Bill on Facility Claims (Filter by Code 11 for Hospital Inpatient Care)
- MC069 – Discharge Date
- MC094 – Type of Claim (Filter by Code 002 for Facility)

MC077 is the billing provider’s National Provider ID created by CMS as 10-digit numeric identifier. The National Billing Provider Identifier (MC077) has more complete information than the National Service Provider Identifier (MC026) (see Figure 1). The decrypted NPI can be linked to the CMS NPI Registry to obtain facilities that have a primary taxonomy of general acute care hospital (“282N00000X”). Filtering by taxonomy allows you to eliminate other types of specialty inpatient care.

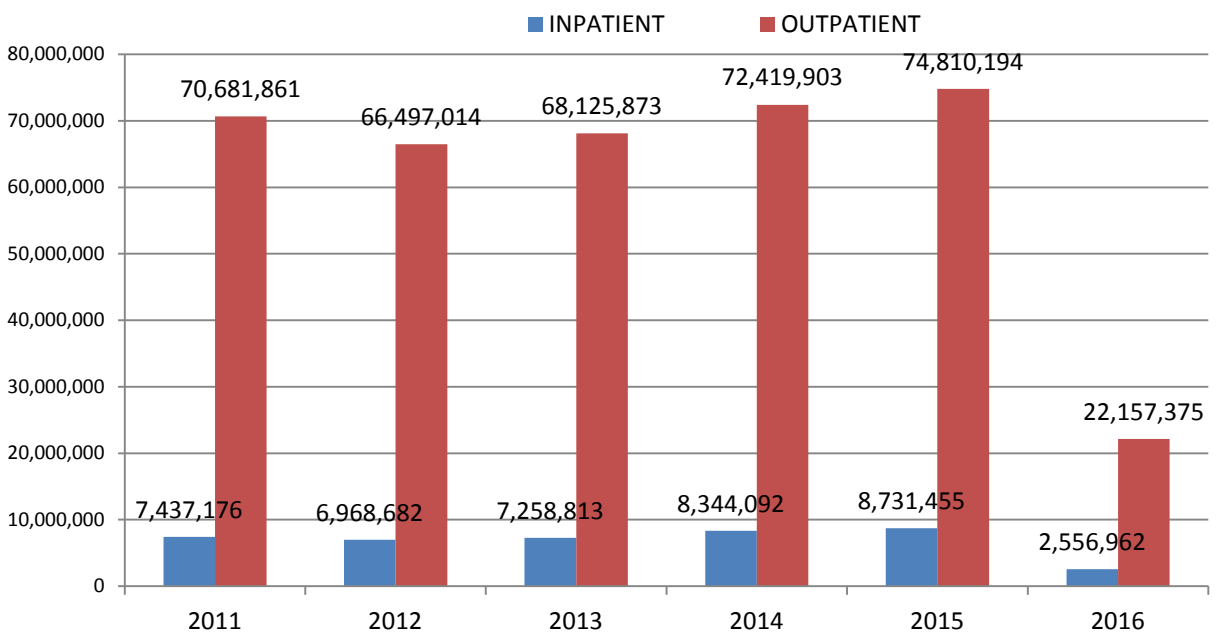


Answer (continued): Those experienced in analyzing Inpatient Case Mix data should keep in mind that a single patient-level episode of care in Case Mix can generate many versions of claim lines in APCD. Also, as of 12/2013, close to 90% of medical claims were for care performed in the outpatient setting (see Figure 2), therefore Type of Bill on Facility (MC036) ensures filtering for hospital inpatient acute care are necessary.



Inpatient Vs Outpatient Coding

Figure 2. Facility Inpatient Claims vs Facility Outpatient Claims*



*Facility Inpatient Claims – Type of Claim='002' and TYPEOFBILLONFACILITYCLAIMS='11'
 Facility Outpatient Claims – Type of Claim='002' and TYPEOFBILLONFACILITYCLAIMS='13'
 The claim lines are restricted with Highest Version Indicator=1
 APCD Release 5.0 Medical Claims

- MC036 Type of Bill on Facility Claims**
- 11 Hospital Inpatient (Part A)
 - 12 Hospital Inpatient (Part B)
 - 13 Hospital Outpatient
 - 14 Hospital Other (Part B)
 - 18 Hospital Swing Bed
 - 21 SNF Inpatient
 - 22 SNF Inpatient Part B
 - 23 SNF Outpatient
 - 28 SNF Swing Bed
 - 32 Home Health
 - 33 Home Health Outpatient
 - 34 Home Health (Part B Only)
 - 41 Religious Nonmedical Health Care Institutions
 - 71 Clinical Rural Health
 - 72 Clinic ESRD
 - 73 Federally Qualified Health Centers
 - 74 Clinic OPT
 - 75 Clinic CORF
 - 76 Community Mental Health Centers
 - 81 Nonhospital based hospice
 - 82 Hospital based hospice
 - 83 Hospital Outpatient (ASC)
 - 85 Critical Access Hospital

Inpatient



Outpatient

Inpatient Vs Outpatient Coding

Answer (continued): **New fields** were added to the APCD in October 2014 that will facilitate your ability to identify care settings. **Type of Facility (MC245)** which define the type of facility setting for the claim and **MassHealth Claim Type (MC246)**.

MC245 Type of Facility

<u>Value</u>	<u>Description</u>
1	General Acute Care Facility
2	Skilled Nursing Facility/Long Term Care Facility
3	Intermediate Care Facility
4	Hospice Facility
5	Designated Cancer Center
6	Designated Inpatient Children’s Hospital
7	Inpatient Rehabilitation Facility
8	Inpatient Psychiatric Hospital
9	Critical Access Hospital
10	VNA/Home Care
70	Other Type of Facility

MC246 MassHealth Claim Type

<u>Value</u>	<u>Description</u>
A	INPATIENT PART A CROSSOVER UB92
B	PROFESSIONAL PART B CROSSOVER
C	OUTPATIENT PART B CROSSOVER UB-04
D	DENTAL
H	HOME HEALTH AND COMMUNITY HEALTH
I	HOSPITAL INPATIENT
L	LONG TERM CARE
M	PHYSICIAN CLAIM
O	HOSPITAL OUTPATIENT
P	PHARMACY
Q	COMPOUND DRUG CLAIMS

Question:

What is cell suppression?



Answer: Cell suppression is a privacy preserving technique to withhold data in a cell that falls below a select small number threshold.

- The CHIA **Data Use Agreement (DUA)** stipulates that no cell (e.g., admittances, discharges, patients, services) less than 11 may be displayed.
- Also, no percentages or other mathematical formulas may be used if they result in the disclosure of a cell less than 11.

Questions?



- Questions related to APCD:
(apcd.data@state.ma.us)
- Questions related to Case Mix:
(casemix.data@state.ma.us)

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 2017, contact Adam Tapply [adam.tapply@state.ma.us]

If you are interested in **PRESENTING** at an MA APCD or Case Mix workgroup in 2017, contact Adam Tapply [adam.tapply@state.ma.us]

You can present remotely from your own office, or in-person at CHIA.