

Massachusetts Case Mix

Hospital Emergency Department Data (EDD)

Fiscal Year 2023

Documentation Manual



Massachusetts Case Mix FY 2023 Hospital Emergency Department Data

DOCUMENTATION MANUAL

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Executive Summary

Each quarter, Massachusetts facilities provide CHIA data collected from emergency departments about visits that did not end in an inpatient admission or outpatient observation stay. The FY 2023 Emergency Department Database (EDD) includes emergency department visits that occurred between October 1, 2022 and September 30, 2023. Facilities reported a total of 2,233,372 visits.

The FY 2023 EDD Documentation Manual provides general information about CHIA's most recent emergency department holdings. This information includes high level data notes (data collection, data application, and use) and a codebook (data element list, data dictionary, reference tables, and summary statistics).

Part A. Data Collection

Select facilities in Massachusetts are required to submit emergency department (ED) visit data to CHIA under 957 CMR 8.00 - APCD and Case Mix Data Submission and Regulation 957 CMR 5.00: Health Care Claims, Case Mix and Charge Data Release Procedures. Researchers can access EDD regulations by visiting CHIA's web site at <https://www.chiamass.gov/regulations>.

957 CMR 8.00 - APCD and Case Mix Data Submission requires facilities to submit visit data to CHIA 75 days after each quarter. The quarterly reporting intervals for the FY 2023 EDD are as follows:

- **Quarter 1: October 1, 2022 - December 31, 2022**
- **Quarter 2: January 1, 2023 – March 31, 2023**
- **Quarter 3: April 1, 2023 – June 30, 2023**
- **Quarter 4: July 1, 2023 – September 30, 2023**

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 visit 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 visits are rejected, CHIA rejects the entire quarterly submission.

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

Defining Emergency Department

Regulation *105 CMR 130.020* defines what types of facilities are considered "Emergency Departments" and what is (and is not) a visit. The Hospital Uniform Reporting Manual (HURM) defines additional emergency services and also defines the regulations for emergency services under Massachusetts General Laws. Functional reporting permits comparisons among facilities with varied organizational structures which can be found in the *HURM*, Chapter III, § 3242.

An emergency department is defined as a department of a hospital or an off-site health care facility that provides emergency services as defined in *105 CMR 130.020*. The emergency department must be listed on the license of the hospital and qualify as a Satellite Emergency Facility as defined in *105 CMR 130.820* through *130.836*.

Visits in Other CHIA Databases

Any visit for which the patient was registered in the emergency department that did not result in an outpatient observation stay or an inpatient admission at the reporting facility is considered an emergency department visit. A visit occurs even if the only service provided to a registered patient is triage or screening. Data users interested in visits that resulted in an observation stay should use the outpatient observation database (FY 2023 OOD). Data users interested in visits that resulted in an inpatient admission should use the hospital inpatient discharge database (FY 2023 HIDD). Both the Outpatient Observation Database (OOD) and Hospital Inpatient Discharge Database (HIDD) have an "ED Indicator" flag which identifies care that begins in the ED. The "Source of Admission" codes in OOD and HIDD and "Revenue" codes in

HIDD can be used to identify stays or discharges that included emergency department services. In addition, as of FY 2017, the OOD contains ED registration and ED discharge date for boarding time for ED visits that result in an observation stay, likewise HIDD contains ED registration and ED discharge date and boarding time for ED visits that result in an inpatient hospital admission.

EDD Verification Report Process

CHIA sends each facility a profile report of their visit 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 not limited to, the number of visits per month and breakouts by type of visit, source of visit, patient race, and patient disposition.

Facilities must affirm that reported data is accurate and complete or identify any discrepancies on the year-end verification cycle. 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 FY 2023 EDD Verification Reports should contact CHIA at 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 use request, limited information covering all data uses is provided by CHIA. Data applicants needing additional assistance on the application process or using the data should contact CHIA at 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: <https://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 for data recipients 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 Delivery

CHIA delivers EDD electronically via Secure File Transfer Protocol (SFTP). Users must also be able to read and download the data files to their back office

Hardware Requirements:

- Encrypted Hard Drive with 2.0 GB of space available.

Data Use

The FY 2023 EDD consists of ASCII text files (.txt), Microsoft Access Database (.mdb) files or SAS files (.sas7bdat). Each file name will have a suffix of “_Full_AAAA_BBBB.” AAAA indicates the specific view of the data. BBBB indicates if the data is an LDS or Government dataset.

- The main FIPA_EDD_2023_Visit (table name: Visit), contains one record per ED visit. The unique identifier on this table is the RecordType20ID.
- FIPA_EDD_2023_Service (table name: Service), contains one record per service code (HCPCS or CPT) reported for each visit and service line-item charges rounded to the nearest dollar. The Visit table (RecordType20ID) has a one-to-many relationship with this table.
- FIPA_EDD_2023_DiagnosisCode (table name: DiagnosisCode), contains one record per ICD-10-CM diagnosis code reported for each visit. The Visit table has a one-to-many relationship with this table by linking the RecordType20ID.
- FIPA_EDD_2023_ProcedureCode (table name: ProcedureCode), contains one record per procedure code (CPT or ICD-10-PCS) for each visit. The Visit table has a one-to-many relationship with this table by linking the RecordType20ID.
- FIPA_EDD_2023_Organization (table name: Organization) contains one record per ED organization. This table can be used to lookup facility names, EMS region, and teaching status.
- FIPA_EDD_2023_PayerCategory (table name: PayerCategory) contains one record per ED payer.
- FIPA_EDD_2023_SubmissionLog (table name: Submission Log) contains one record per quarter for each of the ED facilities filing data.
- FIPA_EDD_2023_ErrorLog (table name: ErrorLog) contains records by quarter and by fiscal year on the number of records that pass and fail and the reason for fail by IdOrgFiler.
- FIPA_EDD_2023_ServiceSummary (table name: ServiceSummary), contains one record per quarter per facility. The Visit table (RecordType20ID) has a many-to-one relationship with this Table.

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. To accommodate the one-to-many relationship between the main ED Visit table and Services, DiagnosisCode and ProcedureCode tables, all four tables contain a RecordType20ID field. The RecordType20ID field is a unique identifier used to link the main Visit table to Services, Diagnoses and Procedures tables. The OrgID field in the Organization table can be linked to columns on the Visit table fields that contain Organization ID numbers (IdOrgFiler, IdOrgSite, IdOrgHosp and IdOrgTransfer).

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

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 FY 2023 EDD, 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 approved government use. All approved data applicants have access to the “CORE” data. Data applicants who choose limited dataset buy-ups may receive 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.

VISIT TABLE—CORE ELEMENTS

AgeLDS	LengthOfStayHours	RegistrationMonth
Charges	NewbornAgeWeeks	RegistrationYear
DaysBetweenVisits	OtherCareGiver	SecondaryPayerType
DepartureStatus	PermanentPatientCountryLDS	SecondarySourceOfPayment
DischargeDay	PermanentPatientStateLDS	SecondarySourceOfVisit
DNRStatus	PrimaryPayerType	SexLDS
EDVisitID	PrimarySourceOfPayment	SourceOfVisit
EmergencySeverity	PrincipalConditionPresent	SubmissionControlID
HispanicIndicator	PrincipalDiagnosisCode	TemporaryPatientStateLDS
Homeless	PrincipalECode	Transport
IdOrgFiler	PrincipalECodeConditionPresent	TypeOfVisit
IdOrgHosp	ProcedureCodingType	VisitPassed
IdOrgSite	RecordType20ID	
IdOrgTransfer	RegistrationDay	

VISIT TABLE—LDS ELEMENTS

DischargeDate	PermanentPatientCityLDS	RegistrationMonthMM
DischargeDateMM	PermanentPatientZIP3CodeLDS	TemporaryPatientCityLDS
Ethnicity1	PermanentPatientZIP5CodeLDS	TemporaryPatientZIP3CodeLDS
Ethnicity2	PhysicianNumber	TemporaryPatientZIP5CodeLDS
LegacyCHIAMothersUHIN	Race1	VisitSequence
LegacyCHIAPatientUHIN	Race2	
OtherPhysicianNumber	RegistrationDate	

VISIT TABLE—GOVERNMENT-ONLY ELEMENTS

AmbulanceRunSheet	OtherEthnicity
DischargeTime	OtherRace
HospitalBillNumber	PatientBirthDate
MedicaidMemberID	RegistrationTime
MedicalRecordNumber	

DIAGNOSIS CODE TABLE—CORE ELEMENTS

ConditionPresent
DiagnosisCode
PrincipallIndicator
RecordType20ID
Sequence

PROCEDURE CODE TABLE—CORE ELEMENTS

ProcedureCode
RecordType20ID
Sequence

SERVICES CODE TABLE – CORE ELEMENTS

ServiceLineItem
RecordType20ID
ServiceLineItemCharges

SERVICE SUMMARY TABLE—CORE ELEMENTS

InpatientVisits	SubmissionControlID
ObservationBeds	SubmissionQuarter
OrgID	TotalEDBeds
OutpatientObservationVisits	TotalRegisteredVisits
ServiceSiteSummaryKey	TreatmentBeds

ORGANIZATION TABLE—CORE ELEMENTS

City	OrganizationName
DateInactive	OrganizationNumber
EMSRegion	OrganizationTypeID
GroupName	TeachingStatus
OrganizationGroupID	Type

PAYER CATEGORY—CORE ELEMENTS

PayerManagedCareCode	PayerSourceCode
PayerMCareMCaidPrivCode	PayerSourceDefinition
PayerCategory	PayerTypeCode
Description	PayerTypeAbbreviation
PayerTypeDescription	

Organization Table

The “Organization” table contains 1 record for every valid OrgId reported in the ED visit database. Referenced OrgId’s include: IdOrgFiler, IdOrgHosp, IdOrgSite, and IdOrgTransfer data elements in the ED database. The OrgIds referenced in FY 2023 EDD are listed in Table 1.

Table 1. ORGANIZATION IDENTIFICATION

Principal Data Element:	ORGID FIELDS
Other Data Elements:	IdOrgFiler IdOrgHosp IdOrgSite IdOrgTransfer
Rules:	The Organization Table will contain 1 record for every valid OrgId reported in the ED visit database. The following table lists Facilities only for submissions in a recent year.

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 emergency data in FY 2023.

ORGID	ORGANIZATION NAME	ED VISIT VOLUME
1	Anna Jaques Hospital	18,436
2	Athol Memorial Hospital	11,045
4	Baystate Medical Center	78,975
5	Baystate Franklin Medical Center	21,444
7	Berkshire Health System - Berkshire Campus	42,827
8	Fairview Hospital	13,333
10	Beth Israel Deaconess Medical Center - East Campus	27,196
16	Boston Medical Center	93,740
22	Brigham and Women's Hospital	37,149
25	Signature Healthcare - Brockton Hospital	17,344
27	Cambridge Health Alliance – Cambridge Hospital Campus	34,828
39	Cape Cod Hospital	61,313
40	Falmouth Hospital	25,936
42	Steward - Carney Hospital	26,968
46	Children's Hospital Boston	53,096

ORGID	ORGANIZATION NAME	ED VISIT VOLUME
49	MetroWest Medical Center - Framingham Campus	31,228
50	Cooley Dickinson Hospital	32,136
53	Beth Israel Deaconess Hospital - Needham	18,583
57	Emerson Hospital	26,552
59	Brigham and Women's - Faulkner Hospital	25,059
62	Steward - Good Samaritan Medical Center - Brockton Campus	45,948
68	Harrington Memorial Hospital	23,988
71	Health Alliance – Leominster Campus	24,804
73	Heywood Hospital	22,292
75	Steward - Holy Family Hospital	36,799
77	Holyoke Medical Center	38,375
79	Beth Israel Deaconess – Plymouth (Jordan)	27,213
81	Lahey Hospital & Medical Center -- Burlington Campus	31,746
83	Lawrence General Hospital	48,847
85	Lowell General Hospital – Main Campus	38,142
88	Martha's Vineyard Hospital	16,131
89	Massachusetts Eye and Ear Infirmary	29,061
91	Massachusetts General Hospital	72,452
97	Milford Regional Medical Center	44,202
98	Beth Israel Deaconess - Milton	29,213
99	Steward - Morton Hospital	35,614
100	Mount Auburn Hospital	17,205
101	Nantucket Cottage Hospital	11,380
104	Tufts Medical Center	32,920
105	Newton-Wellesley Hospital	56,386
106	Baystate Noble Hospital	28,191
109	Lahey Health - Addison Gilbert Campus	10,148
110	Lahey Health - Beverly Campus	32,607

ORGID	ORGANIZATION NAME	ED VISIT VOLUME
114	Steward - Saint Anne's Hospital	35,736
115	Lowell General - Saints Campus	28,007
116	North Shore Medical Center - Salem Campus	55,929
119	Mercy Medical Center - Springfield Campus	47,381
122	South Shore Hospital	77,729
123	Southcoast Hospitals Group - Charlton Memorial Campus	44,613
124	Southcoast Hospitals Group - St. Luke's Campus	58,780
126	Steward - St. Elizabeth's Medical Center	20,082
127	Saint Vincent Hospital	36,822
129	Sturdy Memorial Hospital	40,295
130	UMass Memorial Medical Center - Memorial Campus	32,787
131	UMass Memorial Medical Center - University Campus	50,062
132	Health Alliance - Clinton Hospital	13,664
133	Marlborough Hospital	23,523
138	Lahey Winchester Hospital	38,488
139	Baystate Wing Hospital	33,051
141	Melrose-Wakefield Healthcare - Melrose-Wakefield Hospital Campus	25,237
142	Cambridge Health Alliance - Everett (Whidden) Hospital Campus	47,936
145	Southcoast Hospitals Group - Tobey Hospital Campus	20,061
4448	Lahey Medical Center, Peabody	17,998
11466	Steward - Holy Family at Merrimack Valley	20,437
11467	Steward - Nashoba Valley Medical Center	13,902

Organization of the Diagnosis and Procedure Codes

CHIA organizes the procedure and diagnosis fields into four tables—Visit, Diagnosis, Procedure (CPT-4 or ICD-10-CM procedure codes) and Services (CPT-4 or HCPCS procedure codes). The Visit table contains the first diagnosis code on the record (which cannot be an ICD-10-CM external cause code V00-Y99). All other diagnosis and all procedure codes are contained in the Diagnosis and Procedure tables, respectively. Indicator codes are available for each secondary diagnosis or procedure code and are based on order in which those codes were sent to CHIA. Diagnoses and procedures are ordered as submitted by emergency departments 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.

Organization Identifiers (OrgID)

FY 2023 EDD 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 ED visit data to CHIA.
- **Massachusetts Site Organization ID (IdOrgSite):** The Organization ID for the site where the patient received ED 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.

Most facilities provide emergency care at only one location. Therefore, they are considered to have a single campus or site and need to summarize their data only once. However, facilities may have submitted data about care provided at multiple sites. CHIA requires the latter to summarize their data separately.

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 > 0 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 EDD is derived from patient visit summaries, which can be traced to information gathered upon ED registration or from information entered by registering and attending health professionals into the medical record. The quality of the EDD 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 registration
- Update to information following forensic autopsy,
- Medical record coding, consistency, and/or completeness,
- Extent of facility data processing capabilities,
- Flexibility of facility data processing systems,
- 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 over the 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 FY 2015 (October 2015) and the change in race/ethnicity coding rubric which began in FY 2007 (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

Data Dictionary

FY 2023 EDD 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
- *Reference table*: indicates if a Categorical data element has a set of valid values that are associated with other information
- *Description*: is a longer explanation of the data element and its limitations
- *Summary statistics*: links to frequencies or means for that data element

Users of the data with questions about any specific data element should contact CHIA at CaseMix.data@chiamass.gov

Active

Short Description	CHIA processing field.
Primary Table:	SubmissionLog
Availability to Users:	CORE
Type of Data:	Categorical
Format:	Varchar
Length:	3
Description:	CHIA indicator of quarterly submission status.

AgeLDS

Short Description	Age of the patient.
Primary Table:	Visit
Availability to Users:	CORE
Type of Data:	Continuous
Format:	Integer
Length:	3
CHIA derived:	Yes
Description:	Age of the patient as calculated by CHIA. Rounded up to the nearest integer. Age is zero when patient is younger than 1 year and age is 999 when patient is older than 89 years. 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.

AmbulanceRunSheet

Short Description	EMS ambulance run sheet number.
Primary Table:	Visit
Availability to Users:	GOV
Type of Data:	Identifier
Format:	Varchar
Description:	Reported to ED facility. May be present if patient arrived by the ground or air ambulance. The unique identifier automatically assigned by the ambulance agency for each Patient Care Report.

Charges

Short Description	Facility reported costs for a visit.
Primary Table:	Visit
Availability to Users:	CORE
Type of Data:	Currency

Format:	Integer
Description:	The grand total of charges associated with the patient's emergency department visit. The total charge amount is rounded to the nearest dollar. A charge of \$0 is not permitted unless the patient has a special Departure Status reported by facility.
Summary statistics:	Table 7

City

Short Description	Municipality in which the emergency department is located.
Primary Table:	Organization
Availability to Users:	CORE
Type of Data:	Categorical
Format:	Varchar
Description:	Name of the municipality in which the emergency department is located.

ConditionPresent

Short Description	Flags whether the diagnosis was present on visit.
Primary Table:	Diagnosis
Availability to users:	CORE
Type of Data:	Categorical
Length:	1
Format:	Varchar
Description:	Indicates the onset of a diagnosis preceded or followed by the ED visit. There is a present on visit indicator for every diagnosis and external cause-code.
Reference table:	Table 3

Datelnative

Short Description	Date in which facility was inactive as an ED.
Primary Table:	Organization
Availability to users:	CORE
Type of Data:	Date
Description:	Date in which facility was inactive as an ED.

DaysBetweenVisits

Short Description	CHIA derived field to allow for easy calculation of number of days between ED visits.
Primary Table:	Visit
Availability to users:	CORE
Type of Data:	Continuous

Format: Integer
Length: 4
Description: This CHIA calculated field indicates the number of days between each ED Visit for applicable patients. That is, a match with the UHIN only is used to make a determination that a patient has a revisit. The calculation is Date of Visit 2 - Date of Visit 1.
Summary statistics: Table 7

DepartureStatus

Short Description Standardized departure status
Primary Table: Visit
Availability to users: CORE
Type of Data: Categorical
Format: Varchar
Length: 1
Description: CHIA defined departure status as reported by ED facility. This field identifies the disposition and destination of the patient after departure from the ED.
Summary Statistics: Table 8
Reference Table:

CODE	DESCRIPTION
1	Routine (i.e. to home or usual place of residence)
3	Transferred to Other Facility
4	Against Medical Advice (AMA)
6	Eloped
8	Within Hospital Clinic Referral
9	Dead on Arrival (DOA) (with or without resuscitative efforts in the ED)
0	Died during ED Visit
P	Patient met personal physician in the ED (not seen by staff)

DiagnosisCode

Short Description ICD-10-CM code for each diagnosis reported by the facility.
Primary Table: Diagnosis
Availability to users: CORE
Type of Data: Categorical

Format:	Varchar
Length:	7
Description:	ICD-10-CM Associated Diagnosis. Excludes the decimal point. May be an External Cause Code or an Associated or Supplemental External Cause Code IF the Principal External Cause Code is present. Associated External Cause Codes may be: ICD-10-CM (V00-Y89) and Supplemental Codes: (Y90-Y99) (place of injury, activity, status).
Reference table:	Standard ICD-10-CM Diagnosis Codes

DischargeDate

Short Description	Date patient left ED
Primary Table:	Visit
Availability to users:	LDS
Type of Data:	Date
Format:	YYYYMMDD
Length:	8
Description:	Calendar date of patient departure from the ED.

DischargeDay

Short Description	Day of the month when patient left ED.
Primary Table:	Visit
Availability to users:	CORE
Type of Data:	Date
Format:	DDD
Length:	3
Description:	Calendar day of departure from ED. Only values are abbreviated days of week (Mon, Tue, Wed, Thu, Fri, Sat, Sun). Field is blank if discharge date is NULL.

DischargeDateMM

Short Description	Month of year when patient left ED.
Primary Table:	Visit
Availability to users:	LDS
Type of Data:	Date
Format:	MM
Length:	2
Description:	Month of year when patient departed from ED. Only two-digit values are valid.

DischargeTime

Short Description Time stamp indicating when the patient departed the ED.
Primary Table: Visit
Availability to users: GOV
Type of Data: TIME
Format: HH:MM
Description: Time when patient departed from the ED is hours and minutes in military time. Time ranges from 0000 to 2359.

DNRStatus

Short Description Patient had physician order not to resuscitate or patient receiving palliative care only.
Primary Table: Visit
Availability to users: LDS
Type of Data: Ordinal
Format: Integer
Description: A status indicating that the patient had a physician order not to resuscitate or the patient had a status of receiving palliative care only.

Reference table:

CODE	DESCRIPTION
1	DNR order written
2	Comfort measures only
3	No DNR order or comfort measures ordered

EDVisitID

Short Description Facility specific unique visit key.
Primary Table: Visit
Linking tables: Service
Availability to users: CORE
Type of Data: Identifier
Description: Facility specific unique identifier for each visit record. Used to link between tables. Users should use this field, along with the facility identifiers to associate visit data. The total volume of ED visit records will always equal the total volume of unique ED visit IDs.

EmergencySeverity

Short Description Facility calculated measure of severity.
Primary Table: Visit
Availability to users: CORE

Type of Data:	Categorical
Description:	Patient's score on the Emergency Severity Index, as described in Gilboy N, Tanabe T, Travers D, Rosenau AM. Emergency Severity Index (ESI): A Triage Tool for Emergency Department Care, Version 4. Implementation Handbook 2012 Edition. AHRQ Publication No. 12-0014. Rockville, MD. Agency for Healthcare Research and Quality. November 2011 ". It employs a five-level scale. It may be reported on Record Type 20 as an alternative to, or in addition to, the Type of Visit. Regardless of whether the ESI or the Type of Visit is reported; it should reflect the initial assessment of the patient, and not a subsequent revision of it due to information gathered during the course of the emergency department visit.
Summary Statistics:	Table 9

EMSRegion

Short Description	Emergency response region (I-V) where facility is located.
Primary Table:	Organization
Availability to users:	CORE
Type of Data:	Categorical
Description:	Massachusetts emergency region code. For additional information on EMS Regions, see: https://www.mass.gov/service-details/ems-regions-in-massachusetts

ErrorCategory

Short Description	Indicates what the error was on a visit record.
Primary Table:	ErrorLog
Availability to users:	CORE
Type of Data:	Categorical
CHIA derived:	Yes
Description:	CHIA flag that indicates what the error was on a visit record. Used for processing.

ErrorDescription

Short Description	Standardized Description of the reported error.
Primary Table:	ErrorLog
Availability to users:	CORE
Type of Data:	Categorical
CHIA derived:	Yes
Description:	CHIA flag for a reported error in data. Used for processing.

Ethnicity 1, Ethnicity 2

Short Description	Standardized, facility reported ethnicity.
Primary Table:	Visit
Availability to users:	LDS
Type of Data:	Categorical
Length:	6
Description:	Primary (Ethnicity 1) or Secondary (Ethnicity 2) ethnicity as reported by the provider. CHIA's Provider community utilizes the full list of standard ethnicity codes, per the Center for Disease Control found at: https://www.cdc.gov/nchs/data/dvs/Race_Ethnicity_CodeSet.pdf and the specific codes listed below.

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

HispanicIndicator

Short Description	Indicates whether patient was Hispanic.
Primary Table:	Visit
Availability to users:	CORE
Type of Data:	Categorical
Length:	1
Description:	A flag for patients of Hispanic/Latino/Spanish culture or origin regardless of race.
Summary Statistics:	Table 10

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: Visit
Availability to users: CORE
Type of Data: Categorical
Length: 1
Description: This flag indicates that the patient was homeless at the time of visit.
Summary Statistics: Table 11
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 number.
Primary Table: Visit
Availability to users: GOV-SPEC
Type of Data: Identifier
Format: VARCHAR
Length: 17
Description: Facility unique number associated with billing for the patient's visit.

ICD Indicator

Short Description ICD version
Primary Table: Visit
Availability to users: CORE
Type of Data: Categorical

Description: Indicates if the diagnoses, external cause codes, and procedure codes are ICD-10-CM/PCS or ICD-9-CM

Reference table: Table 12

IdOrgFiler

Short Description ID number of the facility that submitted ED claims.

Primary Table: Visit

Linking tables: SubmissionLog
ErrorLog

Availability to users: CORE

Type of Data: Identifier

Description: The Organization ID for the facility that submitted the ED visit data to CHIA.

Reference table: Table 1

IdOrgHosp

Short Description Facility identifier.

Primary Table: Visit

Availability to users: CORE

Type of Data: Identifier

Length: 8

Description: The Organization ID for the main facility affiliation.

Reference table: Table 1

IdOrgSite

Short Description Facility identifier.

Primary Table: Visit

Availability to users: CORE

Type of Data: Identifier

Length: 8

Description: The Organization ID for the site where the patient received ED care.

Reference table: Table 1

IdOrgTransfer

Short Description Indicates where patient was transferred from.

Primary Table: Visit

Availability to users: CORE

Type of Data: Identifier

Length:	10
Description:	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.
Reference table:	Table 1

FieldName

Short Description	Name of the data element that caused the error.
Primary Table:	ErrorLog
Availability to users:	CORE
Type of Data:	Categorical
Description:	Name of the data element that caused the error. Used for processing.

GroupName

Short Description	Name of the system running the ED facility.
Primary Table:	Organization
Availability to users:	CORE
Type of Data:	Open Text
Description:	System that owns or runs the emergency department.

InpatientVisits

Short Description	A count of ED visits that resulted in inpatient visit per each submission (facility-Quarter).
Primary Table:	ServiceSummary
Availability to users:	CORE
Type of Data:	Continuous
Format:	Integer
Description:	A count of ED visits that resulted in inpatient visit per each submission (facility-Quarter). Does not correspond to any visits in the database.

LegCHIAMothersUHIN

Short Description	Patient's mother's unique id.
Primary Table:	Visit
Availability to users:	LDS
Type of Data:	Identifier
Format:	Varchar
Length:	9
CHIA derived:	Yes

Description: 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. If 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 identifiers to her infant or assignment of a spouse's unique identifiers to a patient. Invalid data uses the code UHIN="4".

LegCHIAPatientUHIN

Short Description	Patient's unique id.
Primary Table:	Visit
Availability to users:	LDS
Type of Data:	Identifier
Format:	Varchar
Length:	9
CHIA derived:	No
Description:	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. If 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 identifiers to her infant or assignment of a spouse's unique identifiers to a patient. Invalid data uses the code UHIN="4".

LengthOfStayHours

Short Description	Count of hours in the ED.
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Primary Table:	Visit
Availability to users:	CORE
Type of Data:	Continuous
Format:	Integer
Length:	4
CHIA derived:	Yes
Description:	Count of hours between the registration and discharge time for an ED visit.
Summary statistics:	Table 7

ManagedCareCode

Short Description	Payer code indicating HMO.
Primary Table:	PayerCategory
Availability to users:	CORE
Type of Data:	Categorical
CHIA derived:	Yes
Description:	Subset of payer codes that indicate a managed care plan paid for the visit.

MedicalRecordNumber

Short Description	Patient Visit identifier assigned by the facility
Primary Table:	Visit
Availability to users:	GOV
Type of Data:	Identifier
Format:	Varchar
Length:	10
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.

MedicaidMemberID

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

NewBornAgeWeeks

Short Description	Age of children younger than age 1. Valid values are 1-52.
Primary Table:	Visit

Availability to users:	CORE
Type of Data:	Continuous
Format:	Integer
Length:	Yes
Description:	Age in weeks for children younger than 53 weeks of age who are admitted to the ED. Weeks are calculated from the Registration Date - the DOB, and then rounded to the nearest week. Only values between 0 and 52 are valid. All other values are invalid.
Summary Statistics:	Table 7

NumberOfEDVisitsFailed

Short Description	CHIA derived error field
Primary Table:	DataSubmissionLog
Linking tables:	ErrorLog
Availability to users:	CORE
Type of Data:	Continuous
Description:	Count of ED records that failed CHIA intake.

NumberOfEDVisitsPassed

Short Description	CHIA derived error field
Primary Table:	DataSubmissionLog
Linking tables:	ErrorLog
Availability to users:	CORE
Type of Data:	Continuous
CHIA derived:	Yes
Description:	Count of ED records that passed CHIA intake.

NumberOfEDVisits

Short Description	Count of total ED visits for that facility in that quarter, including any inpatient admissions with as the source of admission and observation stays originating from the ED which are not captured in the ED visit database.
Primary Table:	DataSubmissionLog
Linking tables:	ErrorLog
Availability to users:	CORE
Type of Data:	Continuous
Description:	Total number of registered ED Visits occurring during the reporting period that resulted in inpatient admission (whether preceded by observation stay or not).

NumberOfErrors

Short Description	Count of errors in submission.
Primary Table:	ErrorLog
Availability to users:	CORE
Type of Data:	Continuous
Description:	Count of errors in submission.

ObservationBeds

Short Description	Count of observation beds for the ED facility.
Primary Table:	ServiceSummary
Availability to users:	CORE
Type of Data:	Continuous
Format:	Integer
Description:	Beds located in a distinct area within or adjacent to the emergency department, which are intended for use by observation patients. Facilities include only beds that are set up and equipped on a permanent basis to treat patients. They should not include temporary use of stretchers, gurneys, etc.

OrgId

Short Description	Unique identifier for ED facility. Linkage across tables and fiscal years.
Primary Table:	Organization
Linking tables:	Visit
Availability to users:	CORE
Type of Data:	Identifier
Format:	Integer
Description:	ED facility specific identifier.
Reference table:	Table 1

OrganizationGroupID

Short Description	System ID
Primary Table:	Organization
Availability to users:	CORE
Type of Data:	Identifier
Description:	Code indicating the system that runs the emergency room.
Reference table:	Table 1

OrganizationName

Short Description	Name of ED facility.
Primary Table:	Organization
Linking tables:	SubmissionLog ErrorLog
Availability to users:	CORE
Type of Data:	Open Text
Format:	Varchar
Length:	30
Description:	ED facility specific name.
Reference table:	Table 1

OrganizationNumber

Short Description	ORGID of the facility that owns the emergency room.
Primary Table:	Organization
Availability to users:	CORE
Type of Data:	Identifier
Description:	ORGID of the facility that owns the emergency room.
Reference table:	Table 1

OrganizationTypeID

Short Description	Analogue to ORGID.
Primary Table:	Organization
Availability to users:	CORE
Type of Data:	Categorical
Description:	See ORGID.
Reference table:	Table 1

OtherCareGiver

Short Description	Indicates if the patient had a caregiver.
Primary Table:	Visit
Availability to users:	CORE
Type of Data:	Categorical
Length:	1
Description:	This data element 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.

Summary Statistics

Reference table:

Table 13

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

OtherEthnicity

Short Description

Non-standard patient ethnicity designations.

Primary Table:

Visit

Availability to users:

GOV

Type of Data:

Open Text

Format:

Varchar

Length:

20

Description:

Patient’s ethnicity as entered by the facility. Other ethnicity is an open text field for reporting additional ethnicities when ethnicity 1 or ethnicity 2 equals “R9”, or “Other ethnicity”.

OtherPhysicianNumber

Short Description

Unique identifier of a non-attending physician.

Primary Table:

Visit

Availability to users:

LDS

Type of Data:

Identifier

Description:

Physician’s Massachusetts board of registration in medicine (BORIM license number for physician other than the ED physician who provided services related to this visit. Reported if the physician’s involvement in the patient’s ED Visit is captured in the facility’s electronic information systems or “DENSG”, “PODTR”, “OTHER”, “MIDWIF”, “NURSEP” or “PHYAST” for Dental Surgeon, Podiatrist, Other (i.e. non-permanent licensed physicians), Midwife, Nurse Practitioner, or Physician’s Assistant respectively.

OtherRace

Short Description

Non-standard patient race designations.

Primary Table:

Visit

Availability to users:

GOV

Type of Data:	Open Text
Format:	Varchar
Length:	15
Description:	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", or "Other Race".

OutpatientObservationVisits

Short Description	Count of the number of Observation visits that began in the ED.
Primary Table:	ServiceSummary
Availability to users:	CORE
Type of Data:	Continuous
Description:	Indicates that the patient was admitted from the facility's outpatient observation department or had prior outpatient utilization. Does not correspond to any other data in the database.

Passed

Short Description	CHIA processing field
Primary Table:	SubmissionLog
Availability to users:	CORE
Type of Data:	Categorical
Description:	CHIA indicator of quarterly submission status.

PatientBirthDate

Short Description	Patient Date of Birth
Primary Table:	Discharge
Availability to users:	GOV
Type of Data:	Date
Format:	YYYYMMDD
Length:	8
Description:	Calendar date of patient's birth

PayerCategory

Short Description	Standardized association of a payer with a type of insurance.
Primary Table:	PayerCategory
Availability to users:	CORE
Type of Data:	Categorical

Description: A standardized payer code. MA payers are identified in advance of the payment cycle. This field captures the specific differences between those payers. The payer table is extensive.

Reference table: Table 5

PayerMCareMCaidPrivCode

Short Description Payer code indicating Medicare/MassHealth.

Primary Table: PayerCategory

Availability to users: CORE

Type of Data: Categorical

CHIA derived: Yes

Description: Subset of payer codes that indicate Medicare or MassHealth paid for the visit.

Reference table: Table 5

PayerSourceCode

Short Description Standardized payer source code.

Primary Table: PayerCategory

Availability to users: CORE

Type of Data: Categorical

Description: A standardized source of payment code (different than payer code). Most MA payers are identified in advance of the payment cycle. This field captures the specific differences between those payers. The payer table is extensive.

Reference table: Table 5

PayerSourceDefinition

Short Description Description of the standardized payer source codes.

Primary Table: PayerCategory

Availability to users: CORE

Type of Data: Categorical

Description: A description for use with standardized payer codes. Most MA payers are identified in advance of the payment cycle. This field captures the specific differences between those payers. The payer table is extensive.

Reference table: Table 5

PayerType

Short Description Categorical. Type of Payer.

Primary Table:	PayerCategory
Availability to users:	CORE
Type of Data:	Categorical
Description:	Indicates the type of organization or individual who is payer.
Reference table:	Table 5

PermanentPatientCityLDS

Short Description	Permanent municipality of residence for the patient.
Primary Table:	Visit
Availability to users:	LDS
Type of Data:	Open Text
Format:	Varchar
Length:	25
Description:	Primary municipality of residency for patient.

PermanentPatientCountryLDS

Short Description	Permanent country of residence for the patient.
Primary Table:	Visit
Availability to users:	CORE
Type of Data:	Categorical
Format:	Varchar
Length:	2
Description:	Permanent country of residency for patient reported using International Standards Organization (ISO - 3166) 2-digit country code

PermanentPatientStateLDS

Short Description	Permanent state of residence for the patient.
Primary Table:	Visit
Availability to users:	CORE
Type of Data:	Categorical
Length:	2
Description:	Permanent state of residency for patient reported using USPS 2-digit state abbreviation.
Reference table:	Table 6

PermanentPatientZIP3CodeLDS

Short Description	3-digit ZIP code of the patient's permanent residence.
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Primary Table:	Visit
Availability to users:	CORE
Type of Data:	ZIP code
Format:	Varchar
Length:	3
Description:	First three digits of patient's permanent ZIP code. ZIP codes are not standardized and this field is as reported from a nine-digit ZIP code. For LDS users only, if the patient state is not in Massachusetts or a state bordering Massachusetts (Connecticut, Maine, New Hampshire, New York, Vermont or Rhode Island) ZIP codes are set to zeros (0s) and the state is removed.

PermanentPatientZIP5CodeLDS

Short Description	5-digit ZIP code of the patient's permanent residence.
Primary Table:	Visit
Availability to users:	LDS
Type of Data:	ZIP code
Format:	Varchar
Length:	5
Description:	First five digits of patient's permanent zip code. ZIP codes are not standardized and this field is as reported from a nine-digit ZIP code. For LDS users only, if the patient state is not in Massachusetts or a state bordering Massachusetts (Connecticut, Maine, New Hampshire, New York, Vermont or Rhode Island) ZIP codes are set to zeros (0s) and the state is removed.

PhysicianNumber

Short Description	Uniquely identifies the attending physician.
Primary Table:	Visit
Availability to users:	LDS
Type of Data:	Identifier
Description:	Physician's Massachusetts Board of Registration in Medicine(BORIM) license number for the ED Physician who provided services related to this visit. Report if the physician's involvement in the patient's ED Visit is captured in the facility's electronic information systems or "DENSG", "PODTR", "OTHER", or "MIDWIF" for Dental Surgeon, Podiatrist, "MIDWIF", "NURSEP" or "PHYAST" for Dental Surgeon, Podiatrist, Other (i.e. nonpermanent licensed physicians), Midwife, Nurse Practitioner, or Physician's Assistant respectively.

PrimaryPayerType

Short Description	Primary payer type for the visit.
Primary Table:	Visit
Availability to users:	CORE
Type of Data:	Categorical
Description:	Patient’s expected primary payer type for the ED Visit. Report the single character text code indicating the type of payer who has primary responsibility for the payment of the services related to the ED visit.
Reference table:	Table 4

PrimarySourceofPayment

Short Description	Primary payer for the visit.
Primary Table:	Visit
Availability to users:	CORE
Type of Data:	Categorical
Description:	Primary payer for the ED Visit. Please note that for Source of Payment, the values are in “text” format and may have duplicate numbers due to spaces in the field.
Reference table:	Table 5

PrincipalConditionPresent

Short Description	Flag indicating that principal condition was present on visit.
Primary Table:	Visit
Availability to users:	CORE
Type of Data:	Categorical
Length:	1
Description:	Indicates that principal condition was present on visit.
Reference table:	Table 3

PrincipalDiagnosisCode

Short Description	ED Determined ICD-10-CM code for the Condition that led to the visit to the ED.
Primary Table:	Visit
Availability to users:	CORE
Type of Data:	Categorical
Length:	7
Description:	The ICD diagnosis code corresponding to the condition established after study to be chiefly responsible for the visit of the patient for ED care.
Reference table:	Standard ICD-10-CM Diagnosis Codes

PrincipalECode

Short Description	ICD-10-CM V00-Y99 code for the external cause that led to the visit to the ED.
Primary Table:	Visit
Availability to users:	CORE
Type of Data:	Categorical
Description:	This data element describes the principal external cause of injuries, poisonings, and adverse effects using ICD-10-CM codes. ED determined. In addition to the dedicated external cause Code field, facilities record additional external cause Codes in the associated diagnosis fields for conditions having multiple causes.
Reference table:	Standard ICD-10-CM V00-Y99 Codes

PrincipalECodeConditionPresent

Short Description	External Cause Present on visit indicator
Primary Table:	Visit
Availability to users:	CORE
Type of Data:	Categorical
Description:	Flag indicating that principal ICD-10-CM external cause condition was present on visit. Determined by the emergency department.
Reference table:	Table 3

PrincipalIndicator

Short Description	Indicates principal condition
Primary Table:	Diagnosis
Availability to users:	CORE
Type of Data:	Categorical
Description:	Indicates if the diagnosis code was principal or secondary. Each diagnosis record has this field.

ProcedureCode

Short Description	Code for each significant procedure reported by the facility.
Primary Table:	Procedure
Availability to users:	CORE
Type of Data:	Categorical
Length:	7
Description:	The ICD-10-PCS or Current Procedural Terminology (CPT) code corresponding to procedures which carry an operative or anesthetic risk or require highly trained

personnel, special equipment or facilities. Should be used in conjunction with Procedure Coding Type.

Reference table: ICD-10-PCS Procedure Codes or CPT codes

ProcedureCodingType

Short Description Indicates the type of procedure code
Primary Table: Procedure
Availability to users: CORE
Type of Data: Categorical
Description: Indicates if the code is an ICD-10-PCS code, Current Procedural Terminology (CPT) code, or Healthcare Common Procedure Coding System (HCPCS) code.

Quarter

Short Description Quarter of submission.
Primary Table: SubmissionLog
Availability to users: CORE
Type of Data: Date
Format: QQ
Length: 8
Description: Quarter in which the visit was submitted to CHIA.

Race1, Race2

Short Description Standardized, facility reported race.
Primary Table: Visit
Availability to users: LDS
Type of Data: Categorical
Length: 6
CHIA derived: No
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

RecordType20ID

Short Description	Unique key to link from Visit table.
Primary Table:	Visit
Availability to users:	CORE
Type of Data:	Identifier
Format:	Varchar
Length:	1
CHIA derived:	Yes
Description:	Indicator for Record Type '20'. Required for every ED Visit. Only one allowed per ED Visit. ED Visit specific record identifier used to link data about a specific visit across CHIA data tables. Users should use this identifier with facility IDs and Discharge ids to capture a unique record.

RegistrationDate

Short Description	Date of ED registration
Primary Table:	Visit
Availability to users:	LDS
Type of Data:	Date
Format:	YYYYMMDD
Length:	8
Description:	Calendar date of emergency department registration.

RegistrationDay

Short Description	Day of the week patient was registered in the ED
Primary Table:	Visit

Availability to users: LDS
Type of Data: Date
Format: DDD
Description: Three character abbreviation for emergency department registration Day. Only values Mon, Tue, Wed, Thu, Fri, Sat, and Sun. If registration date is null, the registration day is blank..

RegistrationMonthMM

Short Description ED registration month of the year
Primary Table: Visit
Availability to users: LDS
Type of Data: MM
Description: Month in which the patient was registered in the emergency department. Only values between 1 and 12 are valid.

RegistrationTime

Short Description Time stamp indicating of patient's ED registration
Primary Table: Visit
Availability to users: GOV
Type of Data: Time
Format: HH:MM:
Length: 6
Description: Time at which the patient was registered in the ED is hours and minutes in military time. Time ranges from 0000 to 2359.

RegistrationYear

Short Description Year of ED registration
Primary Table: Visit
Availability to users: CORE
Type of Data: Date
Format: YYYY
Length: 4
Description: Year patient was registered in the ED. As data is in Fiscal years, valid values may be 2022 and 2023.

SecondaryPayerType

Short Description Secondary payer type for the visit.

Primary Table:	Visit
Availability to users:	CORE
Type of Data:	Categorical
Description:	Patient's expected secondary payer type for the ED Visit. Report the single character text code indicating the type of payer who has secondary responsibility for the payment of the services related to the ED visit.
Reference table:	Table 4

SecondarySourceOfPayment

Short Description	Secondary payer for the visit.
Primary Table:	Visit
Availability to users:	CORE
Type of Data:	Categorical
Length:	4
Description:	Secondary payer for this visit. Please note that the values are in "text" format and may have duplicate numbers due to spaces.
Reference table:	Table 5

SecondarySourceOfVisit

Short Description	Secondary cause of the visit to the ED.
Primary Table:	Visit
Availability to users:	CORE
Type of Data:	Categorical
Description:	The two sources of visit codes (Source of Visit and Secondary Source of Visit) indicate the source originating, referring, or transferring the patient to the ED.

Sequence

Short Description	Order of visits during a fiscal year
Primary Table:	Visit
Linking tables:	Service
Availability to users:	CORE
Type of Data:	Continuous
CHIA derived:	Yes
Description:	This calculated field indicates the chronological order of ED visits for patients with multiple ED visits. A match with the UHIN only, is used to make the determination that a patient has had multiple visits. The Sequence Number uses the following data conventions: (1) The sequence number is calculated by sorting the file by UHIN and visit date (in ascending order). (2) The sequence number is then calculated by incrementing a counter for each UHIN's set of visits. A sequence number of "1"

indicates the first ED visit for the UHIN in that fiscal year. (3) If a UHIN has two visits on the same day, the visit date is used as the secondary sort key. (4) If the UHIN is undefined (not reported, unknown or invalid), the sequence number is set to zero.

ServiceID

Short Description	CHIA identifier for a revenue code.
Primary Table:	Service
Availability to users:	CORE
Type of Data:	Identifier
Description:	CHIA identifier for a revenue code.

ServiceLineItem

Short Description	CHIA description of service field.
Primary Table:	Service
Availability to users:	CORE
Type of Data:	Ordinal
Description:	Service Line Items are the Current Procedural Terminology (CPT) or Healthcare Common Procedure Coding System (HCPCS) codes used to bill for specific items and services provided by the emergency department during the visit. In addition, the code DRUGS is used to report provision of any drugs for which there are no specific HCPCS codes available. Likewise, SPPLY is used to report any supplies for which there are no specific HCPCS codes available. Since units of service are not collected in the database, it is possible that the item or service which a reported service line item code represents was actually provided to the patient more than once during the visit.

ServiceSiteSummaryKey

Short Description	CHIA identifier.
Primary Table:	ServiceSummary
Availability to users:	CORE
Type of Data:	Identifier

SexLDS

Short Description	Indicates gender
Primary Table:	Visit
Availability to users:	CORE
Type of Data:	Categorical

Length: 1
CHIA derived: No
Description: Gender flag as assigned by emergency department.
Summary statistics: Table 14
Reference table:

CODE	DESCRIPTION
M	Male
F	Female
U	Unknown

SourceOfVisit

Short Description: How a patient reached the ED.
Primary Table: Visit
Availability to users: CORE
Type of Data: Categorical
Description: The two source of visit codes (Source of Visit and Secondary Source of Visit) that indicate the source originating, referring, or transferring the patient to the ED. Reporting patterns for the Source of Visit data element may vary widely and, as a result, may not be reliable.
Summary statistics: Table 15
Reference table: Table 2

SubmissionActive

Short Description: CHIA processing field
Primary Table: ErrorLog
Availability to users: CORE
Type of Data: Categorical

SubmissionControlID

Short Description: Unique per facility-quarter-submission. Key to link from the Visit table.
Primary Table: Visit
Availability to users: CORE
Type of Data: Identifier
Format: Varchar
Length: 4
CHIA derived: No
Description: Unique ID for a facility's submission of data to CHIA. Usually one Submission Control

ID is associated with a facility's quarterly submission.

SubmissionPassed

Short Description CHIA flag.
Primary Table: ErrorLog
Availability to users: CORE
Type of Data: Categorical
Description: Indicates that visit was submitted to CHIA and passed.

SubmissionPassedFlag

Short Description CHIA derived field
Primary Table: Visit
Availability to users: CORE
Type of Data: Categorical
Length: 4

SubmissionQuarter

Short Description Indicates the quarter (1-4) in which the record was submitted to CHIA.
Primary Table: ErrorLog
Availability to users: CORE
Type of Data: Date
Description: Quarter in which the visit was submitted to CHIA.

SubmissionYear

Short Description Year in which the visit was submitted to CHIA.
Primary Table: ErrorLog
Availability to users: CORE
Type of Data: Date
Description: Indicates the year (2022-2023) in which the record was submitted to CHIA.

TeachingStatus

Short Description Indicates if the ED facility was located in a teaching facility.
Primary Table: Organization
Availability to users: CORE
Type of Data: Categorical

Description: Indicates whether the ED is part of an academic facility or engaged in health professional education.

TemporaryPatientCityLDS

Short Description Current municipality of residence for a patient, if different from permanent residence.
Primary Table: Visit
Availability to users: LDS
Type of Data: Open Text
Format: VARCHAR
Length: 25
Description: Massachusetts municipality in which the patient temporarily resides.

TemporaryPatientStateLDS

Short Description Current state of residence for a patient, if different from permanent residence.
Primary Table: Visit
Availability to users: CORE
Type of Data: Categorical
Length: 2
Description: Indicates "MA" if the patient temporarily resides in Massachusetts.
Reference table: Table 6

TemporaryPatientZIP3CodeLDS

Short Description Current 3-digit ZIP code of patient residence, if different from permanent residence.
Primary Table: Visit
Availability to users: CORE
Type of Data: ZIP code
Format: Varchar
Length: 3
Description: 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 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 is not in Massachusetts or a state bordering Massachusetts (Connecticut, Maine, New Hampshire, New York, Vermont or Rhode Island) ZIP codes are set to zeros (0s) and the state is removed.

TemporaryPatientZIP5CodeLDS

Short Description	Current 5-digit ZIP code of patient residence, if different from permanent residence.
Primary Table:	Visit
Availability to users:	LDS
Type of Data:	ZIP code
Format:	Varchar
Length:	5
Description:	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 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 is not in Massachusetts or a state bordering Massachusetts (Connecticut, Maine, New Hampshire, New York, Vermont or Rhode Island) ZIP codes are set to zeros (0s) and the state is removed.

TemporaryPatientZIPCode

Short Description	Patient's ZIP code
Primary Table:	Visit
Availability to users:	GOV
Type of Data:	ZIP code
Format:	Varchar
Length:	5
Description:	ZIP code of patient's temporary Massachusetts address. CHIA does not alter or standardize the values in this field.

TotalEDBeds

Short Description	Total number of ED beds for a facility-submission-quarter.
Primary Table:	ServiceSummary
Availability to users:	CORE
Type of Data:	Continuous
Description:	Sum of all ED beds in the facility.

TotalCharges

Short Description	Total charges associated with ED visits in a Facility-Submission-Quarter.
Primary Table:	Service
Linking tables:	Service SubmissionLog
Availability to users:	CORE
Type of Data:	Continuous
Description:	Sum of charges for the visit.

TotalRegisteredVisits

Short Description	Total number of ED visits for a facility in a quarter.
Primary Table:	ServiceSummary
Availability to users:	CORE
Type of Data:	Continuous
Description:	Total number of ED visits for a facility in a quarter.

Transport

Short Description	How the patient reached the ED.
Primary Table:	Visit
Availability to users:	CORE
Type of Data:	Categorical
Description:	The patient’s mode of transport to the emergency department.
Summary Statistics:	Table 16

TreatmentBeds

Short Description	Number of beds in ED facility.
Primary Table:	ServiceSummary
Availability to users:	CORE
Type of Data:	Continuous
Description:	Unique identifier for ED facility. Linkage across tables and fiscal years. This data element measures the normal capacity of emergency departments. ED Treatment Beds include only those beds in the emergency department that are set up and equipped on a permanent basis to treat patients. It does not include the temporary use of gurneys, stretchers, etc. Including stretchers, etc. would overestimate facilities’ physical capacity to comfortably treat a certain volume of emergency department patients, although CHIA recognizes that in cases of overcrowding, emergency departments may need to employ temporary beds.

Type

Short Description	Indicates the type of facility where visit occurred.
Primary Table:	Organization
Availability to users:	CORE
Type of Data:	Categorical
Description:	Categorizes emergency rooms by facility type.

TypeofVisit

Short Description: Indicates the type of visit.
Primary Table: Visit
Availability to users: CORE
Type of Data: Categorical
Description: Facilities indicate whether the visit was Emergency, Urgent, Non-Urgent, Newborn, or Unavailable.
Summary statistics: Table 17
Reference table:

CODE	DESCRIPTION
1	Emergency
2	Urgent
3	Non-Urgent
4	Newborn
5	Information Unavailable

VisitPassed

Short Description: CHIA flag.
Primary Table: Visit
Availability to users: CORE
Type of Data: Categorical
CHIA derived: Yes

VisitSequence

Description: CHIA flag. Used for processing
Short description: Order in which visits occurred for a patient.
Primary Table: Visit
Availability to users: LDS
Type of Data: Ordinal
CHIA derived: Yes
Description: This calculated field indicates the chronological order of ED visits for patients with multiple ED visits. A match with the UHIN is only used to make the determination that a patient has had multiple visits. The Sequence Number uses the following data conventions: (1) The sequence number is calculated by sorting the file by UHIN and visit date (in ascending order). (2) The sequence number is then calculated by incrementing a counter for each UHIN's set of visits. A sequence number of "1"

indicates the first visit for the UHIN in that fiscal year. (3) If a UHIN has two visits on the same day, the visit date is used as the secondary sort key. (4) If the UHIN is undefined (not reported, unknown or invalid), the sequence number is set to zero.

Year

Short description	Indicates year of submission.
Primary Table:	Visit
Availability to users:	CORE
Type of Data:	Date
Format:	YY
Description:	Calendar Year the data was submitted.

Longer Reference Tables

FY 2023 EDD has 20 standard reference tables. These relate to categorical variables driven by the Emergency Department Data 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.

Table 2. VISIT SOURCE

Data Elements:	SourceOfVisit SecondarySourceofVisit
Rules:	All other values are invalid Newborns have a special source of visit table (see below).

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
T	Transfer from Another Institution's Ambulatory Surgery (SDS)
Y	Within Hospital Ambulatory Surgery Transfer (SDS Transfer)
E	EMS Transport

SRCVISIT CODE	FOR NEWBORN
Z	Information Not Available – Newborn
A	Normal Delivery
B	Premature Delivery
C	Sick Baby
D	Extramural Birth

Table 3. CONDITION PRESENT

Principal Data Element: PrimaryConditionPresent

Other Data Elements: ConditionPresent
ConditionPresentECode

Rules: All other values invalid.

Last Updated: 1/31/2018

CODE	DESCRIPTION
Y	Yes
N	No
U	Unknown
W	Clinically undetermined
1	Not applicable (only valid for NCHS official published list of not applicable ICD-9-CM or ICD-10-CM codes for POA flag)
[Blank]	Not applicable (only valid for NCHS official published list of not applicable ICD-9-CM or ICD-10-CM codes for POA flag)

Table 4. PAYER TYPE

Principal Data Element: Payer Type
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 (includes Medicare Advantage)
4	MCD	Medicaid
B	MCD-MC	Medicaid Managed Care / MCO
5	GOV	Other Government Payment
7	COM	Other Commercial Insurance not listed elsewhere
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
N	None	None (Valid only for Secondary Payer)
Q	CommCare	Commonwealth Care/Connector Care Plans
Z	DEN	Dental Plans
S	SCO/ICO	Senior Care Options / Integrated Care Organization
A	MCD-ACO	Medicaid Accountable Care Organization
C	COM-ACO	Commercial Accountable Care Organization

Table 5. PAYER SOURCE

Data Elements: PayerSourceCode
 PayerSourceDefinition
 SecondarySourceOfPayment
 PayerCategory
 PrimarySourceOfPayment

Rules: All other values are invalid
 Some codes are valid as Secondary Source of Payment

Refer to complete listing at: [CHIA Payer Source Codes](#)

Table 6. STATE

Data Elements: PermanentPatientStateLDS
 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 FY 2023 EDD 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.

- MetroWest Medical Center – Framingham Campus (Org Id 49) and Saint Vincent Hospital (Org Id 127) are missing Transfer Org Ids for FY 2023 quarters 3 and 4 due to a system conversion. This is expected to be corrected for FY 2024.
- Signature Healthcare Brockton Hospital (Org Id 25) temporarily closed as of February 7, 2023, due to a transformer fire and did not submit quarterly EDD files for FY 2023 quarters 3 and 4.
- Steward Norwood Hospital (Org Id 41) temporarily closed on June 29, 2020, due to flooding and did not submit quarterly EDD files for FY 2023. This site is currently undergoing a complete renovation and rebuild.

Prior to releasing the Final FY 2023 EDD, 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:

- Berkshire Medical Center – Berkshire Campus (Org Id 7):
 - Noted admit source mapped incorrectly to Extramural Birth resulting in a minimal volume over reported. This has been corrected for FY 2024 submissions.
 - Noted total Number ED Hours >24 increased significantly in FY 2023 representing a policy change in the ER for psychiatry patients held in the ED psychiatric ward for 24 hours before transferring to the Inpatient Psychiatric Unit.
- Beth Israel Deaconess Medical Center - East Campus (Org Id 10):
 - Noted fluctuations between Primary Source of Payment categories across all quarters attributed to an increase in safety net coverage related to an increase in demand due to economic conditions (for example, unhoused and migration).
- Beth Israel Deaconess Hospital - Milton (Org Id 98):
 - Noted a 10% volume increase for total Emergency type patient visits in FY 2023 compared to FY 2022.
 - Noted patients are increasingly reluctant to provide SSN data which is required to create CHIA generated Unique Health Information Numbers (UHIN).
- Beth Israel Deaconess Hospital – Needham (Org Id 53):
 - Noted a 9% increase in total ED visits in FY 2023 due to the closure of Steward Norwood Hospital.
- Cape Cod Hospital (Org Id 39):
 - Noted shifts in Source of Visit categories due to improved reporting.
 - Noted improvement in Hispanic Indicator and Patient Ethnicity data collection due to reverification process implementation and improvements in self-registration to decrease volumes for Unknown or declined responses.
 - Noted Primary Source and Type of Payment reporting shifts due to the discontinuation of the Steward Health Choice Medicaid ACO as of March 31, 2023.
- Cooley Dickinson Hospital (Org Id 50):
 - Noted Source of Visit - Direct Physician Referral category experienced an upward trend in volumes across quarters in FY 2023 as more patients could access physician care before an ED visit.
- Emerson Hospital (Org Id 57):
 - Noted a 48% decrease in FY 2023 from FY 2022 in Source of Visit volume due to an overall reduction in direct referrals for patient reported COVID.

- Noted 50% decrease in Noninvasive Ear and Pulse Oximetry beginning in FY 2023 quarter 3 due to a policy change in how charges for pulse oximetry are utilized. Billing was discontinued when included as part of a vitals check for a patient and continued only when physician ordered and deemed medically necessary.
- Falmouth Hospital (Org Id 40):
 - Noted shifts in Type of Visit categories due to improved reporting.
 - Noted fluctuations in Source of Visit reporting due to improvements in staff training.
 - Noted fluctuations in Patient Ethnicity with plans to implement reverification process for Unknown or declined responses along with an increase in self-registration.
 - Noted Primary Source and Type of Payment fluctuations due to discontinuation of Steward Health Choice Medicaid ACO as of March 31, 2023.
- Holyoke Medical Center (Org Id 77):
 - Noted increased reporting of “Unknown” for reporting categories including Patient Race, Hispanic Status and Ethnicity due to patient self-reporting.
 - Noted increase in Eloped status due to long wait times and less staff to keep up with demand, and a higher census in the hospital.
- Lawrence General Hospital (Org Id 83):
 - Noted Primary Source and Type shift to Medicaid from ALWAYS Health Plan beginning in FY 2023 quarter 3.
- Martha’s Vineyard Hospital (Org Id 88):
 - Noted quarterly ED volume fluctuations are due to seasonal population.
- MetroWest Medical Center – Framingham Campus (Org Id 49) and Saint Vincent Hospital (Org Id 127):
 - Noted fluctuations in reported volumes and reporting category shifts due to EHR conversion in May 2023.
- Milford Regional Medical Center (Org Id 97):
 - Noted Patient Departure Status fluctuations in volumes for Eloped and AMA (Against Medical Advice) categories due to a high rate of quarter 1 boarding in the ED.
 - Noted Payer Type reporting shifts due to expanded insurance selection in EMR.
 - Noted quarter 3 FY 2023 decrease in Number ED Hours >24 due to improvements in workflow including bed status.
- South Shore Hospital (Org Id 122):
 - Noted Source of Visit-Other and Patient Departure Status-AMA volume increases in reporting categories attributed to the temporary closure of Signature Healthcare Brockton Hospital which has resulted in significant increases in wait times and patient volume.
 - Noted the closure of Signature Healthcare Brockton Hospital additionally resulted in changes in Payer Type-Health Safety Net and Self Pay volume due to post pandemic changes in COVID policy resulting in patient loss of MassHealth public insurance coverage.
- Steward Health Care System:
 - Noted all Steward Health Care sites are collecting Homeless status effective March 2023.

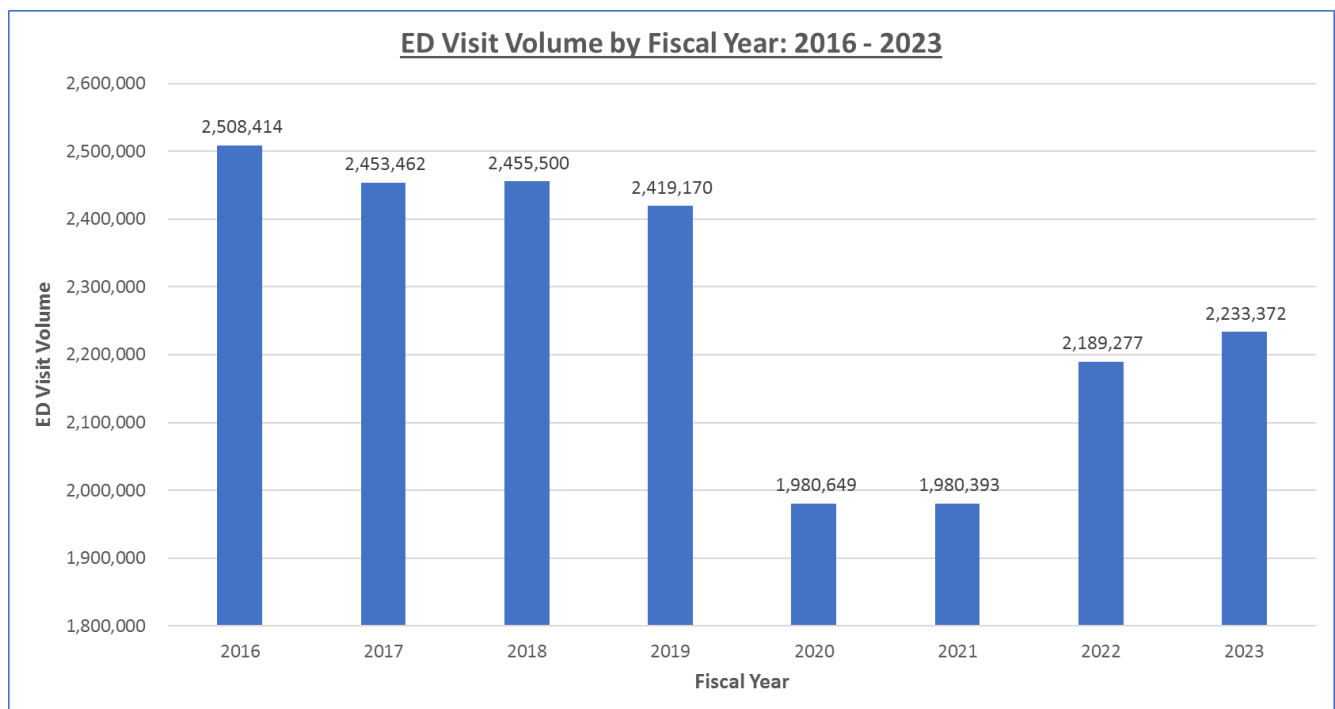
The following hospitals resubmitted data prior to finalizing the FY 2023 EDD release available in July 2024.

- Athol Memorial Hospital (Org Id 2) and Heywood Hospital (Org Id 73) resubmitted all quarters to include patient SSN data which is required to create CHIA generated Unique Health Information Numbers (UHIN) which were confirmed as available for previously established patients. This finding was a result of verifying that new patients were no longer being required to provide this data at the time of registration/check in and were reporting 100% Unknown.

- Boston Medical Center – Menino Pavilion Campus (Org Id 16) resubmitted all quarters to correct tables for Race and Other values which had been previously mapped as Unknown.
- Mass General Brigham including Brigham and Women’s Hospital (Org Id 22), Cooley Dickinson Hospital (Org Id 50), Brigham and Women’s Faulkner Hospital (Org Id 59), Martha’s Vineyard Hospital (Org Id 88), Massachusetts General Hospital (Org Id 91), Massachusetts Eye & Ear Infirmary (Org Id 89), Nantucket Cottage Hospital (Org Id 101), Newton-Wellesley Hospital (Org Id 105) and North Shore Medical Center – Salem Campus (Org Id 116) resubmitted all quarters due to a finding that ED visits without a charge and which had discharge statuses of Eloped or AMA were not being captured.
- North Shore Medical Center - Salem Campus (Org Id 116) resubmitted quarter 3 to adjust payer source mapping and subsequently resubmitted all quarters to correct for reported ED negative time values.

ED Visit Volume

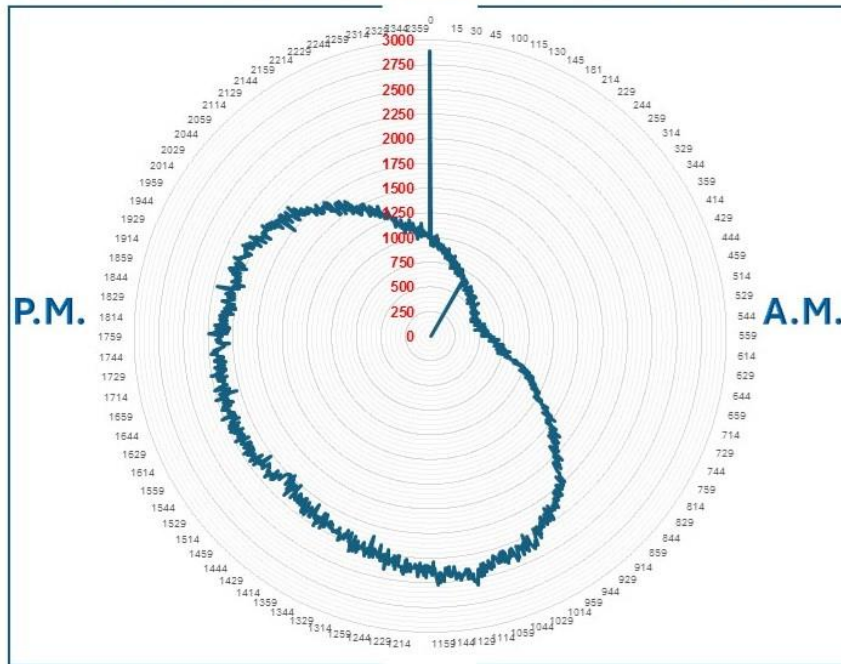
The Final FY 2023 EDD release contains a 2.01% increase in visit volume from the previous year.



Data users should update their ICD-10-CM/PCS lookup tables to include new FY 2023 diagnosis codes downloadable from CMS at: <https://www.cms.gov/medicare/coding-billing/icd-10-codes/2023-icd-10-cm>. In 2023, there were significant updates ICD-10-CM code set, including the addition of over 1,000 new codes, 28 revised codes, and 287 deleted codes.

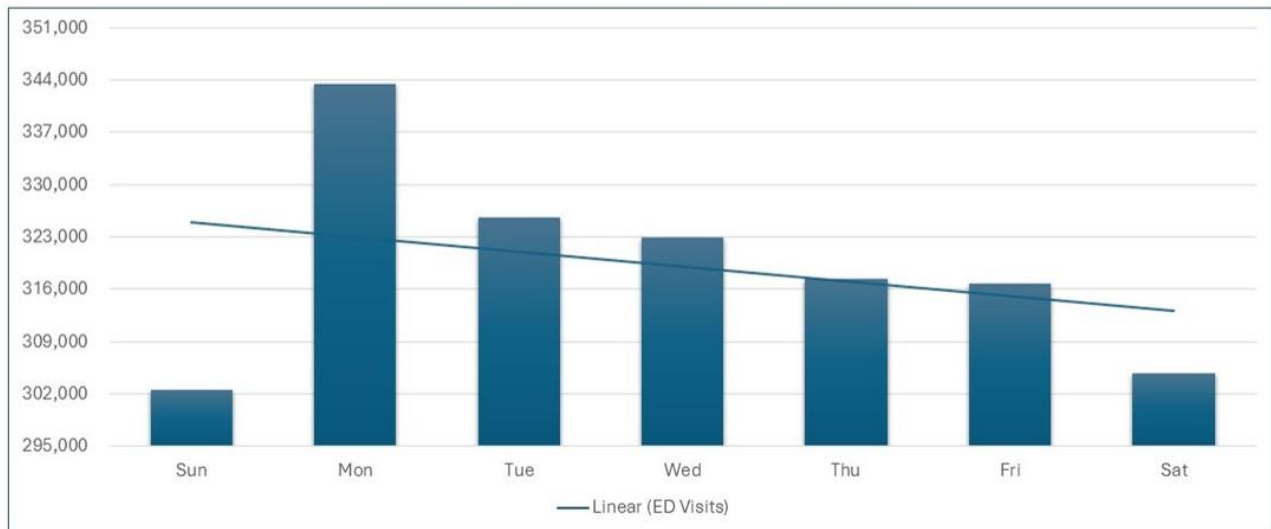
There was a notable surge in ED visits with registration time reported as 0000 military time (12:00 AM midnight). **See chart below.** Of the 2,877 visits with a registration time of midnight, 55% (n=1,520) of those visits occurred at Lowell General Hospital (IdOrgSite 85) and 69% (n=2,000) arrived via ambulance. Otherwise, as in previous years, the highest surge in annual ED visits begins midday after 11:00 am and continues through 1:00 pm with a high proportion of patients who are walk-ins (including private or public transport).

FY2023 Total ED Visit Volume by Registration Military Time from 0000 to 2359



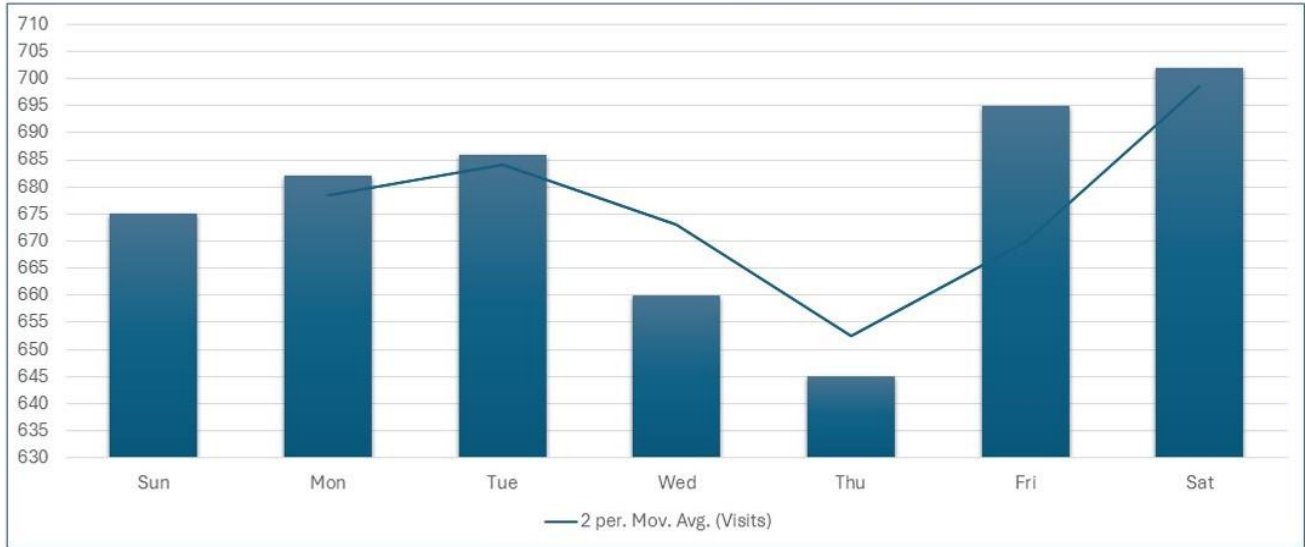
In prior years of the ED data release when comparing ED visit volume by day of week, a recurrent trend has been observed wherein Mondays consistently exhibit the highest volume of ED visits. This pattern persists in FY2023. Notably, in FY2023, there is a marked 13.5% increase in visit volume from Sunday to Monday, as detailed in the table below. This pronounced surge on Mondays may be attributable to the deferment of medical care over the weekend, resulting in an accumulation of conditions necessitating attention at the week's onset.

FY2023 ED Visit Volume by Day of Week



While compared to weekdays, even though weekends have a low total ED visit volume, weekends have a significantly higher rate of ED deaths and dead-on arrivals (DOA). **See Table below.** From Thursdays to Fridays, there was an 8% increase in ED deaths and DOAs.

FY2023 ED Visit Deaths/DOAs by Day of Week



When comparing percent of daily visit volume by emergency severity index (ESI) triaging frequency where an ESI Level 1 indicates that patient requires immediate life-saving intervention, and an ESI Level 2 indicates the patient is in an emergent high-risk situation, Saturdays and Sundays are tied for the highest frequency of patient who require immediate resuscitation or other lifesaving interventions and Friday’s have the highest frequency of emergent high risk patients. **See Table below.**

FY2023 ED Visit Daily Volume by Emergency Severity Index Frequency

ESI 1 – Patient requires immediate life-saving intervention, **ESI 2** – Patient is in a high-risk situation, is disoriented, in severe pain, or vitals are in danger, **ESI 3** – If multiple resources are required to stabilize the patient, but vitals are not in the danger zone, **ESI 4** – if one resource is required to stabilize the patient, **ESI 5** – If the patient does not require any resources to stabilize.

