

# Massachusetts Acute Care Hospital Emergency Department Data— Quarterly Update

October 2019 through September 2024 (Preliminary)

## Introduction

Emergency departments (EDs) serve a vital role in the Massachusetts health care system. To better understand trends in ED utilization, the Center for Health Information and Analysis (CHIA) has analyzed ED visits in all acute care hospitals in Massachusetts quarterly from Federal Fiscal Year (FFY) 2019 through the fourth quarter of FFY 2024 (October 2019 through September 2024). Results and graphic visualizations from this analysis are presented in an **interactive dashboard** available on the CHIA website. It is accompanied by a **databook** with more detailed analyses and a **technical appendix**. Data from FFY 2019 is no longer displayed in the dashboard but can still be found in the databook.

The data source for the dashboard and databook is CHIA's Emergency Department Database (EDD), consisting of ED visits from all acute care hospitals in Massachusetts resulting in neither an inpatient admission nor an observation stay—commonly referred to as treat-and-release visits. This dashboard presents analyses on a quarterly basis on measures of ED utilization and visit characteristics at a statewide level and for select analyses at the hospital level. The data in the quarterly updates are preliminary, with the primary purpose of this series to provide timely patterns and trends on key ED utilization measures. The dashboard and databook are updated quarterly with more complete data as they become available and as CHIA continues to work with providers to process and confirm data submissions through the annual data collection process.

# Key Findings From the February 2025 Update

- · New to this update, the dashboard includes hospital system trends in volume and average length of stay. The hospital system dashboard highlights seasonal fluctuations in ED visit volume, with Mass General Brigham (MGB) Hospital System (comprising 9 hospitals) having the highest volume of ED visits in FFY 2024. Tufts Medicine (comprising 4 hospitals) had the highest average ED length of stay in FFY 2024.
- Prior to the start of the COVID-19 pandemic, treat-and-release ED visits were relatively stable between quarters. Visits fell sharply in April 2020 during the first peak period of COVID-19. Since then, the volume of treat-and-release ED visits has fluctuated considerably, with drops during peak periods of COVID-19 cases and volumes routinely rebounding in each Q3. In Q4 of FFY 2024, ED visits continued to have a slight increase in volume.
- Treat-and-release ED average length of stay has decreased substantially since peaking from January-March 2022 during the COVID-19 pandemic, down to approximately 5 hours for the first time since April-June 2021.

## **About this Update**

This quarterly update includes new data from October 2019 to September 2024. This update is organized in the following nine sections:

- Total Acute Care Volume
- Statewide Utilization
- Statewide Utilization by ZIP Code
- Utilization by Hospital
- Visit Characteristics
- Excess Length of Stay
- Diagnoses
- Behavioral Health
- COVID-19

#### **Total Acute Care Volume**

This section shows the total volume of acute care hospital visits and discharges in Massachusetts by Case Mix categorization. Discharges/visits are categorized by inpatient stay, outpatient observation, and emergency department (ED) treat and release.

#### Statewide Utilization

The utilization section presents the total number of ED visits and the average length of stay for ED visits statewide and by hospital characteristics. Hospital characteristics include hospital cohort, high public payer status, trauma designation, and hospital system.

#### Statewide Utilization by ZIP Code

This map shows statewide utilization patterns by patient ZIP Code of residence. The map shows both the number of emergency department visits and the rate of visits per 100 residents in percentiles by ZIP Code. Locations of emergency departments were added to the map as part of the February 2024 update. Measures are shown for all emergency department visits across Massachusetts on a yearly basis. This section does not use preliminary data.

## Utilization by Hospital

This section presents hospital-level ED utilization measures on a quarterly basis for all acute care hospitals in Massachusetts. The measures included are total visits and average length of stay.

#### Visit Characteristics

This section shows statewide utilization patterns and average length of stay by ED visit characteristics, including age group, sex, race/ethnicity, and primary payer type.

## **Excess Length of Stay**

This section shows visits with longer than average length of stay for visits associated with a primary behavioral health diagnosis, those not related to behavioral health, and at the statewide level. The dashboard includes 4 different thresholds to categorize excess length of stay (4, 6, 12, and 24 hours).

## Diagnoses

This section presents common primary diagnoses associated with ED visits by age group at a statewide level. Additionally, the average length of stay for each of these primary diagnosis categories is provided.

#### Behavioral Health

This section shows total visits and average length of stay for ED visits associated with any behavioral health condition and by specific behavioral health diagnosis categories. These estimates are presented for all ED visits statewide and by age group.

## COVID-19

This section shows statewide utilization patterns for COVID-19- and non-COVID-19-associated ED visits by patient and visit characteristics, including primary payer type, age group, sex, and race/ethnicity. The measures included are total visits, percent of total visits, and average length of stay.

For more information, please contact:

