

# Massachusetts Case Mix

## Outpatient Observation Data (OOD)

Fiscal Year 2020

Documentation Manual



# Massachusetts Case Mix FY 2020 Outpatient Observation Data

## USER GUIDE

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## Executive Summary

Each quarter, Massachusetts facilities provide to the Center for Health Information and Analysis (CHIA) data collected from outpatient observation units about patient stays that did not end in an inpatient admission. Data on observation stay patients who were admitted to the same acute inpatient facility at which their observation stay occurred can be found in the FY2020 Hospital Inpatient Discharge Database (HIDD). The FY2020 Outpatient Observation Database (OOD) includes observation stays that occurred between October 1, 2019 and September 30, 2020. Facilities reported a total of 183,567 stays. The FY2020 OOD Guide provides general information about CHIA's most recent outpatient observation data holdings. This information includes high level data notes (data collection, data application, use and FAQs) and a codebook (data element, data dictionary, reference tables, and summary statistics).

## Part A. Data Collection

Select facilities in Massachusetts are required to submit outpatient observation stay data to CHIA under regulation **957 CMR 8.00 - APCD and Case Mix Data Submission**. Researchers can access OOD regulations by visiting CHIA's web site at <http://www.chiamass.gov/regulations>.

**957 CMR 8.00 - APCD and Case Mix Data Submission** requires acute care hospitals to submit inpatient discharge data to CHIA 75 days after each quarter. The quarterly reporting intervals for the FY2020 OOD are as follows:

- **Quarter 1: October 1, 2019 – December 31, 2019**
- **Quarter 2: January 1, 2020 – March 31, 2020**
- **Quarter 3: April 1, 2020 – June 30, 2020**
- **Quarter 4: July 1, 2020 – September 30, 2020**

CHIA reviews each facility's quarterly data for compliance with **957 CMR 8.00 - APCD and Case Mix Data Submission** using a one percent error rate. The one percent error rate is based upon the presence of one or more errors per stay for the facility's quarterly submission. CHIA checks for valid codes, correct formatting, and presence of the required data elements. If one percent or more of the stays are rejected, CHIA rejects the entire submission.

Each facility receives a quarterly error report displaying invalid stay information. Quarterly data that does not meet the one percent compliance standard must be resubmitted by the reporting facility until the standard is met.

### Data Sources

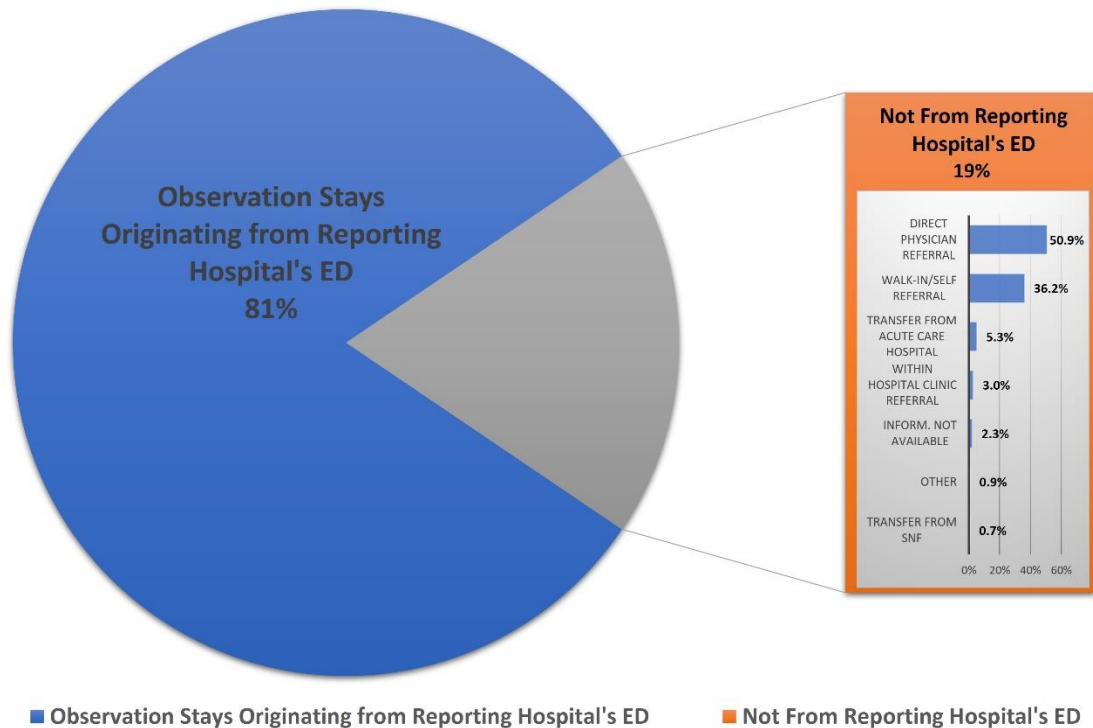
Any stay for which the patient was admitted to observation, but which did not result in an inpatient admission of the patient at the reporting hospital, is included in the FY2020 OOD. Observation services may include monitoring, assessment, and short term treatment before determining whether a patient requires further hospital inpatient treatment or step down monitoring of a patient discharged from inpatient care. An observation stay may occur even if the only service provided is the short term use of a bed to a registered patient for triage or screening. Observation services are further defined in the Hospital Uniform Reporting Manual (HURM), Chapter III, § 3241.

### Observation Stays Originating from Emergency Department Visits

FY2020 outpatient Emergency Department (ED) visits which result in an observation stay at the reporting hospital are not included in the reporting hospital's FY2020 ED visit data. Observation stays that began in the reporting hospital's ED now report in the OOD stay record, the patient's ED registration and discharge date and times associated with the observation stay which originated from an ED visit. While the source of admission codes and ED Flag fields are also used to indicate observation stays originating from an ED Visit, there has been more consistency and completeness in the reporting of the ED registration and ED discharge fields for such stays.

Based on the reporting of ED registration and ED discharge dates, all high proportion of observation stays originate from ED visits. As shown in Figure 1 below, 81% (n=148,833) of all FY2020 observation stays (n=183,567) originated in the reporting hospital's ED.

**Figure 1. Origin of FY2020 Observation Stays**



### Observation Stays Resulting in Inpatient Admissions

If the patient was admitted to inpatient care, observation services were reported as inpatient observation services and included in the reporting hospital's inpatient discharge data (HIDD) and not in the FY2020 OOD. Data users interested in observation stays that result in an inpatient admission should use the FY2020 HIDD. The HIDD database has an "Observation Indicator" flag which identifies admissions that include an observation stay. Their ED Registration and Discharge Dates and Time are also included in the HIDD database.

### OOD Verification Report Process

CHIA sends each facility a report with their observation stay data to maintain and improve the quality of their data submissions. The Verification Report process gives the facilities the opportunity to review the data they have provided to CHIA and affirm data accuracy and completeness.

CHIA produces facility specific Verification Reports at year-end. CHIA asks each facility to review and verify the data contained within the report. Each Verification Report has a series of frequency tables for selected data elements that include, but are not limited to, the number of stays per month and breakouts by admission type, admission source, patient race, and patient disposition.

Facilities must affirm that reported data was accurate or identify any discrepancies. Facilities certify the accuracy and completeness of their data by completing a Verification Report Response form. CHIA accepts two response types from facilities:

**A:** A facility indicates its agreement that the data appearing on the Verification Report is accurate and that it represents the facility's case mix profile.

**B:** A facility indicates that the data on the report is accurate except for the discrepancies noted. If any data discrepancies exist, CHIA requests that facilities provide written explanations of the discrepancies.

Users interested in the FY2020 OOD Verification Reports should contact CHIA at [casemix.data@chiamass.gov](mailto:casemix.data@chiamass.gov). Please indicate the fiscal year of the Verification Report, the dataset name, and if the information is needed for a specific facility or set of facilities.

## Part B: Applying for and Using CHIA Data

Researchers interested in receiving approval to access CHIA data should follow the instructions below to apply for the data. Due to the custom nature of each data request, limited information covering all data uses is provided. Data applicants needing additional assistance applying for data or using the data should contact CHIA at [casemix.data@chiamass.gov](mailto:casemix.data@chiamass.gov).

### How to Apply for the Data

- To obtain a copy of the Application Form, Data Use Agreement, Data Management Plan and/or other documents required for application, go to: <http://www.chiamass.gov/chia-data/>
- Follow the links to the forms that correspond to the data (Case Mix, MA APCD) and application type (Government, Non-Government) that are appropriate to the data request.
- Information on the Hospital Case Mix and Charge Data Fee Schedule is available at the following link: <https://www.chiamass.gov/assets/docs/g/chia-ab/1705.pdf>
- All application documents must be submitted to CHIA and are managed through IRBNet.org. Instructions for submitting application materials through IRBNet are available on the following link: <https://www.chiamass.gov/assets/Uploads/data-apps/Application-Submission-IRBNet-Tutorial.pdf>
- Non-Government applicants can request approval to use a pre-configured Limited Data Set (LDS), designed to protect patient data confidentiality while ensuring analytic utility. This streamlined dataset also improves CHIA's ability to deliver the data efficiently.
- The data contained in Case Mix databases include personal information and Protected Health Information, the release of which is restricted by state and federal laws and regulations. The application process has been designed to help applicants prepare applications that will allow for the release of data while protecting patient privacy. For this reason, applicants should familiarize themselves with CHIA's APCD and Case Mix Data Release Regulation (957 CMR 5.00) and the forms and other background information referenced above.

### Securing CHIA Data Prior to Use

Approved data recipients or agents are obliged by the application and confidentiality agreement to secure the data in a manner that protects the confidentiality of the records and complies fully with the terms of CHIA's Data Use Agreement. All data obtained from CHIA must reside on an encrypted hard drive and/or secure network. Data stored on a Cloud Service Provider must pass a Fed RAMP 3PAO assessment for the specific cloud system which will host the data. The data applicant must also provide CHIA with the name of the Cloud Service Provider and the Fed RAMP level for the specific cloud system hosting the data.

### Data Delivery

CHIA delivers OOD on CD-ROMs. Data users must be able to meet the following Hardware and CD requirements. Users must also be able to read and download the data files to their back office.

### Hardware Requirements:

- CD ROM Device
- Encrypted Hard Drive with 2.0 GB of space available

## Data Use

The FY2020 Case Mix OOD contains 4 Microsoft Access Database (.mdb) files or 4 SAS files (.sas7bdat). Each file name will have a suffix of “\_Full” or “\_Full\_AAAA”. Full indicates a full year or final release. AAAA indicates whether the data is from an LDS or Government dataset.

- The main FIPA\_OOD\_2020\_**Observation** (table name: Observation), contains one record per observation stay.
- FIPA\_OOD\_2020\_**Organization** (table name: Organization) contains one record per organization reported. This table is the look-up table for hospitals and transfer destination organization identifiers. This table can be used to lookup all facility names and hospital teaching status.
- FIPA\_OOD\_2020\_**SubmissionLog** (table name: SubmissionLog) contains one record per quarter for each of the observation facilities filing data.
- FIPA\_OOD\_2020\_**ErrorLog** (table name: ErrorLog) contains records by quarter and by fiscal year for the number of records passed and failed and the reason for fail by IdOrgFiler.

## Linking Files

Historically, case mix data users receive a Microsoft Access version of the data. Many users import the data into SQL, STATA™, SPSS™, SAS™, or R for analysis or data management. Organization Ids should be used to link facility data.



## Part C: Data Elements

The following section should provide the user with an explanation of some of the data. For more information about specific data elements, facility reporting thresholds, or other questions about the data, please contact CHIA at [casemix.data@chiamass.gov](mailto:casemix.data@chiamass.gov).

### About the Limited Data Set (LDS)

The pre-configured Limited Data Set (LDS) is designed to protect patient data confidentiality while ensuring analytic utility. All approved data applicants receive the “core” data elements. Data applicants seeking approval to add to the “core” elements must indicate this by selecting from the list of “buy-ups”. An applicant could use the “Buy-up” process to receive more granular data. For example, the user can request a “buy-up” to a 5 digit patient ZIP code instead of a 3 digit patient ZIP code. CHIA must review buy-up requests and may approve the request based on the project description. CHIA makes an additional set of core elements available only to government data applicants. Government data applicants must specifically identify requested Government-Only elements in their application and provide justification for their request.

### Master Data Elements List

For the FY2020 OOD, CHIA provides a master data elements list by table. Not every approved data applicant has access to every data element – some are reserved for limited dataset buy-ups or for government use. All approved data applicants have access to the “CORE” data. Data applicants who choose limited dataset buy-ups may have access to some “LDS” elements. Only government data applicants may request the “GOV” fields. Data applicants interested in purchasing the data should visit the CHIA website for instructions.

OBSERVATION TABLE-CORE ELEMENTS

AgeLDS	IdOrgSite	Secondary PayerType
AssocConditionPresentCode1-10	IdOrgTransfer	SecondarySourceOfPayment
AssociatedDiagnosisCode1-15	LengthOfStayHours	SecondarySourceOfVisit
AssociatedProcedureCode1-3	NewbornAgeWeeks	SexLDS
Charges	OtherCareGiver	SourceOfVisit
CPTCode1-10	PermanentPatientCountryLDS	SubmissionControlID
DepartureStatus	PermanentPatientStateLDS	SubmissionQuarter
DaysBetweenObsStays	PermanentPatientZIP3CodeLDS	SubmissionYear
ED_Flag	PrimaryPayerType	TemporaryPatientStateLDS
HispanicIndicator	PrimarySourceOfPayment	TemporaryPatientZIP3CodeLDS
HomelessIndicator	PrincipalConditionPresent	TypeOfVisitObs
ICDIndicator	PrincipalDiagnosisCode	VisitPassed

IdOrgFiler	PrincipalProcedureCode	NumberOfHoursInED
IDOrgHosp	RecordType01ID	

**OBSERVATION TABLE-LDS ELEMENTS**

AssociatedProcedureCode1Date-3Date	LegacyCHIAPatientUHIN	PrincipalProcedureCodeYYYYMM
AssociatedProcedureCode1YYYYMM-YYYYMM	LegacyCHIAPhysicianNumber	Race1
DischargeDate	LegacyCHIAOtherPhysicianNumber	Race2
DischargeMonth	ObservationSequence	RegistrationDate
DischargeYear	OtherPhysicianNumber	RegistrationMonth
EmergencyDepartmentRegistrationDate	PermanentPatientCityLDS	RegistrationYear
Ethnicity1	PermanentPatientZIP5CodeLDS	SurgeonAssociatedProcedure1-3
Ethnicity2	PhysicianNumber	TemporaryPatientCityLDS
LegacyCHIAMothersUHIN	PrincipalProcedureCodeDate	TemporaryPatientZip5CodeLDS

**OBSERVATION TABLE-GOVERNMENT-ONLY ELEMENTS**

EmergencyDepartmentDischargeHour	EmergencyDepartmentRegistrationTime	OtherRace
EmergencyDepartmentDischargeMinute	HospitalBillNumber	PatientBirthDate
EmergencyDepartmentDischargeTime	MedicaidMemberID	RegistrationTime
EmergencyDepartmentRegistrationHour	MedicalRecordNumber	
EmergencyDepartmentRegistrationMinute	OtherEthnicity	

**SUBMISSION TABLE**

Active	OrgName	SubmissionControlID
IdOrgFiler	Passed	TotalCharges
NumberOfObservations	Quarter	Year

**ERROR LOG TABLE**

ErrorCategory	NumberOfErrors	SubmissionActive
ErrorDescription	NumberOfObservations	SubmissionControlID
ErrorLogKey	NumberOfObservationsFailed	SubmissionQuarter
FieldName	NumberOfObservationsPassed	SubmissionPassed
IdOrgFiler	OrgName	SubmissionYear

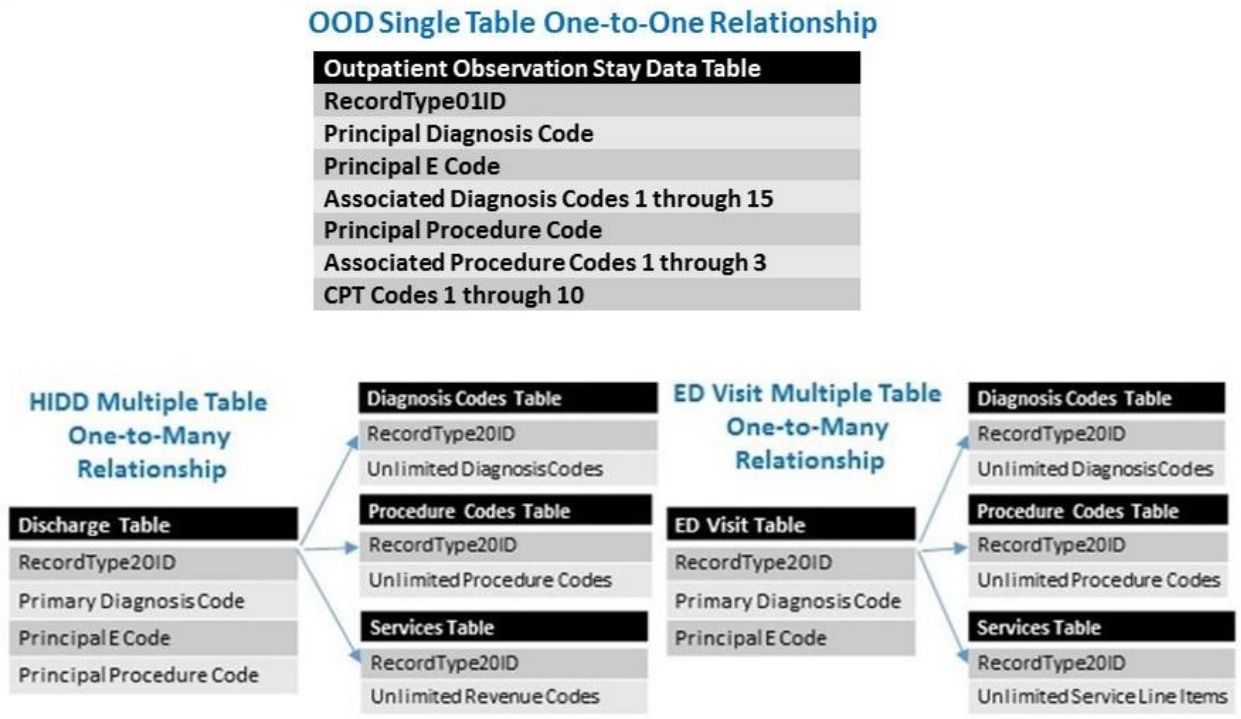
**ORGANIZATION TABLE**

City	OrganizationNumber	State
DateInactive	OrganizationTypeID	Type
GroupName	OrgID	
OrganizationGroupID	OrgName	

**Organization of the Diagnosis and Procedure Codes**

For FY2020 OOD, CHIA organizes the procedure (CPT-4 or ICD-10-PCS) and diagnosis (ICD-10-CM) fields into one main OOD table. See Figure 2 below. Diagnoses and procedures are ordered as submitted to CHIA. CHIA does not require the order of diagnoses and procedures to be medically relevant. CHIA does not affirm or confirm the medical relevancy of the principal diagnosis, procedure, or external cause codes.

**Figure 2. Relationship between Diagnosis Codes and Procedure Codes in Case Mix Data**



**Registration Date, Discharge Date and Observation Time**

The *Registration Date*, *Discharge Date* and *Observation Time* reflects the actual date and time that the patient visit began and was discharged from the OOD. Default values, such as 11:59 PM of the day the patient was registered, were unacceptable. Time was reported as military time, and valid values include 0000 through 2359.

**ED Registration and Discharge Date and Time Data**

If the Observation Stay was due to a transfer from the hospital’s internal Emergency Department, then providers were asked to include the ED registration and discharge dates and times. For FY2020, release of this data is limited to Government recipients only. Time was reported as military time, and valid values include 0000 through 2359.

**Organization Identifiers (OrgID)**

FY2020 OOD contains four organization identifier fields. These fields are a CHIA assigned unique code for each Massachusetts facility:

- **Massachusetts Filer Organization ID (IdOrgFiler):** The Organization ID for the facility that submitted the observation unit data to CHIA.
- **Massachusetts Site Organization ID (IdOrgSite):** The Organization ID for the site where the patient received outpatient observation care.
- **Massachusetts Hospital Organization ID (IdOrgHosp):** The Organization ID for the main hospital affiliation. For example 3108 (Cambridge Health Alliance) is the IdOrgHosp for the IdOrgSite 142 (Everett Hospital).

- **Massachusetts Transfer Hospital Organization ID (IdOrgTransfer):** The Organization ID for the facility from which a patient is transferred. If the patient is transferred from outside of Massachusetts, the IdOrgTransfer will be 9999999.

## Age LDS

If the date of birth and admission date are valid, then CHIA calculated Age LDS in years. The calculation was as follows:

- Age is calculated to be the rounded integer value – of the difference between Date of Birth and Discharge date.
- If Age is valid and < 1 year, then AgeLDS = 0.
- If Age is valid and =>1 year and < 90 years, then AgeLDS = a year between 1 and 89
- If Age is valid and > 89 and <= 115, AgeLDS = 999
- If Age is missing, negative value, or value > 115, then AgeLDS = null

Discretion should be used whenever a questionable age assignment is noted. Researchers are advised to consider other data elements in their analysis of this field.

## Data Limitations

The OOD is derived from outpatient observation stay summaries, which can be traced to information gathered upon registration or from information entered by admitting and attending health professionals into the medical record. The quality of the OOD depends on facility data collection policies and coding practices of the medical record staff.

Information may not be entirely consistent from facility to facility due to differences in:

- Collection and verification of patient supplied information before or at admission,
- Medical record coding, consistency, and/or completeness,
- Extent of facility data processing capabilities,
- Flexibility of facility data processing systems,
- Varying degrees of commitment to quality of merged case mix and charge data,
- Capacity of financial processing system to record late occurring charges on CHIA's electronic submission,
- Non-comparability of data collection and reporting.

## Historical Data Elements

Users of multiple years of Case Mix data should be careful when merging multiple years of data. In order to maintain consistency across years, users may need to merge some codes used for specific data elements. For example, keep in mind the transition from ICD-9-CM to ICD-10-CM/PCS which began in FY2015 (October 2015) and the change in race/ethnicity coding rubric which began in FY2007 (October 2007). Users with questions about new data elements or changes in coding from year to year should contact CHIA at [casemix.data@chiamass.gov](mailto:casemix.data@chiamass.gov).

## Data Dictionary

FY2020 OOD data dictionary provides metadata for the following attributes:

- *Data Element*: name as it appears in the file
- *Short description*: to help users understand what the element contains
- *Primary table*: the main table (MS ACCESS) or file (SAS) that the data element will appear in
- *Linking tables*: other tables that contain the data element
- *Availability to users*: indicates if the data is available to all users (“CORE”), a buy-up (“LDS”), or available only to government (“GOV”)
- *Type of Data*: describes if the data element is Categorical, Ordinal, Currency, an Identifier, Continuous, Date/Time, or Open Text
- *Format*: indicates if the data is formatted in a specific fashion
- *CHIA derived or calculated*: indicates if the field was created by CHIA
- *Description*: is a longer explanation of the data element and its limitations
- *Reference table*: indicates if a Categorical data element has set of valid values that are associated with other information
- *Summary statistics*: links to frequencies or means for that data element

Users of the data with additional questions about any specific data element should contact CHIA at [casemix.data@chiamass.gov](mailto:casemix.data@chiamass.gov).

**Active**

<b>Short Description:</b>	CHIA processing field.
<b>Primary Table:</b>	SubmissionLog
<b>Availability to Users:</b>	CORE
<b>Type of Data:</b>	Categorical
<b>Format:</b>	Varchar
<b>Description:</b>	CHIA indicator of quarterly submission status.

**AgeLDS**

<b>Short Description:</b>	Age of the patient.
<b>Primary Table:</b>	Observation
<b>Availability to Users:</b>	CORE
<b>Type of Data:</b>	Continuous
<b>Format:</b>	YYY
<b>CHIA Derived:</b>	Yes
<b>Description:</b>	<p>Age of the patient as calculated by CHIA based on the registration date and patient's birth date. If either field is null, the calculated age will be blank. The calculated age is rounded up to the nearest integer.</p> <p>Patients younger than 1 year or older than 89 years have their ages grouped.</p> <p>Patients younger than 1 year old are grouped as '0'.</p> <p>Patients older than 89 years are grouped as '999'.</p> <p>Discretion should be used whenever a questionable age assignment is noted.</p> <p>Researchers are advised to consider other data elements in their analysis of this field.</p>

**AssocConditionPresentCode1-10**

<b>Short Description:</b>	Flags whether the diagnosis was present on admission to Observation unit.
<b>Primary Table:</b>	Observation
<b>Availability to Users:</b>	CORE
<b>Type of Data:</b>	Categorical
<b>CHIA Derived:</b>	No
<b>Description:</b>	<p>A qualifier for each diagnosis code indicating the onset of diagnosis preceded or followed by admission. These flags indicate the onset of a diagnosis preceded or followed by admission. There is a POA indicator for 96% of the diagnosis and external cause codes. There are instances where the diagnosis code is exempt from POA indicator reporting. In some of these instances, instead of using the POA exemption indicator of '1', the data submitter has left the POA indicator blank.</p>

### AssociatedDiagnosisCode1-15

<b>Short Description:</b>	ICD-10-CM code for each diagnosis reported by the facility. Up to 15 associated diagnoses in FY2020.
<b>Primary Table:</b>	Observation
<b>Availability to Users:</b>	CORE
<b>Type of Data:</b>	Categorical
<b>Format:</b>	VARCHAR
<b>Description:</b>	ICD-10-CM Associated Diagnosis.
<b>Reference Table:</b>	Standard ICD-10-CM Diagnosis Codes

### AssociatedProcedureCode1-3

<b>Short Description:</b>	ICD-10-PCS codes for each associated significant procedure reported by the facility. Up to 3 ICD-10-PCS procedures in FY2020.
<b>Primary Table:</b>	Observation
<b>Availability to Users:</b>	CORE
<b>Type of Data:</b>	Categorical
<b>Format:</b>	VARCHAR
<b>Description:</b>	Patient's significant procedure, as reported in FL 74 of the UB-04. ICD code (exclude decimal point).
<b>Reference Table:</b>	Standard ICD-10-PCS Procedure Codes

### AssociatedProcedureCode1Date-3Date

<b>Short Description:</b>	The date on which this procedure was performed
<b>Primary Table:</b>	Observation
<b>Availability to Users:</b>	LDS
<b>Type of Data:</b>	Date
<b>Format:</b>	YYYYMMDD
<b>Description:</b>	Calendar date that 1st non-primary procedure was performed.

### AssociatedProcedureCode1YYYYMM-3YYYYMM

<b>Short Description:</b>	Month and Year in which this procedure was performed
<b>Primary Table:</b>	Observation
<b>Availability to Users:</b>	LDS
<b>Type of Data:</b>	Date
<b>Format:</b>	YYMM
<b>Description:</b>	Month and year that 1st non-primary procedure was performed.



## Charges

<b>Short Description:</b>	Facility reported costs for a stay.
<b>Primary Table:</b>	Observation
<b>Availability to Users:</b>	CORE
<b>Type of Data:</b>	Currency
<b>Format:</b>	Integer
<b>Description:</b>	This is the grand total of charges associated with the patient's Observation stay. The total charge amount should be rounded to the nearest dollar. A charge of \$0 is not permitted unless the patient has a special Departure Status reported by facility.

## City

<b>Short Description:</b>	Municipality in which the Observation unit is located.
<b>Primary Table:</b>	Organization
<b>Availability to Users:</b>	CORE
<b>Format:</b>	Varchar
<b>Type of Data:</b>	Categorical
<b>Description:</b>	City in which Observation facility is located.

## CPTCode1-10

<b>Short Description:</b>	CPT Code for each significant procedure reported by the facility. Up to 10 Procedures in FY2020.
<b>Primary Table:</b>	Observation
<b>Availability to Users:</b>	CORE
<b>Type of Data:</b>	Categorical
<b>Reference Table:</b>	Standard CPT codes

## DateInactive

<b>Short Description:</b>	Date in which facility was inactive as an Observation facility.
<b>Primary Table:</b>	Organization
<b>Availability to Users:</b>	CORE
<b>Type of Data:</b>	Date
<b>Format:</b>	YYYYMMDD
<b>Description:</b>	Date in which facility was inactive as an Observation facility.

## DaysBetweenObsStays

<b>Short Description:</b>	Number of days between Observation stays as calculated by CHIA.
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**Primary Table:** Observation  
**Availability to Users:** CORE  
**Type of Data:** Continuous  
**Format:** NNN  
**CHIA derived:** Yes  
**Description:** Count of calendar days between Observation stays for a unique patient. Patients were identified using their encrypted patient ID (field name PT\_ID). The calculation is Date of stay 2 - Date of stay 1.

### DepartureStatus

**Short Description:** Standardized discharge status.  
**Primary Table:** Observation  
**Availability to Users:** CORE  
**Type of Data:** Categorical  
**Format:** N  
**Description:** CHIA defined discharge status as reported by Observation facility. This field identifies the disposition and destination of the patient after discharge from Observation.

**Reference Table:**

CODE	DESCRIPTION
1	Routine
2	Admission to Hospital
3	Transferred
4	Against medical advice (AMA)
5	Expired

### DischargeDate

**Short Description:** Date of discharge from Observation.  
**Primary Table:** Observation  
**Availability to Users:** LDS  
**Type of Data:** Date  
**Format:** YYYYMMDD  
**Description:** Calendar date of discharge from Observation.

### DischargeMonth

**Short Description:** Month in which patient was discharged from Observation.  
**Primary Table:** Observation

**Availability to Users:** LDS  
**Type of Data:** Date  
**Format:** MM  
**Description:** Month of discharge from Observation. Only two-digit values are valid.

**DischargeYear**

**Short Description:** Year in which patient was discharged from Observation.  
**Primary Table:** Observation  
**Availability to Users:** LDS  
**Type of Data:** Date  
**Format:** YYYY  
**Description:** Year of discharge from Observation unit.

**ED\_Flag**

**Short Description:** Flag indicating stay began in Emergency Department.  
**Primary Table:** Observation  
**Availability to Users:** CORE  
**Type of Data:** Categorical  
**Format:** N  
**Description:** Indicates whether an observation stay began in the Emergency Department.  
**Reference Table:**

CODE	DESCRIPTION
0	Not admitted to observation from the emergency department (ED)/no ED visit(s) on this record
1	Not admitted to observation from the emergency department but ED visit(s) reflected in this record
2	Admitted to observation from the emergency department

**EmergencyDepartmentRegistrationDate**

**Short Description:** Date of patient registration to the hospital's Emergency Department.  
**Primary Table:** Observation  
**Availability to Users:** GOV  
**Type of Data:** Date  
**Format:** YYYYMMDD  
**Description:** Calendar date of admission to the ED.

### EmergencyDepartmentRegistrationTime

<b>Short Description:</b>	Time of patient registration in the hospital's Emergency Department.
<b>Primary Table:</b>	Observation
<b>Availability to Users:</b>	GOV
<b>Type of Data:</b>	Time
<b>Format:</b>	HH:MM
<b>Description:</b>	Time at which patient was registered in the emergency department. Hours in military time (0-24 hours). Only values between 0000 and 2359 are valid.

### EmergencyDepartmentDischargeDate

<b>Short Description:</b>	Date of patient discharge from the hospital's Emergency Department.
<b>Primary Table:</b>	Observation
<b>Availability to Users:</b>	GOV
<b>Type of Data:</b>	Date
<b>Format:</b>	YYYYMMDD
<b>Description:</b>	Calendar date of discharge from the ED.

### EmergencyDepartmentDischargeTime

<b>Short Description:</b>	Time of patient discharge from the hospital's Emergency Department.
<b>Primary Table:</b>	Observation
<b>Availability to Users:</b>	GOV
<b>Type of Data:</b>	Time
<b>Format:</b>	HH:MM
<b>Description:</b>	Time at which patient was discharged from the emergency department. Hours in military time (0-24 hours). Only values between 0000 and 2359 are valid.

### ErrorCategory

<b>Short Description:</b>	Indicates the error on a stay record.
<b>Primary Table:</b>	ErrorLog
<b>Availability to Users:</b>	CORE
<b>Type of Data:</b>	Categorical
<b>CHIA Derived:</b>	Yes
<b>Description:</b>	CHIA flag that indicates what the error was on a stay record.. Used for processing.

### ErrorDescription

<b>Short Description:</b>	Standardized description of the reported error.
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**Primary Table:** ErrorLog  
**Availability to Users:** CORE  
**Type of Data:** Open Text  
**Description:** CHIA flag for a reported error in data.. Used for processing.

### ErrorLogKey

**Short Description:** Unique identifier of each error.  
**Primary Table:** ErrorLog  
**Availability to Users:** CORE  
**Type of Data:** Identifier  
**Description:** Unique identifier of each error.

### Ethnicity1, Ethnicity2

**Short Description:** Standardized, facility reported ethnicity.  
**Primary Table:** Observation  
**Availability to Users:** LDS  
**Type of Data:** Categorical  
**CHIA Derived:** No  
**Description:** OOD includes two main fields to report Ethnicity: Ethnicity 1 and Ethnicity 2. The ethnicity codes are based on the CDC Race and Ethnicity Code Set: [https://www.cdc.gov/nchs/data/dvs/Race\\_Ethnicity\\_CodeSet.pdf](https://www.cdc.gov/nchs/data/dvs/Race_Ethnicity_CodeSet.pdf)

**Reference Table:**

CODE	DESCRIPTION
AMERCN	American
BRAZIL	Brazilian
CVERDN	Cape Verdean
CARIBI	Caribbean Island
PORTUG	Portuguese
RUSSIA	Russian
EASTEU	Eastern European
OTHER	Other Ethnicity
UNKNOW	Unknown/Not Specified

### FieldName

**Short Description:** Name of the data element that caused the error.  
**Primary Table:** ErrorLog  
**Availability to Users:** CORE  
**Type of Data:** Open Text  
**Description:** Name of the data element that caused the error. Used for processing.

### GroupName

**Short Description:** Name of the system running the Observation unit.  
**Primary Table:** Organization  
**Availability to Users:** CORE  
**Type of Data:** Open Text  
**Description:** System that runs or owns the Observation facility.

### HispanicIndicator

**Short Description:** Indicates whether patient was Hispanic.  
**Primary Table:** Observation  
**Availability to Users:** CORE  
**Type of Data:** Categorical  
**Description:** A flag for patients of Hispanic/Latino/Spanish culture or origin regardless of race.  
**Reference Table:**

CODE	DESCRIPTION
Y	Patient is Hispanic/Latino/Spanish.
N	Patient is not Hispanic/Latino/Spanish.

### HomelessIndicator

**Short Description:** Indicates whether the patient was homeless.  
**Primary Table:** Observation  
**Availability to Users:** CORE  
**Type of Data:** Categorical  
**Description:** This flag indicates that the patient was homeless at the time of stay. Data users studying homelessness are advised to also review the ICD-10-CM diagnosis codes. There are instances when diagnosis code Z59.0 (homelessness) is reported in the case mix data and the homeless indicator is not reported.

**Reference Table:**

CODE	DESCRIPTION
Y	Patient is known to be homeless.
N	Patient is not known to be homeless.

**HospitalBillNumber**

**Short Description:** Unique patient billing record.  
**Primary Table:** Observation  
**Availability to Users:** GOV  
**Type of Data:** Identifier  
**Format:** Varchar  
**Description:** Facility unique number associated with all billing for the stay.

**ICDIndicator**

**Short Description:** ICD version  
**Primary Table:** Observation  
**Availability to Users:** CORE  
**Type of Data:** Categorical  
**Description:** Indicator for 10-CM/PCS diagnoses, external cause codes, and procedure codes  
**Reference Table:**

CODE	DESCRIPTION
0	ICD-10-CM/PCS Code

**IdOrgFiler**

**Short Description:** ID number of the facility that submitted Observation claims.  
**Primary Table:** Observation  
**Linking Tables:** SubmissionLog  
ErrorLog  
**Availability to Users:** CORE  
**Type of Data:** Categorical  
**Description:** The Organization ID for the facility that submitted the Observation stay data to CHIA.  
**Reference Table:** Table 3

### IdOrgHosp

<b>Short Description:</b>	Facility identifier.
<b>Primary Table:</b>	Observation
<b>Availability to Users:</b>	CORE
<b>Type of Data:</b>	Categorical
<b>Description:</b>	The Organization ID for the main facility affiliation.
<b>Reference Table:</b>	Table 3

### IdOrgSite

<b>Short Description:</b>	Facility identifier.
<b>Primary Table:</b>	Observation
<b>Availability to Users:</b>	CORE
<b>Type of Data:</b>	Categorical
<b>Description:</b>	The Organization ID for the site where the patient received Observation care.
<b>Reference Table:</b>	Table 3

### IdOrgTransfer

<b>Short Description:</b>	Indicates where patient was transferred from.
<b>Primary Table:</b>	Observation
<b>Availability to Users:</b>	CORE
<b>Type of Data:</b>	Categorical
<b>Description:</b>	Organization ID for the facility from which a patient is transferred. If the patient was transferred from outside of Massachusetts, the IdOrgTransfer will be 99999999.
<b>Reference Table:</b>	Table 3

### LegacyCHIAMothersUHIN

<b>Short Description:</b>	Patient's mother's unique id.
<b>Primary Table:</b>	Observation
<b>Availability to Users:</b>	LDS
<b>Type of Data:</b>	Identifier
<b>Format:</b>	VARCHAR
<b>Length:</b>	9
<b>CHIA Derived:</b>	Yes
<b>Description:</b>	CHIA generated unique identifier of a newborn's mother. For newborns or for infants less than 1 year old, CHIA derives a unique ID for the patient's mother. This unique ID allows a newborn visit to be associated with a Mother's visit. Linkable across records and fiscal years. Each patient is given by CHIA a Unique Health Information



Number (UHIN), which is a surrogate key that can link patients over time and across facilities. The data element is blank, a single dash (-) appears in the UHIN field. It is valid for facilities to report that the unique patient identifier is unknown. In these cases, the UHIN appears as '000000001'. The utility of the UHIN field is dependent on the reporting data. For a small number of facilities, little or no UHIN data exists, as these institutions failed to report patients' uniquely identified information. Other facilities reported the same data repeatedly, resulting in numerous admissions for one UHIN. In other cases, the demographic information (age, sex, etc.) was not consistent when a match did exist with the UHIN. Some explanations for this include assignment of a mother's unique identifier to her infant or assignment of a spouse's unique identifier to a patient. Invalid data uses the code UHIN='-----4'

### LegacyCHIAPatientUHIN

<b>Short Description:</b>	Patient's unique id.
<b>Primary Table:</b>	Observation
<b>Availability to Users:</b>	LDS
<b>Type of Data:</b>	Identifier
<b>Format:</b>	VARCHAR
<b>Length:</b>	9
<b>CHIA Derived:</b>	No
<b>Description:</b>	CHIA generated unique identifier of the patient. Linkable across records and fiscal years. Each patient is given by CHIA a Unique Health Information Number (UHIN), which is a surrogate key that can link patients over time and across facilities. The data element is blank, a single dash (-) appears in the UHIN field. It is valid for facilities to report that the unique patient identifier in unknown. In these cases, the UHIN appears as '000000001'. The utility of the UHIN field is dependent on the reporting data. For a small number of facilities, little or no UHIN data exists, as these institutions failed to report patients' uniquely identified information. Other facilities reported the same data repeatedly, resulting in numerous admissions for one UHIN. In other cases, the demographic information (age, sex, etc.) was not consistent when a match did exist with the UHIN. Some explanations for this include assignment of a mother's unique identifier for her infant or assignment of a spouse's unique identifier to a patient. Invalid data uses the code UHIN='-----4'.

### LegacyCHIAPhysicanNumber

<b>Short Description:</b>	Unique identifier of the attending physician.
<b>Primary Table:</b>	Observation
<b>Availability to Users:</b>	LDS
<b>Type of Data:</b>	Identifier

**Description:** Identifier for the Observation Physician who provided services related to this stay. Report if the physician’s involvement in the patient’s Observation stay was captured in the facility’s electronic information systems.

### LegacyCHIAOtherPhysicianNumber

**Short Description:** Unique identifier of a non-attending physician.  
**Primary Table:** Observation  
**Availability to Users:** LDS  
**Type of Data:** Identifier  
**Description:** Identifier for physician other than the Observation Physician who provided services related to this stay. Report if the physician’s involvement in the patient’s Observation stay was captured in the facility’s electronic information systems.

### LengthOfStayHours

**Short Description:** Count of hours spent in the Observation unit.  
**Primary Table:** Observation  
**Availability to Users:** CORE  
**Type of Data:** Continuous  
**Format:** NNN  
**CHIA Derived:** Yes  
**Description:** Count of hours between the registration and discharge time for an Observation stay.

### MedicaidMemberID

**Short Description:** Patient's MassHealth unique ID.  
**Primary Table:** Observation  
**Availability to Users:** GOV  
**Type of Data:** Identifier  
**Description:** Unique MassHealth Identifier of a patient.

### MedicalRecordNumber

**Short Description:** Stay identifier assigned by the facility.  
**Primary Table:** Observation  
**Availability to Users:** GOV  
**Type of Data:** Identifier  
**Description:** The unique number assigned to each patient within the hospital that distinguishes the patient and the patient’s hospital record(s) from all others in that institution.

### NewbornAgeWeeks

<b>Short Description:</b>	Age of children younger than age 1. Valid values are 1-52.
<b>Primary Table:</b>	Visit
<b>Availability to Users:</b>	CORE
<b>Type of Data:</b>	Continuous
<b>Format:</b>	NN
<b>CHIA Derived:</b>	Yes
<b>Description:</b>	Age in weeks for children younger than 53 weeks of age who were admitted for Observation. Weeks are calculated from the Admitting Date - the DOB, and then rounded to the nearest week. Only values between 0 and 52 are valid. All other values are invalid.

### NumberOfErrors

<b>Short Description:</b>	Count of errors in submission from Observation.
<b>Primary Table:</b>	ErrorLog
<b>Availability to Users:</b>	CORE
<b>Type of Data:</b>	Continuous
<b>Description:</b>	CHIA processing field.

### NumberOfObservations

<b>Short Description:</b>	Count of Observation stay records for a facility in a quarter.
<b>Primary Table:</b>	SubmissionLog
<b>Linking Table:</b>	ErrorLog
<b>Availability to Users:</b>	CORE
<b>Type of Data:</b>	Continuous
<b>Description:</b>	Total number of registered observation stays occurring during the reporting period.

### NumberOfObservationsFailed

<b>Short Description:</b>	Count of Observation stay records that failed CHIA intake.
<b>Primary Table:</b>	ErrorLog
<b>Availability to Users:</b>	CORE
<b>Type of Data:</b>	Continuous
<b>Description:</b>	Count of observation stay records that failed CHIA intake.

### NumberOfObservationsPassed

<b>Short Description:</b>	Count of observation stay records that passed CHIA intake.
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<b>Primary Table:</b>	ErrorLog
<b>Availability to Users:</b>	CORE
<b>Type of Data:</b>	Continuous
<b>Description:</b>	Count of observation stay records that passed CHIA intake.

### ObservationSequence

<b>Short Description:</b>	Order in which observation stays occurred for a patient.
<b>Primary Table:</b>	Observation
<b>Availability to Users:</b>	LDS
<b>Type of Data:</b>	Continuous
<b>CHIA Derived:</b>	Yes
<b>Description:</b>	Numeric order of observation stays in Massachusetts for a patient based on the patient's social security number.

### OrganizationGroupID

<b>Short Description:</b>	Code indicating the system that runs the Observation unit.
<b>Primary Table:</b>	Organization
<b>Availability to Users:</b>	CORE
<b>Type of Data:</b>	Categorical
<b>Description:</b>	Code indicating the system that runs the Observation unit.
<b>Reference Table:</b>	Table 3

### OrganizationNumber

<b>Short Description:</b>	ORGID of the facility that owns the Observation unit.
<b>Primary Table:</b>	Organization
<b>Availability to Users:</b>	CORE
<b>Type of Data:</b>	Categorical
<b>Description:</b>	Identifier of the facility that owns the Observation unit.
<b>Reference Table:</b>	Table 3

### OrganizationTypeID

<b>Short Description:</b>	Analogue to all the organization identifiers.
<b>Primary Table:</b>	Organization
<b>Availability to Users:</b>	CORE
<b>Type of Data:</b>	Categorical
<b>Description:</b>	Organization ID that can be linked to all "IdOrg" fields.
<b>Reference Table:</b>	Table 3

### OrgID

**Short Description:** Facility identifier.  
**Primary Table:** Organization  
**Availability to Users:** CORE  
**Type of Data:** Open Text  
**Description:** CHIA assigned identifier for a facility.  
**Reference Table:** Table 3

### OrgName

**Short Description:** Name of Observation facility.  
**Primary Table:** Organization  
**Linking Tables:** SubmissionLog  
 ErrorLog  
**Availability to Users:** CORE  
**Type of Data:** Open Text  
**Description:** Facility name.

### OtherCareGiver

**Short Description:** Indicates if the patient had a caregiver.  
**Primary Table:** Observation  
**Availability to Users:** CORE  
**Type of Data:** Categorical  
**Description:** Indicates the type of primary caregiver responsible for the patient's care other than the attending physician, operating room physician, or nurse midwife as specified in the Regulation. Other caregiver codes include resident, intern, nurse practitioner, and physician assistant.

**Reference Table:**

CODE	DESCRIPTION
1	Resident
2	Intern
3	Nurse Practitioner
4	Not Used
5	Physician Assistant

### OtherEthnicity

<b>Short Description:</b>	Non-standard patient ethnicity designation.
<b>Primary Table:</b>	Observation
<b>Availability to Users:</b>	GOV
<b>Type of Data:</b>	Open Text
<b>Description:</b>	Patient's ethnicity as entered by the facility. Other ethnicity is an open text field for reporting any additional ethnicities when Ethnicity 1 or Ethnicity 2 equals "OTHER-Other Ethnicity".

### OtherPhysicianNumber

<b>Short Description:</b>	Unique identifier of a non-attending physician.
<b>Primary Table:</b>	Observation
<b>Availability to Users:</b>	LDS
<b>Type of Data:</b>	Identifier
<b>Description:</b>	Physician's state license number (BORIM #) for physician other than the Observation Physician who provided services related to the stay. Report if the physician's involvement in the patient's Observation stay was captured in the facility's electronic information systems. If BORIM is unable, then must be "DENSG", "PODTR", "OTHER", "NURSEP", "PHYAST" or "MIDWIF".

### OtherRace

<b>Short Description:</b>	Non-standard patient race designation.
<b>Primary Table:</b>	Observation
<b>Availability to Users:</b>	GOV
<b>Type of Data:</b>	Open Text
<b>Description:</b>	Patient's Race as entered by the facility. Other Race is an open text field for reporting additional races when Race 1 or Race 2 equals "R9 -Other Race".

### Passed

<b>Short Description:</b>	CHIA processing field.
<b>Primary Table:</b>	SubmissionLog
<b>Availability to Users:</b>	CORE
<b>Type of Data:</b>	Continuous
<b>Description:</b>	Count of observation stay records that passed CHIA processing.

### PatientBirthDate

<b>Short Description:</b>	Patient date of birth.
<b>Primary Table:</b>	Observation
<b>Availability to Users:</b>	GOV
<b>Type of Data:</b>	Date
<b>Format:</b>	YYYYMMDD
<b>Description:</b>	Calendar date of patient's birth.

### PermanentPatientCityLDS

<b>Short Description:</b>	Permanent city of residence for the patient.
<b>Primary Table:</b>	Observation
<b>Availability to Users:</b>	LDS
<b>Type of Data:</b>	Categorical
<b>Description:</b>	Primary city of residency for patient.

### PermanentPatientCountryLDS

<b>Short Description:</b>	Permanent country of residence for the patient.
<b>Primary Table:</b>	Observation
<b>Availability to Users:</b>	CORE
<b>Type of Data:</b>	Categorical
<b>Description:</b>	Primary country of residency for patient. The LDS populates PermanentPatientCountryLDS for only the countries of US, CA and MX which covers 99% of the records. The other country values for 1% of the records are suppressed.

### PermanentPatientStateLDS

<b>Short Description:</b>	Permanent state of residence for the patient.
<b>Primary Table:</b>	Observation
<b>Availability to Users:</b>	CORE
<b>Type of Data:</b>	Categorical
<b>Description:</b>	Primary state of residency for patient. Only values in the reference table are valid. While patients from all states have received observation stay care, the LDS populates the PermanentPatientStateLDS field for only the states of MA, NH, RI, CT, ME, VT, and NY which covers 98% of the records. The other state values for 2% of the records are suppressed.

### PermanentPatientZIP3CodeLDS

<b>Short Description:</b>	3-digit ZIP code of the patient's permanent residence.
<b>Primary Table:</b>	Observation
<b>Availability to Users:</b>	CORE
<b>Type of Data:</b>	ZIP code
<b>Format:</b>	NNN
<b>Description:</b>	First three digits of patient's permanent ZIP code. ZIP codes were not standardized and this field was as reported from a nine-digit ZIP code.

### PermanentPatientZIP5CodeLDS

<b>Short Description:</b>	5-digit ZIP code of the patient's permanent residence.
<b>Primary Table:</b>	Observation
<b>Availability to Users:</b>	LDS
<b>Type of Data:</b>	ZIP code
<b>Format:</b>	NNNNN
<b>Description:</b>	First five digits of patient's permanent ZIP code. ZIP codes were not standardized and this field was as reported from a nine-digit ZIP code.

### PhysicianNumber

<b>Short Description:</b>	Unique identifier of the attending physician.
<b>Primary Table:</b>	Observation
<b>Availability to Users:</b>	LDS
<b>Type of Data:</b>	Identifier
<b>Description:</b>	Physician's state license number (BORIM #) for the Observation Physician who provided services related to this stay. Report if the physician's involvement in the patient's Observation stay was captured in the facility's electronic information systems. If BORIM is unable, then must be "DENSG", "PODTR", "OTHER", "NURSEP", "PHYAST" or "MIDWIF".

### PrimaryPayerType

<b>Short Description:</b>	Primary payer type for the stay.
<b>Primary Table:</b>	Observation
<b>Availability to Users:</b>	CORE
<b>Type of Data:</b>	Categorical
<b>Description:</b>	Patient's expected primary payer type for the Observation stay. Report the single character text code indicating the type of payer who has primary responsibility for the payment of the services related to the Observation stay.
<b>Reference Table:</b>	Table 4 and online at CHIA website: <a href="#">Payer Codes</a> (Excel)



### PrimarySourceOfPayment

<b>Short Description:</b>	Primary payer for the stay.
<b>Primary Table:</b>	Observation
<b>Availability to Users:</b>	CORE
<b>Type of Data:</b>	Categorical
<b>Description:</b>	Primary payer for the Observation stay.
<b>Reference Table:</b>	Online at CHIA website: <a href="#">Payer Codes</a> (Excel)

### PrincipalConditionPresent

<b>Short Description:</b>	Flag indicating that principal condition was present on admission.
<b>Primary Table:</b>	Observation
<b>Availability to Users:</b>	CORE
<b>Type of Data:</b>	Categorical
<b>Description:</b>	Indicates that principal condition was present on admission.
<b>Reference Table:</b>	Table 2

### PrincipalDiagnosisCode

<b>Short Description:</b>	ICD-10-CM code for the condition that led to the admission to the Observation unit.
<b>Primary Table:</b>	Observation
<b>Availability to Users:</b>	CORE
<b>Type of Data:</b>	Categorical
<b>Description:</b>	The condition established after study to be chiefly responsible for occasioning the admission of the patient to the observation unit. Facility determined.
<b>Reference Table:</b>	Standard ICD-10-CM Diagnosis Codes

### PrincipalProcedureCode

<b>Short Description:</b>	ICD-10-PCS code for the principal procedure in the Observation unit stay.
<b>Primary Table:</b>	Observation
<b>Availability to Users:</b>	CORE
<b>Type of Data:</b>	Categorical
<b>CHIA Derived:</b>	No
<b>Description:</b>	The chief procedure performed in the Observation unit. Facility determined.
<b>Reference Table:</b>	Standard ICD-10-PCS Procedure Codes

### PrincipalProcedureCodeDate

<b>Short Description:</b>	Date of the principal Procedure.
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**Primary Table:** Observation  
**Availability to Users:** LDS  
**Type of Data:** Date  
**Format:** YYYYMMDD  
**Description:** Calendar date of principal procedure. There are instances when observation stay patients do not have a principal procedure and therefore, the principal procedure code date field is blank. An anomaly in the FY2020 OOD release is that many of these blank date fields are populated with 19000101. Since no principal procedure is associated with this date, 19000101 can be recoded as NULL.

### PrincipalProcedureCodeYYYYMM

**Short Description:** Month and Year of the principal procedure.  
**Primary Table:** Observation  
**Availability to Users:** LDS  
**Type of Data:** Date  
**Primary Table:** Observation  
**Availability to Users:** CORE  
**Type of Data:** Categorical  
**Description:** Indicates that principal condition was present at admission. There are instances when observation stay patients do not have a principal procedure and therefore, the principal procedure code date field is blank. An anomaly in the FY2020 OOD release is that many of these blank date fields are populated with 190001. Since no principal procedure is associated with this date, 190001 can be recoded as NULL.

### Quarter

**Short Description:** Quarter of submission.  
**Primary Table:** SubmissionLog  
**Availability to Users:** CORE  
**Type of Data:** Date  
**Description:** Quarter in which the observation stay was submitted to CHIA.

### Race1, Race2

**Short Description:** Standardized, facility reported race.  
**Primary Table:** Observation  
**Availability to Users:** LDS  
**Type of Data:** Categorical  
**Description:** CHIA has adopted federal Office of Management and Budget standard race and ethnicity values that are consistent with CDC standards.

**Reference Table:**

CODE	DESCRIPTION
R1	American Indian/Alaska Native
R2	Asian
R3	Black/African American
R4	Native Hawaiian or other Pacific Islander
R5	White
R9	Other Race
UNKNOW	Unknown

**RecordType01ID**

**Short Description:** Stay identifier.  
**Primary Table:** Observation  
**Availability to Users:** CORE  
**Type of Data:** Identifier

**Description:** Stay identifier used for CHIA processing.

**RegistrationDate**

**Short Description:** Date of admission to the Observation unit.  
**Primary Table:** Observation  
**Availability to Users:** LDS  
**Type of Data:** Date  
**Format:** YYYYMMDD  
**Description:** Calendar date of admission to Observation.

**RegistrationMonth**

**Short Description:** Month of admission to the Observation unit.  
**Primary Table:** Observation  
**Availability to Users:** LDS  
**Type of Data:** Date  
**Format:** MM  
**Description:** Month in which the patient was admitted to Observation. Only values between 1 and 12 are valid.

### RegistrationTime

<b>Short Description:</b>	Time stamp indicating when the patient was admitted to the Observation unit.
<b>Primary Table:</b>	Observation
<b>Availability to Users:</b>	GOV
<b>Type of Data:</b>	Time
<b>Format:</b>	HH:MM
<b>Description:</b>	Time at which the patient was admitted to Observation. Hours in military time (0-24 hours). Only values between 0000 and 2359 are valid.

### RegistrationYear

<b>Short Description:</b>	Year of admission to the Observation unit.
<b>Primary Table:</b>	Observation
<b>Availability to Users:</b>	LDS
<b>Type of Data:</b>	Date
<b>Format:</b>	YYYY
<b>Description:</b>	Year patient was admitted to Observation. Valid values may be 2019 and 2020.

### SecondaryPayerType

<b>Short Description:</b>	Secondary payer for the Observation stay.
<b>Primary Table:</b>	Observation
<b>Availability to Users:</b>	CORE
<b>Type of Data:</b>	Categorical
<b>Description:</b>	Patient's expected secondary payer type for the Observation stay. Report the single character text code indicating the type of payer who has secondary responsibility for the payment of the services related to the Observation stay.
<b>Reference Table:</b>	Table 4 and online at CHIA website: <a href="#">Payer Codes</a> (Excel)

### SecondarySourceOfPayment

<b>Short Description:</b>	Secondary payer for the Observation stay.
<b>Primary Table:</b>	Observation
<b>Availability to Users:</b>	CORE
<b>Type of Data:</b>	Categorical
<b>Description:</b>	Secondary payer for the observation stay.
<b>Reference Table:</b>	Online at CHIA website: <a href="#">Payer Codes</a> (Excel)

### SecondarySourceOfVisit

<b>Short Description:</b>	Secondary cause of the Observation stay.
<b>Primary Table:</b>	Observation
<b>Availability to Users:</b>	CORE
<b>Type of Data:</b>	Categorical
<b>Description:</b>	The two sources of stay codes (Source of stay and Secondary Source of stay) which indicate the source originating, referring or transferring the patient to Observation. Please note that the terms “visit” and “stay” are used interchangeably for observation services.
<b>Reference Table:</b>	Table 1

### SexLDS

<b>Short Description:</b>	Indicates gender.
<b>Primary Table:</b>	Observation
<b>Availability to Users:</b>	CORE
<b>Type of Data:</b>	Categorical
<b>Description:</b>	Gender flag as assigned by the observation unit.
<b>Reference Table:</b>	

CODE	DESCRIPTION
M	Male
F	Female
U	Unknown

### SourceOfVisit

<b>Short Description:</b>	How a patient reached the Observation unit.
<b>Primary Table:</b>	Observation
<b>Availability to Users:</b>	CORE
<b>Type of Data:</b>	Categorical
<b>CHIA Derived:</b>	No
<b>Description:</b>	The two sources of stay codes (Source of Visit and Secondary Source of Visit) which indicate the source originating, referring or transferring the patient to Observation. Reporting patterns for the Source of Visit data element may vary widely and, as a result, may not be reliable. Please note that the terms “visit” and “stay” are used interchangeably for observation services.
<b>Reference Table:</b>	Table 1

### State

<b>Short Description:</b>	Facility state.
<b>Primary Table:</b>	Organization
<b>Availability to Users:</b>	CORE
<b>Type of Data:</b>	Categorical
<b>Description:</b>	State in which reporting facility is located.
<b>Reference Table:</b>	Table 5

### SubmissionActive

<b>Short Description:</b>	CHIA processing field.
<b>Primary Table:</b>	ErrorLog
<b>Availability to Users:</b>	CORE
<b>Type of Data:</b>	Identifier
<b>Description:</b>	CHIA flag. Used for processing.

### SubmissionControlID

<b>Short Description:</b>	Unique per facility-quarter-submission identifier. Key link from the stay table.
<b>Primary Table:</b>	Observation
<b>Linking Tables:</b>	SubmissionLog ErrorLog
<b>Availability to Users:</b>	CORE
<b>Type of Data:</b>	Identifier
<b>Description:</b>	Unique id for a facility's submission of data to CHIA. Usually one Submission Control ID is associated with a facilities' quarterly submission.

### SubmissionPassed

<b>Short Description:</b>	CHIA flag.
<b>Primary Table:</b>	ErrorLog
<b>Availability to Users:</b>	CORE
<b>Type of Data:</b>	Identifier
<b>Description:</b>	Indicates that observation stay data was submitted to CHIA and passed.

### SubmissionQuarter

<b>Short Description:</b>	Indicates the quarter (1-4) in which the record was submitted to CHIA.
<b>Primary Table:</b>	Observation
<b>Linking Tables:</b>	ErrorLog

**Availability to Users:** CORE  
**Type of Data:** Categorical  
**Description:** Quarter in which the observation stay data was submitted to CHIA.

**SubmissionYear**

**Short Description:** Year in which the observation stay data was submitted to CHIA.  
**Primary Table:** Observation  
**Linking Tables:** ErrorLog  
**Availability to Users:** CORE  
**Type of Data:** Categorical  
**Description:** Indicates the year (2019-2020) in which the record was submitted to CHIA.

**SurgeonAssociatedProcedure1-3**

**Short Description:** ICD-10-PCS or CPT code for each significant procedure reported by the facility. Up to 3 procedures in FY2020.  
**Primary Table:** Observation  
**Availability to Users:** LDS  
**Type of Data:** Categorical  
**Description:** Patient’s significant procedure, as reported in FL 74 of the UB-04. ICD code (exclude decimal point).  
**Reference Table:** Standard ICD-10-PCS Procedure Codes

**TemporaryPatientCityLDS**

**Short Description:** Current municipality of patient residence, if different from permanent residence.  
**Primary Table:** Observation  
**Availability to Users:** LDS  
**Type of Data:** Categorical  
**Description:** MA City in which the patient temporarily resides.

**TemporaryPatientStateLDS**

**Short Description:** Current state of patient residence, if different from permanent residence.  
**Primary Table:** Observation  
**Availability to Users:** CORE  
**Type of Data:** Categorical  
**Description:** Indicates "MA" if the patient temporarily resides in Massachusetts.

### TemporaryPatientZip3CodeLDS

<b>Short Description:</b>	Current 3-digit ZIP code of patient residence, if different from permanent residence.
<b>Primary Table:</b>	Observation
<b>Availability to Users:</b>	CORE
<b>Type of Data:</b>	ZIP code
<b>Format:</b>	NNN
<b>Description:</b>	First three digits of patient's temporary, Massachusetts ZIP code. ZIP codes are not standardized and this field is as reported from a nine-digit ZIP code. The Limited Data Set (LDS) supports selection of 3-character ZIP Code or 5-character ZIP Code for approval by CHIA. Government users may be able to request a 9-character ZIP Code. For LDS users only, if the patient state was not in Massachusetts or a state bordering Massachusetts (Connecticut, Maine, New Hampshire, New York, Rhode Island or Vermont), ZIP codes were set to zeros (0s) and the state was removed.

### TemporaryPatientZip5CodeLDS

<b>Short Description:</b>	Current 5-digit ZIP code of patient residence, if different from permanent residence.
<b>Primary Table:</b>	Observation
<b>Availability to Users:</b>	LDS
<b>Type of Data:</b>	ZIP code
<b>Format:</b>	NNNNN
<b>Description:</b>	First five digits of patient's temporary, Massachusetts ZIP code. ZIP codes are not standardized and this field is as reported from a nine-digit ZIP code. The Limited Data Set (LDS) supports selection of 3-character ZIP Code or 5-character ZIP Code for approval by CHIA. Government users may be able to request a 9-character ZIP Code. For LDS users only, if the patient state was not in Massachusetts or a state bordering Massachusetts (Connecticut, Maine, New Hampshire, New York, Rhode Island or Vermont), ZIP codes were set to zeros (0s) and the state was removed.

### TotalCharges

<b>Short Description:</b>	Total charges associated with Observation stay(s) in a Facility-Submission-Quarter.
<b>Primary Table:</b>	SubmissionLog
<b>Availability to Users:</b>	CORE
<b>Type of Data:</b>	Currency
<b>Description:</b>	Sum of charges for the submission.

### Type

<b>Short Description:</b>	Indicates the type of facility where stay occurred.
<b>Primary Table:</b>	Organization



**Availability to Users:** CORE  
**Type of Data:** Categorical  
**Description:** Categorizes observation stays by facility type. Curated by CHIA.

**TypeOfVisitObs**

**Short Description:** Indicates the type of stay.  
**Primary Table:** Observation  
**Availability to Users:** CORE  
**Type of Data:** Categorical  
**Description:** Facilities indicate whether the stay was Emergency, Urgent, Non-Urgent, Newborn, or Unavailable.

**Reference Table:**

CODE	DESCRIPTION
1	Emergency
2	Urgent
3	Elective
4	Newborn
5	Information Not Available

**VisitPassed**

**Short Description:** CHIA flag.  
**Primary Table:** Observation  
**Availability to Users:** CORE  
**Type of Data:** Identifier  
**Description:** CHIA flag. Used for processing.

**Year**

**Short Description:** Indicates year of submission.  
**Primary Table:** SubmissionLog  
**Availability to Users:** CORE  
**Type of Data:** Categorical  
**Format:** YY  
**Description:** Calendar Year the data was submitted.

## Longer Reference Tables

FY2020 OOD has several standard reference tables. These relate to categorical variables driven by the Outpatient Observation Database Submission Guide. Some of the tables have been integrated into the data dictionary. This section contains longer tables used by multiple data elements. Users of the data with additional questions about any specific Reference table should contact CHIA at [casemix.data@chiamass.gov](mailto:casemix.data@chiamass.gov).

**Table 1. SOURCE OF VISIT**

**Principal Data Element:** SourceOfVisit  
**Other Data Elements:** SecondarySourceofVisit  
**Rules:** All other values are invalid

CODE	DESCRIPTION
0	Information Not Available
1	Direct Physician Referral
2	Within Hospital Clinic Referral
3	Direct Health Plan Referral/HMO Referral
4	Transfer from Acute Care Hospital
5	Transfer from a Skilled Nursing Facility (SNF)
6	Transfer from Intermediate Care Facility (ICF)
7	Outside Hospital Emergency Room Transfer
8	Court/Law Enforcement
9	Other
F	Transfer from a Hospice Facility
L	Outside Hospital Clinic Referral
M	Walk-In/Self-Referral
R	Inside Hospital ER Transfer
T	Transfer from Another Institution's Ambulatory Surgery (SDS)
W	Extramural Birth
Y	Within Hospital Ambulatory Surgery Transfer (SDS Transfer)

**Table 2. CONDITION PRESENT**

**Principal Data Element:** Principal ConditionPresent

**Rules:** All other values invalid.

CODE	DESCRIPTION
Y	Yes
N	No
U	Unknown
W	Clinically undetermined
1	Exempt
A	Not applicable

**Table 3. ORGANIZATION**

**Data Elements:** IdOrgFiler  
 IdOrgHosp  
 IdOrgSite  
 IdOrgTransfer  
 OrgID

Note: The organization table contains information on all organizations submitting data and other organizations transferring patients to organizations. Below is a list of the 65 organizations submitting observation data in FY2020. See Part D: Data Notes for additional information on data submitters.

CODE	DESCRIPTION
1	Anna Jaques Hospital
2	Athol Memorial Hospital
4	Baystate Medical Center
5	Baystate Franklin Medical Center
7	Berkshire Health System - Berkshire Campus
8	Fairview Hospital
10	Beth Israel Deaconess Medical Center - East Campus
16	Boston Medical Center
22	Brigham and Women's Hospital

CODE	DESCRIPTION
25	Signature Healthcare - Brockton Hospital
27	Cambridge Health Alliance – Cambridge Hospital
39	Cape Cod Hospital
40	Falmouth Hospital
41	Steward - Norwood Hospital
42	Steward - Carney Hospital
46	Boston Children's Hospital
49	MetroWest Medical Center - Framingham Union Hospital Campus
50	Cooley Dickinson Hospital
51	Dana-Farber Cancer Institute
53	Beth Israel Deaconess Hospital - Needham
57	Emerson Hospital
59	Brigham and Women's - Faulkner Hospital
62	Steward - Good Samaritan Medical Center - Brockton Campus
68	Harrington Memorial Hospital
71	Health Alliance - Clinton Hospital - Leominster Campus
73	Heywood Hospital
75	Steward - Holy Family Hospital
77	Holyoke Medical Center
79	Beth Israel Deaconess Hospital - Plymouth
81	Lahey Hospital & Medical Center - Burlington
83	Lawrence General Hospital
85	Lowell General Hospital - Main Campus
88	Martha's Vineyard Hospital
89	Massachusetts Eye and Ear Infirmary
91	Massachusetts General Hospital
97	Milford Regional Medical Center
98	Beth Israel Deaconess Hospital – Milton

CODE	DESCRIPTION
99	Steward - Morton Hospital
100	Mount Auburn Hospital
101	Nantucket Cottage Hospital
103	New England Baptist Hospital
104	Tufts-New England Medical Center
105	Newton-Wellesley Hospital
106	Baystate Noble Hospital
109	Lahey Health - Addison Gilbert Hospital Campus
110	Lahey Health - Beverly Hospital Campus
114	Steward - Saint Anne's Hospital
115	Lowell General Hospital - Saints Campus
116	North Shore Medical Center, Inc. - Salem Campus
119	Mercy Medical Center - Springfield Campus
122	South Shore Hospital
123	Southcoast Hospitals Group - Charlton Memorial Hospital Campus
124	Southcoast Hospitals Group - St. Luke's Hospital Campus
126	Steward - St. Elizabeth's Medical Center
127	Saint Vincent Hospital
129	Sturdy Memorial Hospital
131	UMass Memorial Medical Center - University Campus
133	Marlborough Hospital
138	Winchester Hospital
139	Baystate Wing Memorial Hospital
141	Melrose Wakefield Healthcare - Melrose-Wakefield Hospital Campus
145	Southcoast Hospitals Group - Tobey Hospital Campus
6693	Shriners Hospitals for Children - Boston
11466	Steward - Holy Family Hospital at Merrimack Valley
11467	Steward - Nashoba Valley Medical Center

**Table 4. PAYER TYPE**

**Principal Data Element:** PayerType  
**Other Data Elements:** ManagedCareCode  
 MCareMCaidPrivCode  
**Rules:** All other values are invalid

PAYER TYPE CODE	PAYER TYPE ABBREVIATION	PAYER TYPE DEFINITION
1	SP	Self-Pay
2	WOR	Worker's Compensation
3	MCR	Medicare
F	MCR-MC	Medicare Managed Care
4	MCD	Medicaid
B	MCD-MC	Medicaid Managed Care
5	GOV	Other Government Payment
6	BCBS	Blue Cross
C	BCBS-MC	Blue Cross Managed Care
7	COM	Commercial Insurance
D	COM-MC	Commercial Managed Care
8	HMO	HMO
9	FC	Free Care
0	OTH	Other Non-Managed Care Plans
E	PPO	PPO and Other Managed Care Plans Not Elsewhere Classified
H	HSN	Health Safety Net
J	POS	Point-of-Service Plan
K	EPO	Exclusive Provider Organization
T	AI	Auto Insurance
Q	ComCare	Commonwealth Care/ConnectorCare Plans

PAYER TYPE CODE	PAYER TYPE ABBREVIATION	PAYER TYPE DEFINITION
Z	DEN	Dental Plans
N	None	None (Valid only for Secondary Payer)

**Table 5. STATE**

**Principal Data Element:** PermanentPatientStateLDS

**Other Data Elements:** TemporaryPatientStateLDS

**Rules:** All other values are invalid  
 Must be present when Patient Country is 'US'  
 Must be valid U.S. postal code for state

CODE	DESCRIPTION
CT	Connecticut
ME	Maine
MA	Massachusetts
NH	New Hampshire
NY	New York
RI	Rhode Island
VT	Vermont

Note: The LDS includes only the states listed above. The default code of XX is used for any other state or U.S. possession.

## Part D. Data Notes

At the time of this publication the following data notes were present. As data findings occur, CHIA will update the FY20 OOD Release Notes published on the CHIA website at <https://www.chiamass.gov/case-mix-data/>. Data notes will not be regularly updated in this Documentation Manual.

- Many Principal Procedure Code Date and Principal Procedure Code YYYYMM fields are populated with “19000101” or “190001” as a default when no Principal Procedure Code is reported, and the field is left blank.
- Steward Norwood Hospital (Org Id 41) temporarily closed on June 29, 2020 due to flooding. Outpatient Observation stay data is only reported for the first three quarters of FY20.
- UMass Memorial Health hospitals reported a high volume of incomplete Principal External Cause codes in FY20. The codes are missing the encounter indicator (initial, subsequent or sequela) which invalidates the data. The affected sites include Health Alliance – Clinton Hospital (Org Id 132), Health Alliance-Clinton Hospital – Leominster Campus (Org Id 71), UMass Memorial Medical Center – Memorial Campus (Org Id 130), UMass Memorial Medical Center – University Campus (Org Id 131) and Marlborough Hospital (Org Id 133). Resubmissions were not able to be included in the Final OOD FY20 release.

Prior to releasing the Final FY2020 OOD, CHIA provides the hospitals with a profile of the data submitted. Providers may resubmit data or provide written feedback to CHIA. Below is a summary of some of the key feedback received:

- MetroWest Medical Center — Framingham Union Hospital Campus (Org Id 49):
  - Noted Source of Admission shifts in Direct Physician Referrals, Transfers from Acute Hospitals and Walk In/Self Referrals are attributable to the COVID-19 public health emergency and align with the 30% decline in total observation stays in FY20.
- Saint Vincent Hospital (Org Id 127):
  - Noted the reporting of invalid ZIP codes (00000) in 7.7% of observation stays in FY20 is reasonable but can be improved with better control of entries allowed during registration.

### End User Support

Data documentation for Case Mix data releases can be accessed at <http://www.chiamass.gov/case-mix-data/>. For more information about specific data elements, facility reporting, or other questions about the data, please contact CHIA by emailing [casemix.data@chiamass.gov](mailto:casemix.data@chiamass.gov).



## Part E. Frequently Asked 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?

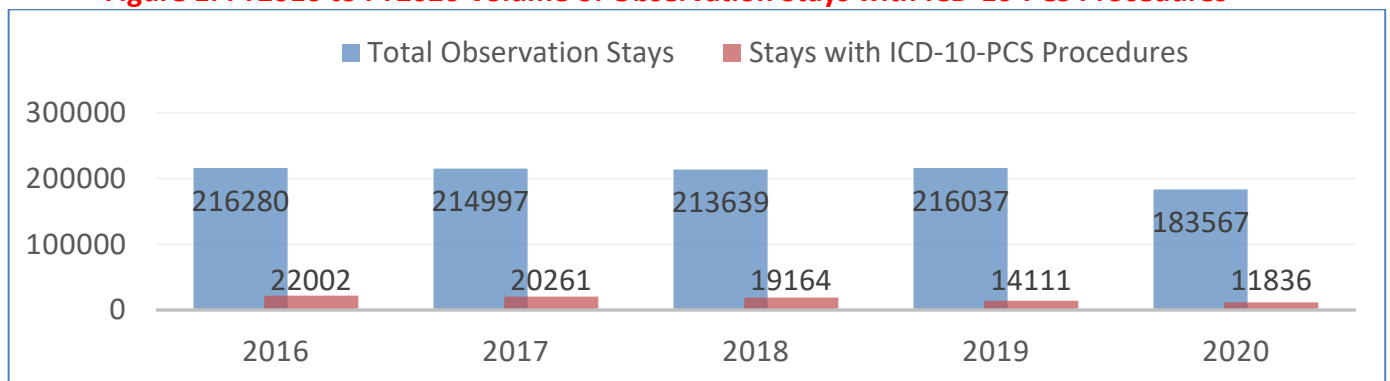
**Answer:** Yes, although at a smaller volume, many of same procedures performed in the hospital inpatient care setting also appear in the outpatient observation stay data, including percutaneous transluminal coronary angioplasty, oophorectomy, prostatectomy, hysterectomy, knee arthroplasty, hip replacement, 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

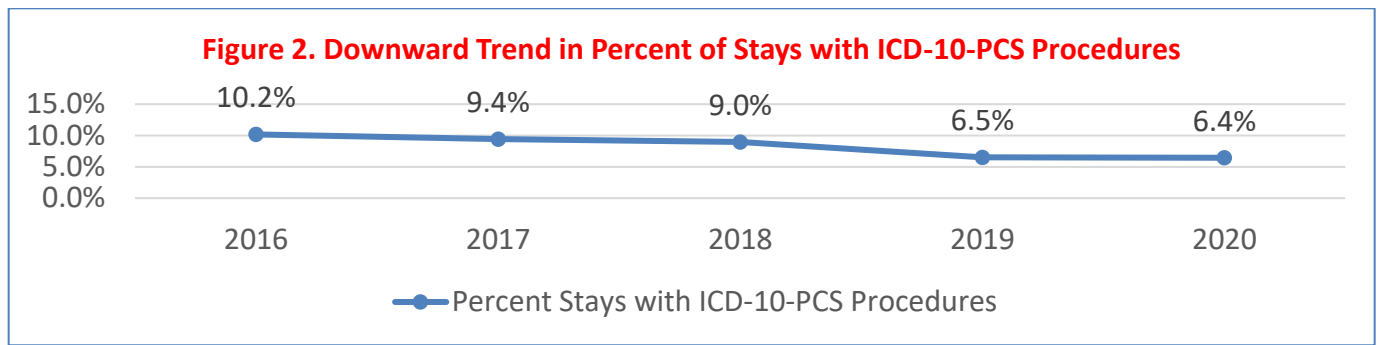
Rank	Observation Stay Top 10 CCS Procedure Categories	Rank	Inpatient Discharge Top 10 CCS Procedure Categories
1	Diagnostic cardiac catheterization; coronary arteriography	1	Respiratory intubation and mechanical ventilation
2	Upper gastrointestinal endoscopy; biopsy	2	Blood transfusion
3	Appendectomy	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

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 a small volume of observation stays had such procedures.

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

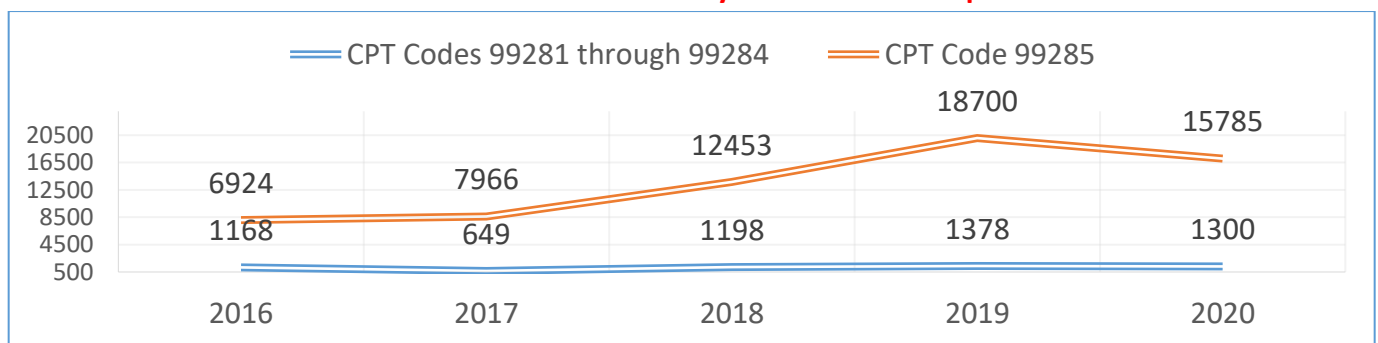


In Figure 2 below, you will see that the percent of patients with such codes has trended downward from 10% in FY2016 to 6% in FY2020.



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. CPT code 99285 for high complexity ED visit patients is in the top 10 of CPTs for observation stays. While the number 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 (see Table 1 below).

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



**Question:** If we wanted to analyze patients who are admitted through observation stay to inpatient hospitalization, what field should we use to ensure that we have filtered for all such patients?

**Answer:** Hospitals report observation room charges under revenue code 762. However, if the patient has been seen in Observation as well as another outpatient department and is then admitted, hospitals use Revenue Code 762 and use the alternate outpatient department as the admission source. Since this is frequently the case with observation stay patients, you will find a small number of discharges with source code 'X' for observation admission source and a larger number with Revenue Code 762 and Observation Stay Flag indicating 'Yes'. It is important to note that the revenue code units of service are reported in hours and a patient might have a longer observation stay, say 48 hours, than inpatient length of stay, which could be only 1 day.

**Question:** We are using the case mix data to analyze gunshot wound (GSW) injuries in Massachusetts. In some years, there are GSWs in Observation Stay data and other years not. Why is that?

**Answer:** The lack of observation stays for gunshot wounds was paralleled by a 19% statewide decrease in FY2017 inpatient care for gunshot wounds and a decrease from FY2016 to FY2017 for ED dead on arrivals due to gunshot wounds and a decrease in ED deaths due to gunshot wounds. The use of observation stay care setting for gunshot wounds has been on the decline, mainly at specific trauma centers which previous had high volume.