CHIA Data User Workgroup

Donald Kirkwood, Manager of Data Release and Procurement

Scott Curley, Chief Data Product Officer

Anne Medinus, Senior Research Account Specialist

Sylvia Hobbs, Associate Director of Artificial Intelligence and Data Innovations

December 23, 2025

Agenda

- **Announcements:**
  - All Annual Data Releases Met Targeted Release Date
  - MA APCD CY2024 is Now Available
  - Reminder of Application Submission Process
  - Alert: New Publication on Artificial Intelligence and Leveraging Insurance Claims Data
  - Alert: New Federal Request for Information on Partnerships for Transformational Artificial Intelligence Models
  - Alert: Mass General Brigham Announces New AI Company
  - Reminder: Academy Health Abstract Deadline

- **Data User Support Questions**
  - Mapping Sites of Service and Facility Types in the Massachusetts APCD
  - Admission Source Codes and Transfer Pathways
  - Historical Hospital Outpatient ED Visit Volume: Trends and Variability
  - CHIA Data in Action: A Year in Review
  - Compilation of 2025 Active NIH Funded Projects Using the Massachusetts All Payer Claims Data
  - Sweet 16

- **Q&A**

Announcements

Annual Data Release Status

https://www.chiamass.gov/status-of-data-requests

Targeted Release Dates Met!

All CHIA fiscal year and calendar year 2024 case mix and all payer data claims products are open for application and have met their targeted 2025 annual availability date milestone.

MA APCD Releases

Product	Target	Actual	Status
MA APCD CY 2024 (2020-2024 data with six-month run out from 2025)	Fall 2025	Fall 2025	Available
Release Status Notes • MA APCD CY 2024 is available for application.			

Case Mix Releases

Product	Target	Actual	Status
Case Mix FY 2024 (October 1, 2023 - September 30, 2024)			
Hospital Inpatient Discharge Data (HIDD)	June 2025	May 2025	Available
Emergency Department Data (EDD)	August 2025	July 2025	Available
Outpatient Observation Stay Data (OOD)	September 2025	August 2025	Available
Release Status Notes • All FY 2024 Case Mix databases are available.			

MA APCD CY 2024 Release Now Available

New Release Available

The MA APCD CY 2024 Release Includes:

- Member eligibility data submitted between January 2020 and June 2025.
- Medical claims (from 42 payers), Dental claims (from 27 payers) and Pharmacy claims (from 42 payers) incurred between January 1, 2020, and December 31, 2024, with claims run-out through June 30, 2025, and accompanying Product and Provider data for the same date range.

Read MA APCD CY 2024 Documentation Before Applying for the Data

https://www.chiamass.gov/ma-apcd

It is highly recommended that data applicants read the documentation before applying for the data. Doing so:

- Clarifies database structure, file types, claim/versioning logic, and processing rules. Ensures correct interpretation of all files.
- Summarizes key changes in the CY2024 release, including updated eligibility reporting, Master Patient Index revisions, and coding updates.
- Specifies field formats, required elements, and record layouts to prevent ingestion errors and misinterpretation.
- Details patient linkage across claims and exclusions, ensuring accurate person-level tracking and analyses.
- Explains PHI transformation under HIPAA Expert Determination, critical for compliance and understanding analytic limitations.

MA APCD Calendar Year 2024 Documentation

- MA APCD CY 2024 Documentation Guide
- MA APCD CY 2024 Release Notes
- MA APCD CY 2024 Standardized Extract Data Specifications
- MA APCD Updated Master Patient Index and Data Exclusion
- MA APCD CY 2024 De-Identification Summary

Reminder of Application Submission Process

The following webpage links provide the step-by-step instructions for non-government entities and government entities on how to apply for the case mix and MA APCD data.

Non-Government Application Documents

https://www.chiamass.gov/non-government-agency-apcd-requests
https://www.chiamass.gov/non-government-agency-case-mix-requests

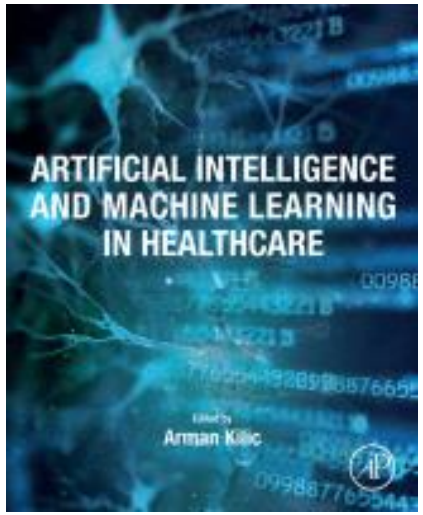
Government Application Documents

https://www.chiamass.gov/government-agency-apcd-requests
https://www.chiamass.gov/government-agency-case-mix-requests

Application documents are no longer submitted to or managed through IRBNet.org. All application materials must now be emailed directly to CHIA. Even if you have previous application documents submitted to IRBNet which you are updating, those updates should also be emailed directly to CHIA.

- ❑ **Massachusetts Case Mix Data** application documents must be emailed to casemix.data@chiamass.gov.
- ❑ **Massachusetts All Payer Claims Data** application documents must be emailed to apcd.data@chiamass.gov.

Alert: New Book Artificial Intelligence and Machine Learning in Healthcare



By Arman Kilic (Editor), Publisher: Academic Press, Publication date: December 22, 2025, ISBN 9780128225189,
https://www.sciencedirect.com/science/article/pii/B9780128225189000101

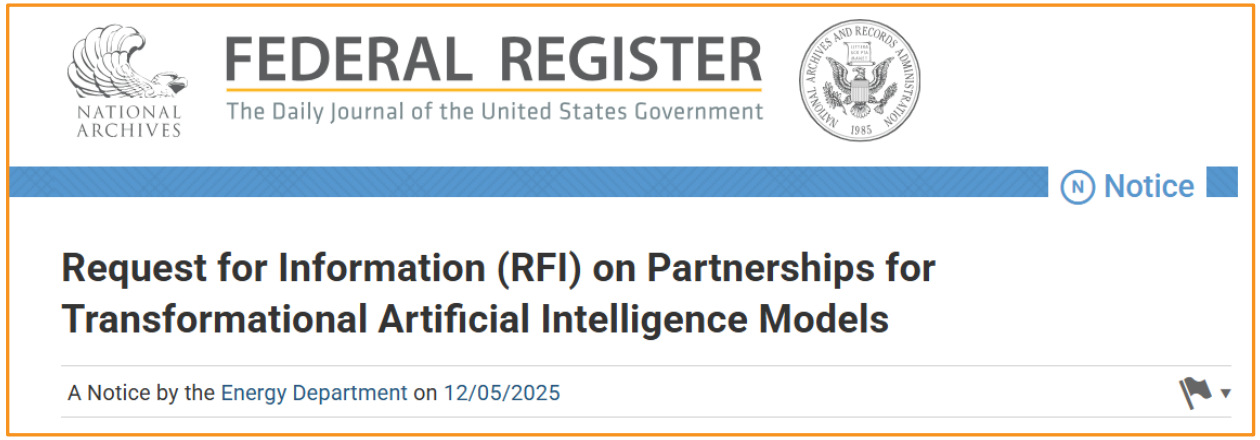
Chapter 11 - Leveraging insurance claims data

By Jieshi Chen, Brian Kunzer, Artur Dubrawski
Auton Lab, Carnegie Mellon University, Pittsburgh, PA, United States

Abstract

This chapter summarizes common healthcare use cases and two research studies of applying machine learning (ML) techniques on medical insurance claims data to detect billing frauds, predict disease onset and progression, and support public health surveillance on disease outbreaks and drug safety. Mining insurance claims could be challenging due to the massive volume and high dimensionality; however, advanced ML techniques could be applied to effectively and efficiently extract actionable intelligence embedded in insurance claims to potentially reduce the cost of care and improve the quality of care.

Alert: RFI on Partnerships for Transformational Artificial Intelligence Models



The U.S. Department of Energy (DOE) Office of Science is seeking public input on its Request for Information (RFI) regarding partnerships for developing transformational artificial intelligence (AI) models. The initiative aims to curate scientific data from DOE's National Laboratories to create self-improving AI models that advance scientific discovery, energy innovation, and national security. Stakeholders from industry, academia, and research organizations are invited to submit comments electronically by **January 14, 2026**, to AICommunityInput@science.doe.gov. For more information, see:

https://www.federalregister.gov/documents/2025/12/05/2025-22127/request-for-information-rfi-on-partnerships-for-transformational-artificial-intelligence-models

Alert : Mass General Brigham Announces New AI Company

Mass General Brigham

Advancing Care | Workforce Enrichment and Engagement | Newsroom | Careers

About Us > Newsroom > Mass General Brigham Announces New AI Company to Accelerate Clinical Trial Screening and Patient Recruitment

Mass General Brigham Announces New AI Company to Accelerate Clinical Trial Screening and Patient Recruitment

Dec 12, 2025 — 6 minute read

Innovation | Technology & Innovation | Research

'AIwithCare' will feature a software platform that uses generative AI to screen patients for clinical trial eligibility. The AI tool, RECTIFIER, was shown in recent research to be highly efficient at enrolling eligible patients. Rapid, accurate and cost-effective medical analytics can change the way medical data can be used for patients, providers and health systems.

Mass General Brigham has launched AIwithCare, a spinout centered on RECTIFIER, an AI tool using Retrieval-Augmented Generation to automate clinical trial eligibility screening from EHRs. Validated in NEJM AI and JAMA studies, RECTIFIER nearly doubled enrollment rates compared to manual review and now supports 20+ use cases across cardiology, oncology, neurology, and population health. By analyzing structured and unstructured data, including clinical notes and reports, it enables high-resolution phenotyping, accelerates patient identification, and reduces manual chart review burden. Through its AIwithCare Studio platform, the company aims to scale these capabilities to academic health systems, offering advanced analytics for trial matching, precision medicine, and operational workflows. This innovation represents a practical application of generative AI to improve research efficiency and patient access.

REMINDER: Academy Health Annual Research Meeting 2026 Submission Deadline Approaching

CHIA Data is Frequently Featured In Academy Health Research Meeting Presentations

Submission Deadline:
Tuesday, **Jan 6, 2026, at 5:00 PM EST**

Link to Begin Submission
https://academyhealth.confex.com/academyhealth/2026arm/cfp.cgi

The ARM 2026 on May 30 - June 2, 2026, at the Seattle Convention Center is organized around specific themes. For information on conference themes see:
https://academyhealth.confex.com/academyhealth/f/2026armSubtopics

Data User Support Questions

Question: I'm working on mapping CHIA data to visualize healthcare facility distribution by county and facility type (e.g., hospitals, emergency departments, long-term care) and travel distance. What is the best authoritative source for state-level mapping data that includes facility classifications and geolocation details?

Answer: For mapping CHIA data, MassGIS Infrastructure Data Layers provide authoritative, geospatially accurate, and publicly available datasets curated by the Commonwealth of Massachusetts. These layers include precise facility locations, classifications, and attributes for hospitals, clinics, long-term care facilities, and other healthcare infrastructure. Unlike CMS Provider of Services files, which often require additional geocoding and may lack granular spatial accuracy, MassGIS data is GIS-ready, enabling seamless integration with mapping tools and spatial analytics platforms.

Additionally, MassGIS free downloadable datasets adhere to state standards for data quality and interoperability, making them ideal for academic research, public health planning, and CHIA data visualization projects. Key healthcare-specific layers include Hospitals (Acute and Non-Acute), Long-Term Care Facilities, Community Health Centers, Ambulatory Surgical Centers, and Dialysis Centers. These layers support advanced spatial analysis, network modeling, and integration with population health metrics, ensuring researchers can produce accurate, actionable insights for policy and care delivery.

answer continued →

Answer *(continued)*: An example of the use of the MassGIS data layers can be seen in the Massachusetts Department of Public Health's interactive Health Care Capacity Dashboard available at: https://www.mass.gov/info-details/health-care-capacity-interactive-dashboard

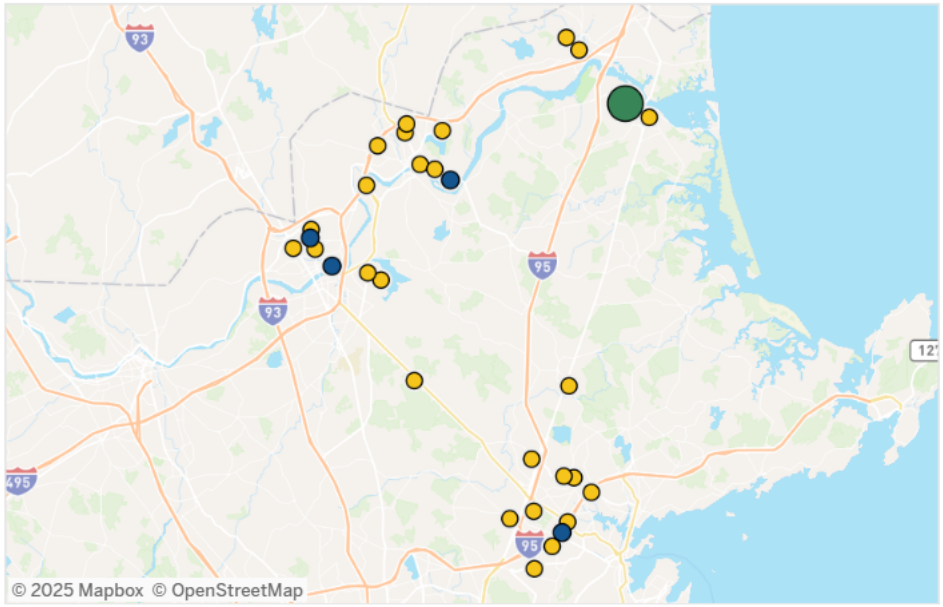
Massachusetts Department of Public Health
DPH
Massachusetts Department of Public Health
Health Care Capacity Dashboard

Last updated on December 17, 2025
with data through the end of November.

Choose a hospital

Anna Jaques Hospital

Anna Jaques Hospital, nearby hospitals and nursing homes within a 30 minute drive time* radius



Within 30 minutes* of Anna Jaques Hospital there are...

4 other acute care hospitals
24 nursing homes

Anna Jaques Hospital is licensed for...

63 adult medical/surgical beds

8 intensive care unit (ICU) beds

0 pediatric medical/surgical beds

0 pediatric intensive care unit (PICU) beds

Maternity beds: Yes

Neonatal intensive care unit (NICU) beds: No

Psychiatric inpatient beds: No

Explore more data on hospital beds

*30 minute drive times are calculated using average traffic and road conditions. Traffic, road closures, weather, and other factors can change over time and will impact which hospitals are reachable within 30 minutes. Hospital locations are from MassGIS: https://www.mass.gov/orgs/massgis-bureau-of-geographic-information

Question: I'm using the Massachusetts case mix data, and I'm confused about the 'Transfer Hospital Organization ID' field. When a patient's primary or secondary source of admission indicates a transfer (e.g., from an acute hospital, SNF, intermediate care facility, or outside ER), how do I determine the correct OrgID? Should it match the admitting hospital's OrgID, and what should I enter if the transfer came from a facility outside Massachusetts?

Interfacility Transfers

Answer: When hospital data submitters populate this field, they are instructed that the data must be:

- A valid OrgID if Primary or Secondary Source of Admission is:
  - '4' (Transfer from an Acute Hospital)
  - '5' (Transfer from a SNF Facility)
  - '6' (Transfer from an Intermediate Care Facility)
  - '7' (Outside Hospital Emergency Room Transfer)
  - '9' (Other (to include Level 4 Nursing Facility) and the transfer facility is a Level 4 Nursing Facility/Rest Home and the provider from which the transfer occurred is in Massachusetts) 'V' (Transfer from another facility to a Medicare-approved swing bed and the provider from which the transfer occurred is in Massachusetts)
- Transfer OrgID should not be the OrgID for Provider on RT10 or the Hospital Service Site on RT20
- Must be a valid OrgID as specified in the Transfer OrgID list posted on CHIA's website if the provider from which the transfer occurred is in Massachusetts OR
- If the provider from which the transfer occurred is outside Massachusetts, the transfer OrgID must be 9999999

answer continued →

Answer *(continued):* The list of facilities to link the transfer organization ids to can be found on the CHIA website at:

https://www.chiamass.gov/assets/docs/p/case-mix/Transfer-Org-Id-List.xlsx

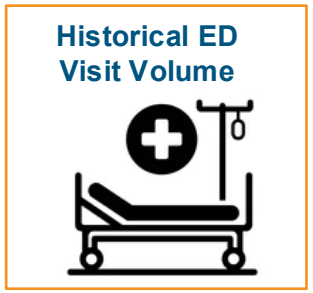
This list contains 408 licensed facilities including nursing homes and rest homes.

The Commonwealth of Massachusetts
Executive Office of Health and Human Services
Center for Health Information and Analysis
Massachusetts Licensed or Certified Health Care Facility Listing
Per Department of Public Health as of January 16, 2025

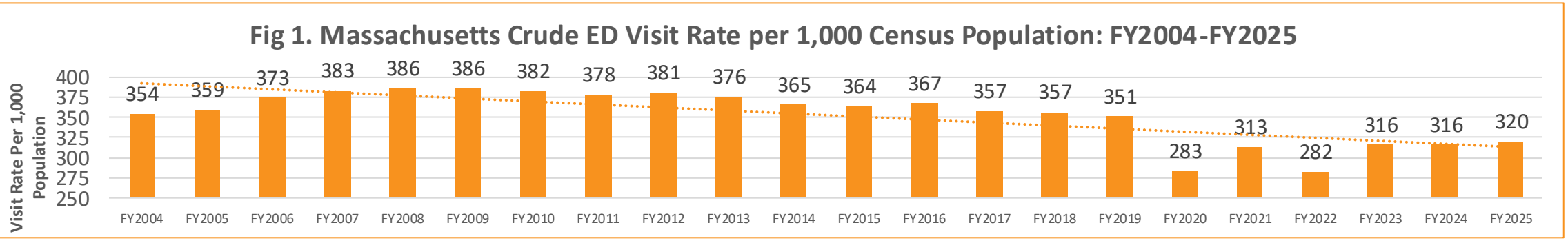
Note: If a facility is not included on this list, please call your CHIA Senior Healthcare Data Liaison to obtain the assigned CHIA Organization ID (Org ID).

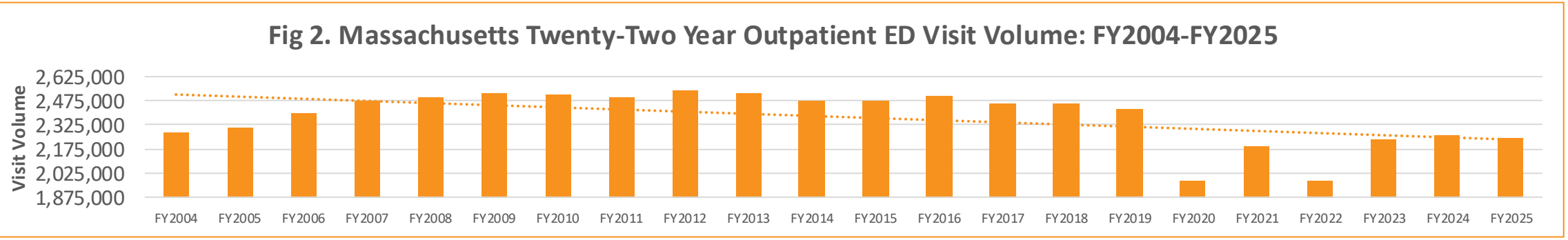
Type of Facility	CHIA Org ID	Name of Facility	Street	City/Town	Zip Cod
Acute Hospital	1	ANNA JAQUES HOSPITAL	25 HIGHLAND AVENUE	NEWBURYPORT	01950
Acute Hospital	2	ATHOL MEMORIAL HOSPITAL	2033 MAIN STREET	ATHOL	01331
Acute Hospital	5	BAYSTATE FRANKLIN MEDICAL CENTER	164 HIGH STREET	GREENFIELD	01301
Acute Hospital	4	BAYSTATE MEDICAL CENTER	759 CHESTNUT STREET	SPRINGFIELD	01199
Acute Hospital	106	BAYSTATE NOBLE HOSPITAL	115 WEST SILVER STREET, BOX 1634	WESTFIELD	01086
Acute Hospital	139	BAYSTATE WING HOSPITAL AND MEDICAL CENTERS/BAYSTATE WING CAMPUS	40 WRIGHT STREET	PALMER	01069
Acute Hospital	7	BERKSHIRE MED CTR INC/BERKSHIRE CAM	725 NORTH STREET	PITTSFIELD	01201
Acute Hospital	53	BETH ISRAEL DEACONESS HOSPITAL - NEEDHAM	148 CHESTNUT STREET	NEEDHAM	02192
Acute Hospital	79	BETH ISRAEL DEACONESS HOSPITAL - PLYMOUTH	275 SANDWICH STREET	PLYMOUTH	02360
Acute Hospital	98	BETH ISRAEL DEACONESS HOSPITAL-MILTON INC	199 REEDSDALE ROAD	MILTON	02186
Acute Hospital	10	BETH ISRAEL DEACONESS MED CTR/EAST	330 BROOKLINE AVENUE	BOSTON	02215
Acute Hospital	140	BETH ISRAEL DEACONESS MED CTR/WEST	ONE DEACONESS ROAD	BOSTON	02215
Acute Hospital	109	BEVERLY HOSP/ADDISON GILBERT CAMPU	298 WASHINGTON STREET	GLOUCESTER	01930
Acute Hospital	110	BEVERLY HOSP/BEVERLY CAMPUS	85 HERRICK STREET	BEVERLY	01915
Acute Hospital	46	BOSTON CHILDREN'S HOSPITAL	300 LONGWOOD AVENUE	BOSTON	02115
Acute Hospital	16	BOSTON MED CTR CORP MENINO PAVILION	830-840 HARRISON AVENUE	BOSTON	02118

Question: I am applying for data to analyze outpatient emergency department (ED) visit decline in the post–COVID-19 period. I would like to know in advance the long-term historical volume of all-cause ED visits to determine whether there have been comparable previous large-scale declines in ED visits and to see the extent to which visit volumes have subsequently rebounded.



Answer: In FY2013, pre-COVID ED visit volume had begun to show a slow, long-run decline from its FY2009 peak with crude ED visit rates falling from 386 per 1,000 population in FY2009 to 351 per 1,000 by FY2019 (See Figure 1). Post-COVID (FY2020 onward), ED visits shows a far sharper decline, hitting a historic low of 1.98M visits in FY2022 (See Figure 2) , equivalent to only 282 visits per 1,000 population, followed by a slight but incomplete rebound through FY2025, when the rate rises to 320 per 1,000 population.





CHIA Data in Action: The Year in Review

Congratulations to the many NIH-funded research teams in Massachusetts for securing competitive awards to use MA APCD to advance groundbreaking health research addressing critical issues from maternal health to behavioral health and opioid response. Researchers since the inception of the MA APCD have successfully procured grants and used MA data to demonstrate the transformative impact of evidence-based research.

National Institutes of Health

2025 Current Active Funded NIH Projects Using the MA APCD

Source: https://reporter.nih.gov/

Some of the Current Active 2025 NIH Funded Projects using the Massachusetts All Payer Claims Data

Healthcare Transitions and the Health of Adolescents and Young Adults with Intellectual or Developmental Disabilities
NIH Project Number 5R01HD103720-05
Contact PI/Project Leader CHIEN, ALYNA TUNG-MEI
Organization BOSTON CHILDREN'S HOSPITAL

Medicaid Coverage of Behavioral Health Supports for Opioid Use Disorder During Post-Incarceration Reentry
NIH Project Number 1K08DA063862-01
Contact PI/Project Leader BOVELL-AMMON, BENJAMIN JARED
Organization BAYSTATE MEDICAL CENTER

Impact of prescription stimulants on the drug overdose epidemic
NIH Project Number 5R01DA058315-03
Contact PI/Project Leader
DE NADAI, ALESSANDRO STEVENS
Organization MCLEAN HOSPITAL

The Impact of Including Pregnancy as a Qualifying Life Event for Marketplace Special Enrollment on Child and Maternal Health
NIH Project Number 5R01HD111508-03
Contact PI/Project Leader GARABEDIAN, LAURA FADEN
Organization HARVARD PILGRIM HEALTHCARE, INC.

Medicaid Accountable Care Organizations and Quality of Care for Adults with Serious Mental Illness
NIH Project Number 5K23MH128639-04
Contact PI/Project Leader GOLDMAN, ANNA
Organization BOSTON MEDICAL CENTER

The Effects of Postpartum Medicaid Policies on Postpartum Depression Care Among Low-Income Women
NIH Project Number 5K01MH127253-03
Contact PI/Project Leader GORDON, SARAH HALL
Organization BOSTON UNIVERSITY MEDICAL SCHOOL

Predict to Prevent: Dynamic Spatiotemporal Analyses of Opioid Overdose to Guide Pre-Emptive Public Health Responses
NIH Project Number 5R01DA054267-04
Contact PI/Project Leader STOPKA, THOMAS J
Organization TUFTS UNIVERSITY

Structural Racism and Engagement of Family Caregivers in Serious Illness Care
NIH Project Number 5R01NR020439-04
Contact PI/Project Leader TJIA, JENNIFER
Organization UNIVERSITY OF MASSACHUSETTS MEDICAL SCHOOL

Cardiovascular Health of Low-Income Working-Age Adults in the US: Health Care Access, Policy, and the Pandemic
NIH Project Number 5R01HL164561-04
Contact PI/Project Leader WADHERA, RISHI KUMAR
Organization BETH ISRAEL DEACONNESS MEDICAL CENTER

CY2024 Top 16 Highest Volume Claim Submission by Payer and File Type

From release to release, there is a shift in the highest volume of claims submissions by payer which can signal changes in payer market share and membership migration. The sixteen carriers dominating the highest claim submission volumes within each file type classified as the 'Sweet Sixteen' are listed below. Three carriers, MassHealth, Blue Cross Blue Shield of Massachusetts, and Commonwealth Care Alliance, were in the top 16 for all three file types.

MA APCD Medical Claims, Dental Claims, and Pharmacy Claims Top 16 Payer Claim Volume

Medical Claims Top 16	Dental Claims Top 16	Pharmacy Claims Top 16
MassHealth	MassHealth	CVS Caremark
Blue Cross Blue Shield of Massachusetts	Blue Cross Blue Shield of Massachusetts	Medco Health Services
Harvard Pilgrim Health Care	Dental Service of Massachusetts, Inc. (Denta Quest)	MassHealth
Boston Medical Center HealthNet Plan	Metropolitan Life Insurance Company	Blue Cross Blue Shield of Massachusetts
Tufts Health Plan	Altus Dental Insurance Company, Inc.	Tufts Health Plan
Network Health	CIGNA Health and Life Insurance Company	Network Health
Fallon Community Health Plan	The Guardian Life Insurance Company of America	Boston Medical Center HealthNet Plan
Commonwealth Care Alliance	United Healthcare Insurance Company - OptumHealth Dental	Fallon Community Health Plan
WellPoint, Inc.	Health Safety Net	United Healthcare Insurance Company - Medicare Advantage
UnitedHealthcare Senior Care Options (HMO SNP)	Aetna Life Insurance Company	Humana Insurance Company
Health New England, Inc.	Cigna Health and Life Insurance Company (Dental DPPO)	informedRx (SXC Health Solutions, Inc.)
Neighborhood Health Plan	Commonwealth Care Alliance	Harvard Pilgrim Health Care
United Healthcare Insurance Company - Medicare Advantage	Delta Dental Plan of Michigan, Inc.	Commonwealth Care Alliance
Massachusetts Behavioral Health Partnership	Humana Insurance Company	Centene (dba Wellcare)
Beacon Health Strategies	WellPoint, Inc.	Envision Pharmaceutical Services, Inc.
Senior Whole Health	Aetna - Next Generation (Next Gen)	Health New England, Inc.

New Applications Posted to Receive Public Comments

https://www.chiamass.gov/apcd-application-received-and-commenting

MA APCD | Case Mix Data | Hospital and Other Provider Data | Information for Data Submitters | Public Records Request

CHIA Data » MA APCD » MA APCD Applications Received and Commenting

Massachusetts All Payer Claims Database (MA APCD) Applications Received and Commenting

Applications Open for Comment *

Primary Investigator	Organization	Project Title	Date Posted	Comment
Lisa Powell, Distinguished Professor and Director Health Policy and Administration	University of Illinois, Chicago- School of Public Health	Impact of Variations in Healthcare Quality, Enrollment Behavior and Policy Reforms on Maternal Health Outcomes among Medicaid Enrollees in Massachusetts	December 22, 2025	apcd.data@chiamass.gov
Alterra Milone, Director, Research and Grants Management	National Bureau of Economic Research (NBER)	Comparing Health Insurance Types and Understanding Churn: Evidence from Longitudinal Analysis and Natural Experiments	December 22, 2025	apcd.data@chiamass.gov

Resultant Research Using the MA APCD and Case Mix Data

https://www.chiamass.gov/resultant-research-using-chia-data/

Resultant Research Using the MA APCD and CHIA's Case Mix Data

The table below contains a sample of external research publications using CHIA's MA APCD and Case Mix data (by year of publication). Case Mix specific research is highlighted in gray. If you have questions please email apcd.data@chiamass.gov and/or casemix.data@chiamass.gov.

2025

Investigator and Organization	Article Title	Publication	Full Citation	Data Application
Nancy L Keating, Joel S Weissman, Alexi A Wright, Robert Wolf, Susan Gershman, Richard Knowlton, John Ayanian, Harvard Medical School, Brigham & Women's Hospital, Massachusetts Department of Public Health, University of Michigan Medical School	Outpatient palliative care and end-of-life care intensity: Linking Massachusetts cancer registry with All-Payer claims	JNCI Cancer Spectrum	Nancy L Keating, Joel S Weissman, Alexi A Wright, Robert Wolf, Susan Gershman, Richard Knowlton, John Z Ayanian, Outpatient palliative care and end-of-life care intensity: Linking Massachusetts cancer registry with All-Payer claims, JNCI Cancer Spectrum, 2025;, pkaf010, https://doi.org/10.1093/jncics/pkaf010	DPH-related project
Brittany Ranchoff, Kimberley Geissler, et al, Baystate Health, Harvard Medical School	Association of Medicaid Accountable Care Organizations and postpartum mental health care utilization	Health Service Research	Ranchoff BL, Geissler KH, Attanasio LB, Jeung C. Association of Medicaid Accountable Care Organizations and postpartum mental health care utilization. Health Serv Res. 2025 Jan 7:e14421. doi: 10.1111/1475-6773.14421. Epub ahead of print.	Effects of Utilization Patterns and Coordination of Care on Outcomes
Anne Valentine, Ilhom Akobirshoev, Jiangying Zhang, Tiffany Moore Simas, Monika Mitra, Brandeis University,	Perinatal mental health and risk of severe maternal morbidity in women with physical disabilities, Massachusetts	Disability Health Journal	Valentine A, Akobirshoev I, Zhang J, Moore Simas TA, Mitra M. Perinatal mental health and risk of severe maternal morbidity in women with physical disabilities, Massachusetts 2003-2015. Disabil Health J. 2025 Jan 1:101772. doi:	DPH-related project

When is the next Data User Group meeting?

- First User Group meeting for 2026 is Tuesday, January 27th
- http://www.chiamass.gov/ma-apcd-and-case-mix-user-workgroup-information/

Questions?

- Questions related to MA APCD email:

  apcd.data@chiamass.gov
- Questions related to Case Mix email:

  casemix.data@chiamass.gov