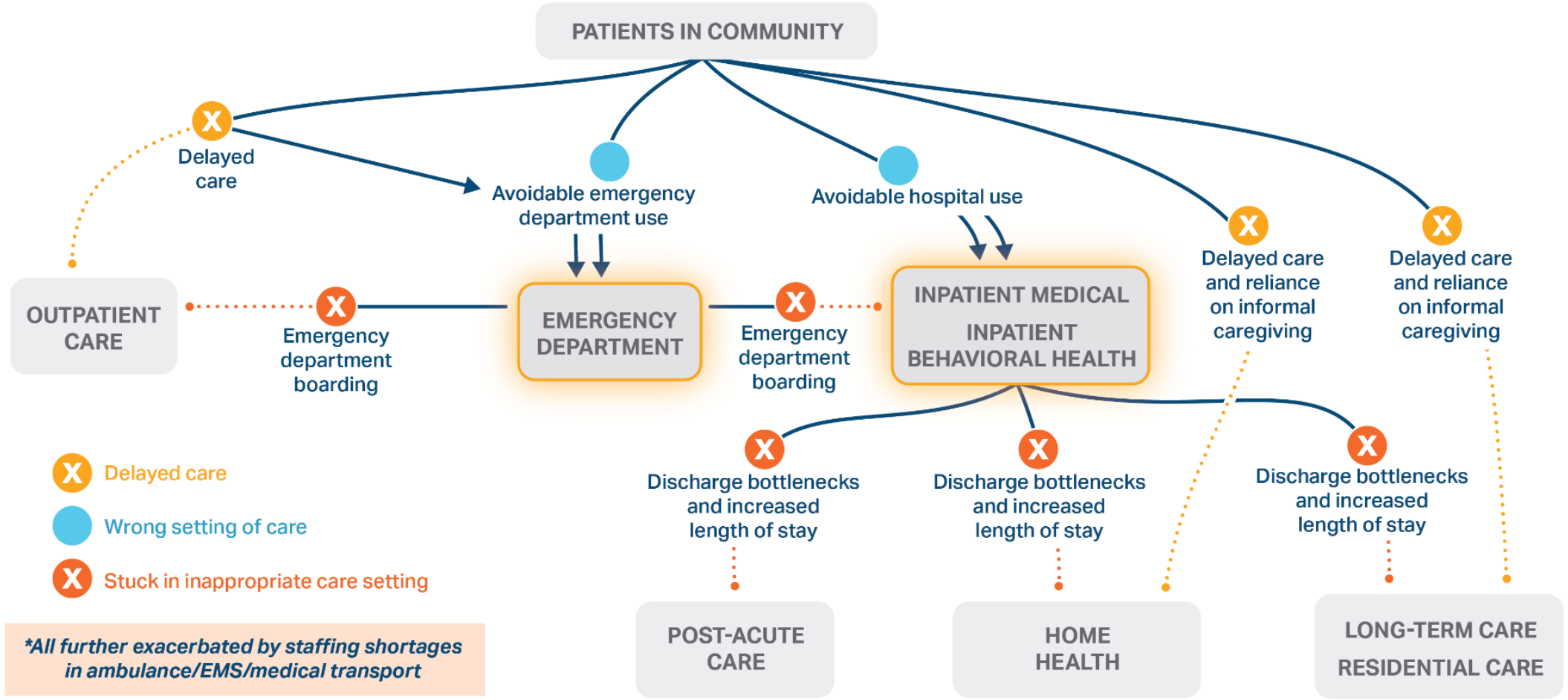
MASSACHUSETTS
HEALTH POLICY COMMISSION

Behavioral Health Emergency Department Boarding in Massachusetts

December 12, 2024

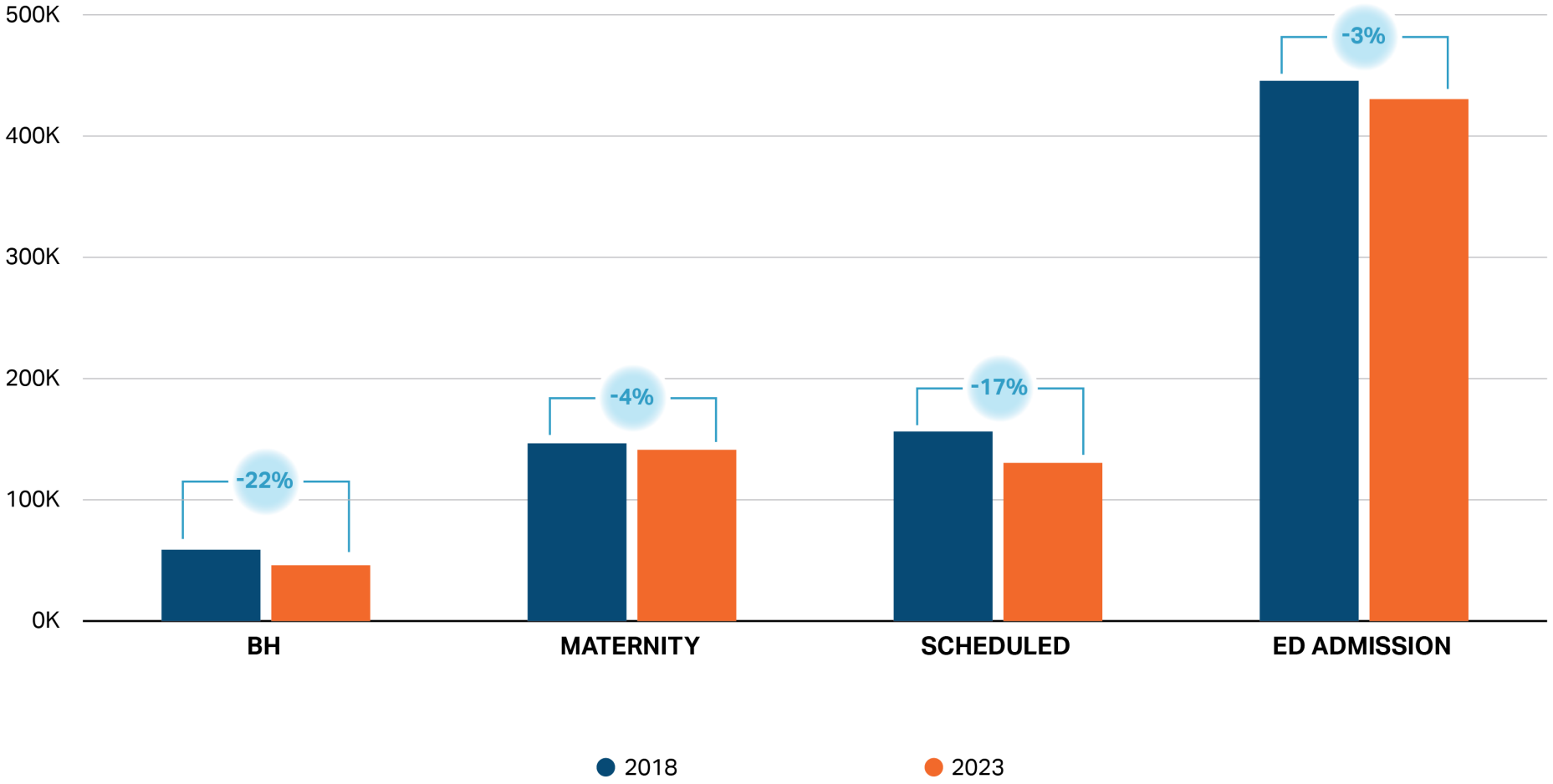
Prior HPC work has examined systemic linkages and bottlenecks that can lead to capacity issues and patients stuck in the wrong setting of care.



Sources: Massachusetts HPC, "Health Care Workforce Trends and Challenges in the Era of COVID-19" March 2023. Available at: https://masshpc.gov/publications/policyresearch-brief/health-care-workforce-trends-and-challenges-era-covid-19

All categories of inpatient stays decreased from 2018 to 2023.

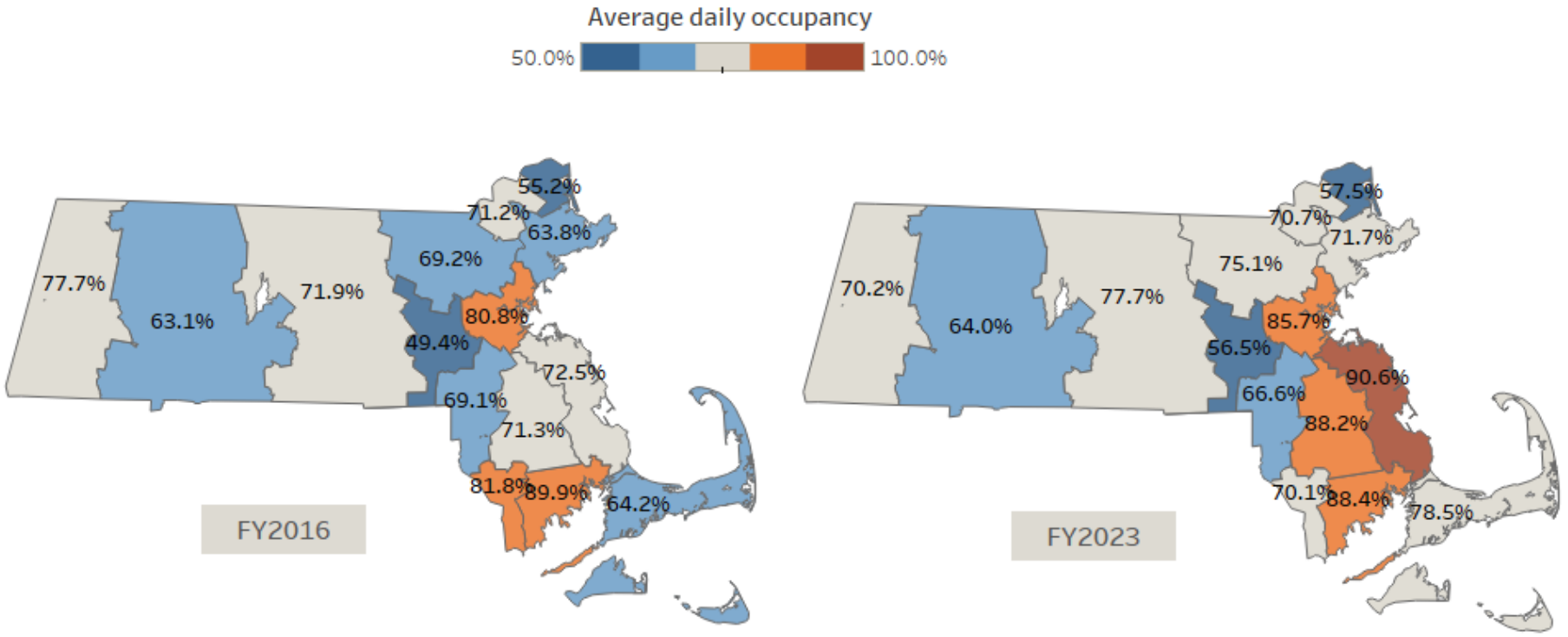
Inpatient stays by type of inpatient stay, 2018 and 2023



Notes: ED admission were identified using ED flags, admission source codes and ED revenue codes after excluding any BH or maternity stays. APR-DRG codes were used to identify Maternity (14,15) and BH (19,20) stays. Scheduled includes all stays that were not BH, maternity, or ED admissions. Includes COVID related discharges. Excludes rehabilitation admissions and admissions with length of stay greater than 180 days.
Sources: HPC analysis of Center for Health Information and Analysis (CHIA) Hospital Inpatient Discharge Database, FY2017-2023, preliminary FY2024

Despite a decrease in inpatient stays, hospital occupancy increased from 2016 to 2023, particularly in the Eastern half of the state.

Ratio of average daily bed days to statewide acute-care staffed beds (occupancy), FY2016-FY2023

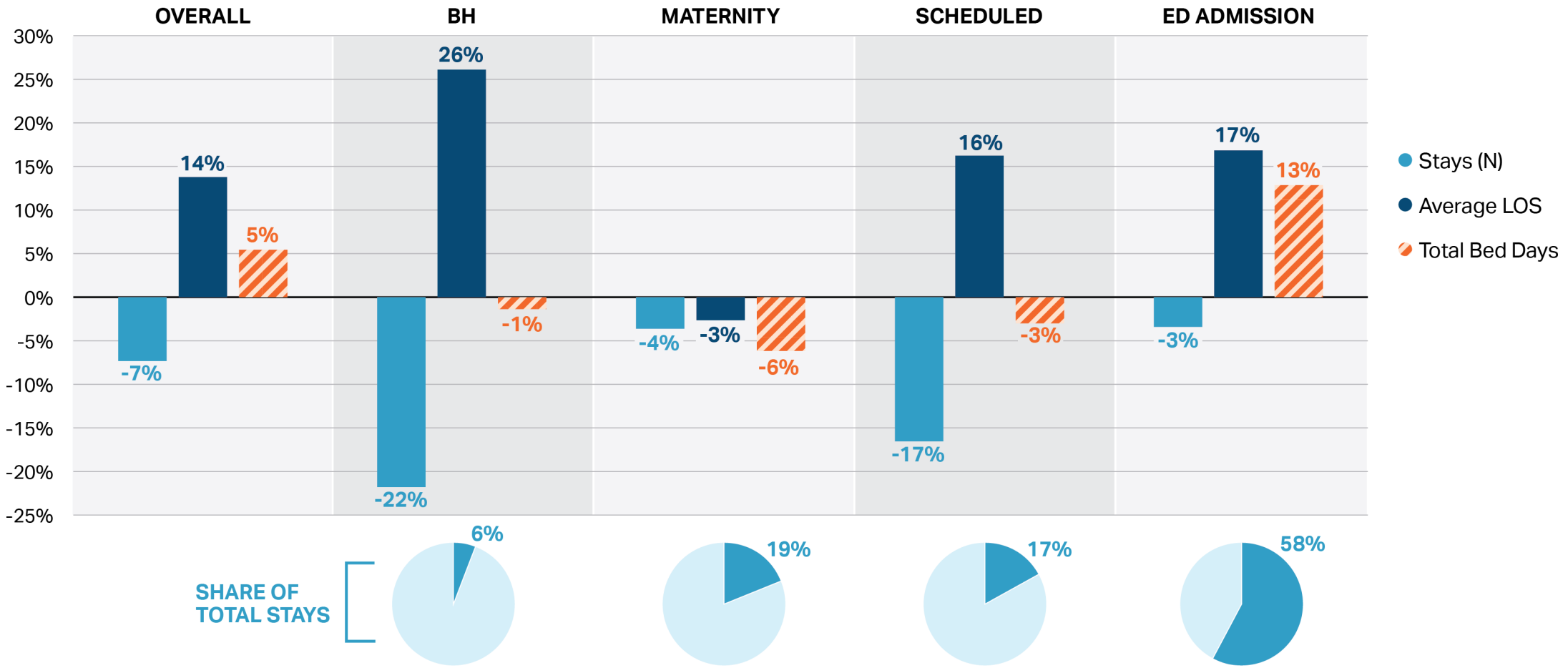


Notes: Includes all discharges from acute care and specialty hospitals. 2023 beds have yet to be reported—using 2022 bed numbers with 2023 utilization.
Source: HPC's analysis of Center for Health Information and Analysis (CHIA) Hospital Inpatient Discharge Database and Hospital Profiles, FY2016-FY2023

- The total number of staffed acute-care hospital beds have increased by **2.7%** from FY2016 to FY2023.
- The average daily census increased by nearly **10%** over this same time period, resulting in higher occupancy rates and less available beds.
- On August 31st, 2024, Nashoba and Carney Hospitals closed representing **a loss of approximately 129 beds**. HPC and others in the state are tracking the impact of these closures on statewide inpatient capacity.

Total hospital use (bed days) increased from 2018 to 2023 despite a decrease in admissions because of longer average length of stay.

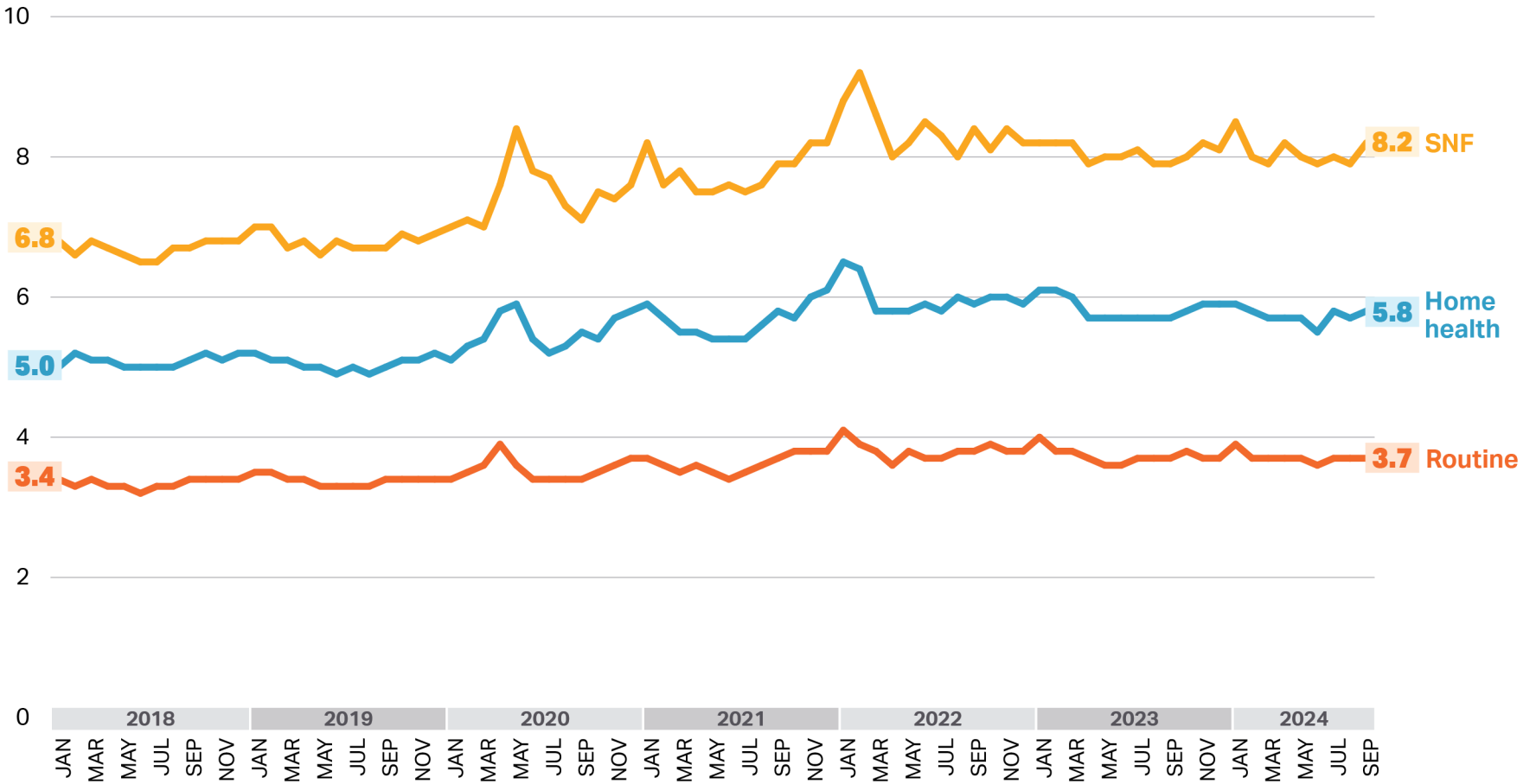
Percent change from 2018 to 2023 in number of stays, average length of stay, and total days for inpatient stays, 2018 and 2023



Notes: ED admission were identified using ED flags, admission source codes and ED revenue codes after excluding any BH or maternity stays. APR-DRG codes were used to identify Maternity (14,15) and BH (19,20) stays. Scheduled includes all stays that were not BH, maternity, or ED admissions. Includes COVID related discharges. Excludes rehabilitation admissions and admissions with length of stay greater than 180 days.
Sources: HPC analysis of the Center for Health Information and Analysis (CHIA) Hospital Inpatient Discharge Database, CY2018 to CY2023

The increase in length of stay is concentrated among patients ultimately discharged to post-acute care.

Average length of stay (days) for admissions from the ED (combined) by discharge destination, 2018 to 2024



Notes: Based on patient discharge data and includes only stays admitted from the emergency department (as defined in prior slides). Includes COVID-related discharges. Excludes pediatric, maternity, BH, scheduled, and rehabilitation stays. Stays with length of stay greater than 180 days.
Sources: HPC analysis of the Center for Health Information and Analysis (CHIA) Hospital Inpatient Discharge Database, FY2017 to FY2023, preliminary FY2024

- HPC has previously reported on hospital capacity issues, highlighting the lack of post-acute beds as well as the prior authorizations needed as an impediment to discharging patients in a timely manner.
- Starting in 2021 as part of pandemic response, the DOI asked carriers to waive prior authorizations. This ended in May 2022.

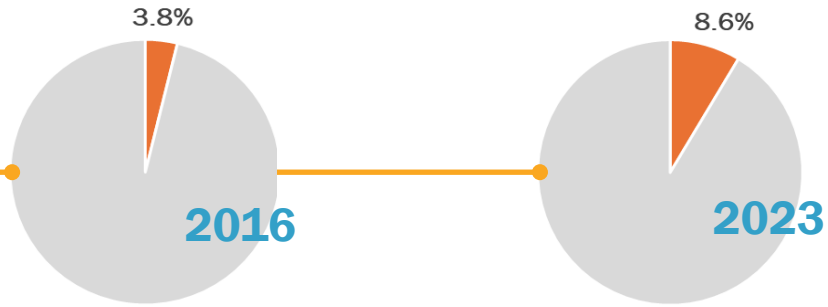
https://www.mass.gov/doc/bulletin-2022-03-extended-relaxation-of-prior-authorization-in-response-to-health-facility-capacity-constraints-issued-february-23-2022/download

Extra long lengths of stay are increasing as a proportion of hospital stays

Characteristics of extra long stays (over 30 days) on a given day, FY2016 and FY2023

BED DAYS

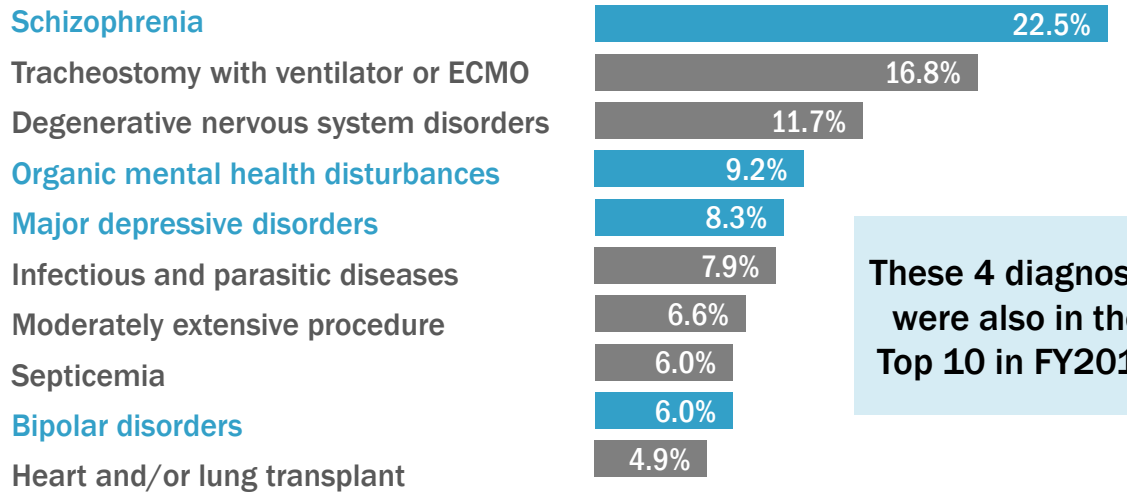
Long stayers are filling an **increasing proportion** of daily hospital bed capacity, more than **doubling** from FY2016 to FY2023.



BEHAVIORAL HEALTH

4 of the top 10 diagnoses among long stayers are for behavioral health conditions, such as schizophrenia and bipolar disorders.

Top 10 diagnoses for long stayers in FY2023

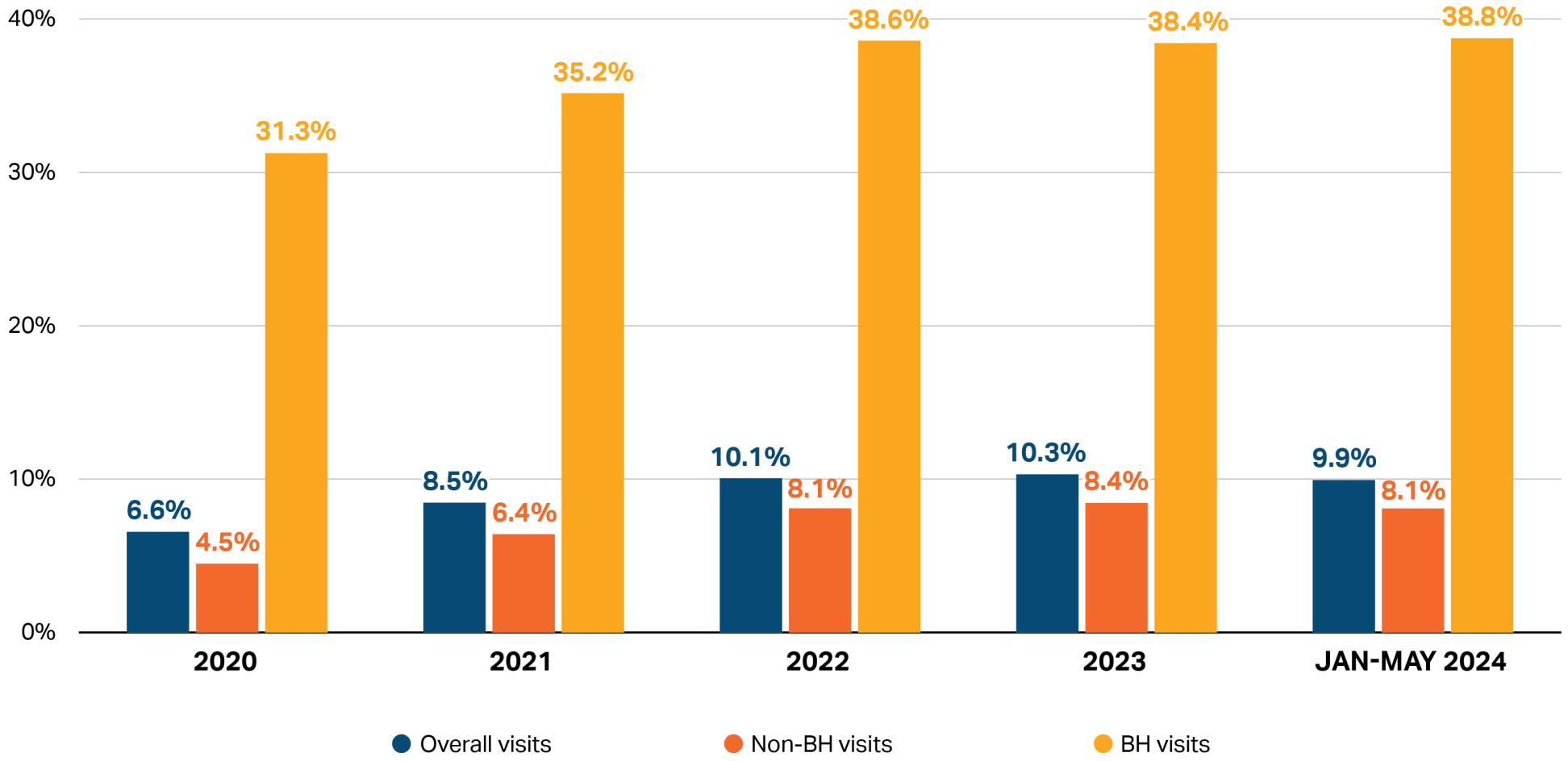


These 4 diagnoses were also in the Top 10 in FY2016

Notes: Data based on characteristics of patients in acute hospital beds on April 1st in each year. Statistics represent those whose stay as of April 1 had exceeded 30 days. Includes all discharges from acute care and specialty hospitals.
Sources: HPC's analysis of Center for Health Information and Analysis (CHIA) Hospital Inpatient Discharge Database, FY2016-FY2023

Long stays are also increasing in the ED. The percent of ED visits that boarded has grown both for BH-related visits and other visits as well.

Percent of emergency department visits that boarded (visits that were ≥12 hours in the ED) by type of visit, January 2020 to May 2024



Notes: The HPC defines ED boarding as greater than or equal to 12 hours in the hospital ED. Analysis includes both "treat and release" ED visits as well as ED visits ultimately admitted to a higher level of care. Does not include visits by non-Massachusetts residents. Behavioral health emergency department visits, observation stays, and inpatient stays were identified using AHRQ's CCSR for the primary diagnosis (BH: MBD001-MBD034).
Sources: HPC analysis of Center for Health Information and Analysis (CHIA) Case Mix Hospital Inpatient, Observation, and Emergency Department databases, FY2018 to FY2024

The HPC's Behavioral Health-related Emergency Department Boarding Study

Pursuant to Section 145 of Chapter 126 of the Acts of 2022

This legislation instructs the Health Policy Commission to conduct an analysis and issue a report on the ongoing effects of the COVID-19 pandemic on behavioral health-related boarding in acute care hospital settings, including but not limited to, boarding in EDs, medical surgical units or observation units.

The study should include visits that are for mental health, behavioral health, or substance use disorders.

The study should review:

- Length of stay, primary reason for wait, and level of care required
- Type of insurance coverage
- Payer reimbursement
- Demographics of patients including race/ethnicity, age, gender, housing status
- Ability to facilitate care coordination
- Effects of COVID-19 on length of stay, workforce, and workforce shortages
- Outcomes and quality of care for patient boarded in acute care hospitals

The final report will include recommendations on how to address the burden on acute care hospitals and payer reimbursement.

Behavioral health emergency department (ED) boarding has been a continuing crisis in Massachusetts.

ED boarding occurs when patients are held in the emergency department awaiting further treatment such as an inpatient level of care, whether medical or psychiatric.

- For most of the analyses in this study, the HPC considers a patient to have experienced behavioral health ED boarding if they have a primary diagnosis of a behavioral health condition and **spend 12 or more hours in the ED**.
- Other state agencies and organizations have implemented several different definitions of BH boarding to track the ongoing ED boarding crisis.

Behavioral health ED boarding may occur for several reasons such as:

- **Delayed psychiatric evaluations, lab tests, and determining level of care needed**
- **No available inpatient beds** either in acute-care hospitals or freestanding psychiatric hospitals for patients with a need for an inpatient level of care.
- **Delays in finding appropriate care in the community** for patients who do not need an inpatient level of care.

Behavioral health ED boarding is not only harmful for these patients and their families, but also impacts the hospital staff, non-BH patients, and emergency medical services.

Behavioral Health Emergency Department Boarding

Researchers, state agencies, and organizations representing parts of the health care system have different ways they define behavioral health ED boarding. These definitions vary based on the availability of data and the problem they are trying to understand or address.

- The American College of Emergency Physicians says any patient remaining in the ED for over 4 hours should be considered as “boarding”.
- Massachusetts Hospital Association conducts a weekly “point in time” survey of their hospitals on Monday mornings. They count any patients in the ED or in a med/surg bed needing a BH bed as “boarders”.
- The Expedited Inpatient Admission Protocol (EPIA) was originally developed as part of a 2017 Expedited Admissions Task Force and focused on patients spending 24 or more hours in the ED awaiting an inpatient behavioral health bed.
- Chapter 177 of the Acts of 2022 (the ABC Mental Health Act) defines boarding as “waiting not less than 12 hours” to be placed in an appropriate therapeutic setting (inpatient, crisis stabilization, community program, or residential) after being assessed.

Except where otherwise noted, any patient staying 12 hours or more in the ED with a primary behavioral health diagnosis will be counted as experiencing boarding regardless of their discharge destination (e.g. inpatient, home, or observation).

One intervention that has been implemented to address long waits for psychiatric inpatient beds from the ED is the Expedited Psychiatric Inpatient Admissions (EPIA) policy.

Expedited Psychiatric Inpatient Admissions Policy

At 24 Hours

The insurance carrier is notified by the ED by 24 hours that there is a patient awaiting an inpatient level of care.

At 48 Hours

The ED makes a formal request for assistance to the insurance carrier. This request will include clinical information on the patient, barriers to admission, and information on bed searches.

At 72 Hours

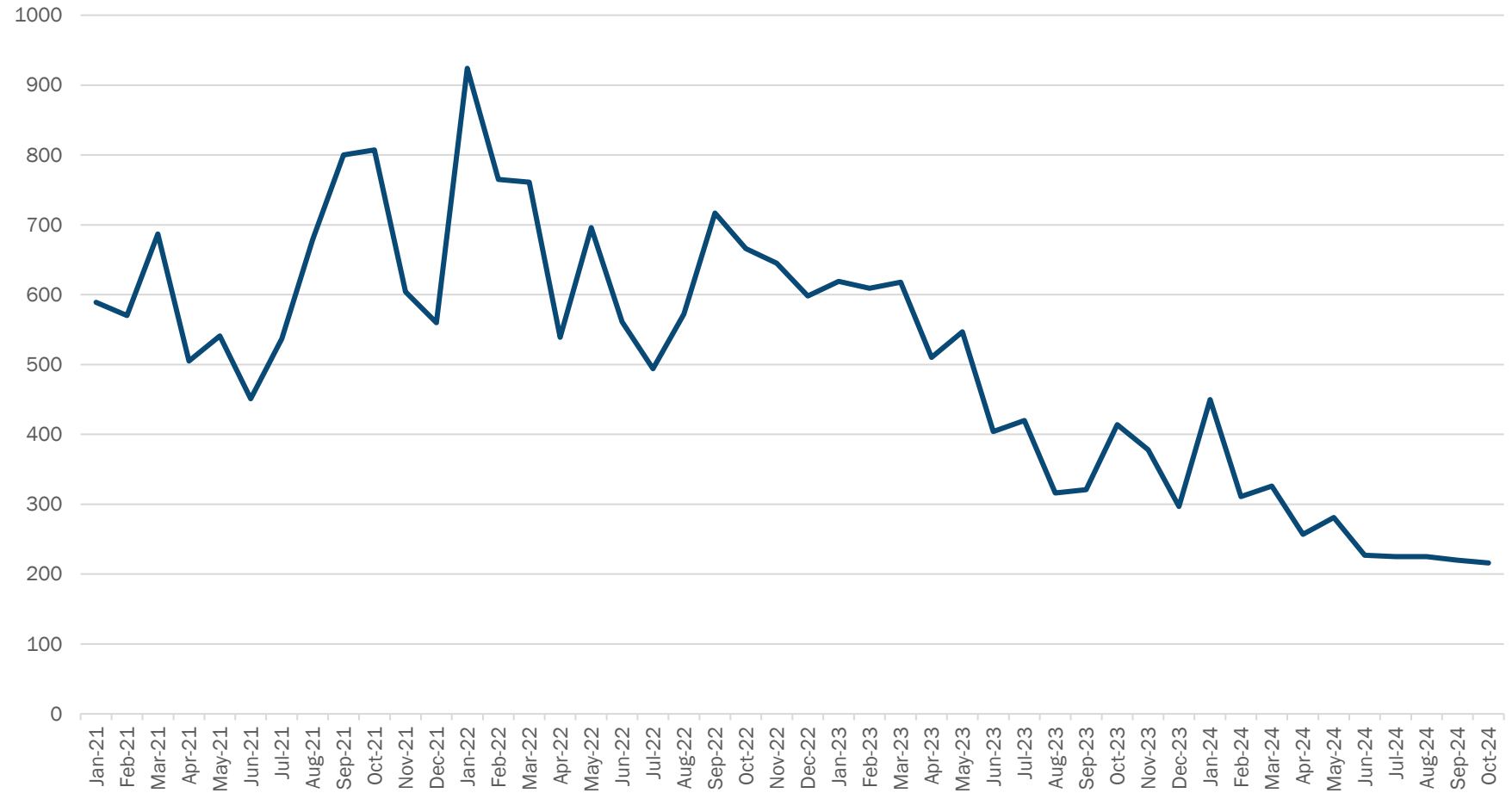
The insurance carrier requests assistance from DMH by 96 hours.

- Starting in 2018, the EPIA policy was implemented to facilitate the placement of patients in need of inpatient psychiatric hospitalization. This policy was developed through a task force that included: carriers, providers, hospital & carrier trade associations, professional associations, and several state agencies.
- The policy sets clear steps and responsibility for escalating cases where placement has not been achieved in a reasonable period of time to insurance carriers, inpatient psychiatric units, and, ultimately, the Massachusetts Department of Mental Health (DMH).

Sources: Massachusetts Executive Office of Health and Human Services. Expedited Psychiatric Inpatient Admission (EPIA) Policy. Available at: https://www.mass.gov/info-details/expedited-psychiatric-inpatient-admissions-epia-policy

The monthly number of referrals to the EPIA has decreased since 2022.

Number of referrals to the Expedited Psychiatric Inpatient Program, January 2021 – October 2024



Source: Massachusetts Executive Office of Health and Human Services. Expedited Psychiatric Inpatient Admission (EPIA) Dashboards. EPIA External Report October 2024. Available at: https://www.mass.gov/lists/expedited-psychiatric-inpatient-admission-epia-dashboards.

- The EPIA protocol only applies to patients who are determined to need an inpatient level of care and have spent at least 24 hours in the ED.
- In October 2024, there were 216 referrals through the EPIA policy, with an average time to placement of 2.3 days[1]
- Of those referrals, 42.6% were insured by MassHealth ACO/MCO, 21.8% were dually-insured by MassHealth & Medicare, and 7.9% were commercially-insured.

Other state efforts aimed at improving BH ED boarding

- The Massachusetts launched the **Behavioral Health Help Line** and a statewide network of **Community Behavioral Health Centers** in 2023. These efforts were part of the Commonwealth's **Roadmap for Behavioral Health Reform.**[1]
  - The goal is to get Massachusetts residents "the mental health and substance use care they need, when and where they need it."
  - CBHCs are open 24 hours a day and are an alternative to the ED for certain patients in behavioral health crisis, regardless of insurance or ability to pay.
  - Some patients will still need to seek care at an ED after visiting a CBHC if they are determined to need an inpatient bed and there are none available, or if patients are told they need additional medical clearance.
- DOI issued an additional bulletin during COVID and an increase in ED boarding to emphasize the importance of the EPIA process for commercial insurers and hospital providers including arranging payments for specialty needs (known as "specialing"). This could include additional services such as an individual room or 1:1 staff/patient ratio. [2]

Sources: (1) Massachusetts Executive Office of Health and Human Services. Roadmap for Behavioral Health Reform. Available at: https://www.mass.gov/roadmap-for-behavioral-health-reform. (2) DOI Bulletin 2021-07 "Updated Protocols for the Prevention of Emergency Department Boarding of Patients under EPIA Protocols"

The HPC identified patients with BH-related ED boarding using inpatient, observation, and emergency department data.

DATA SOURCE

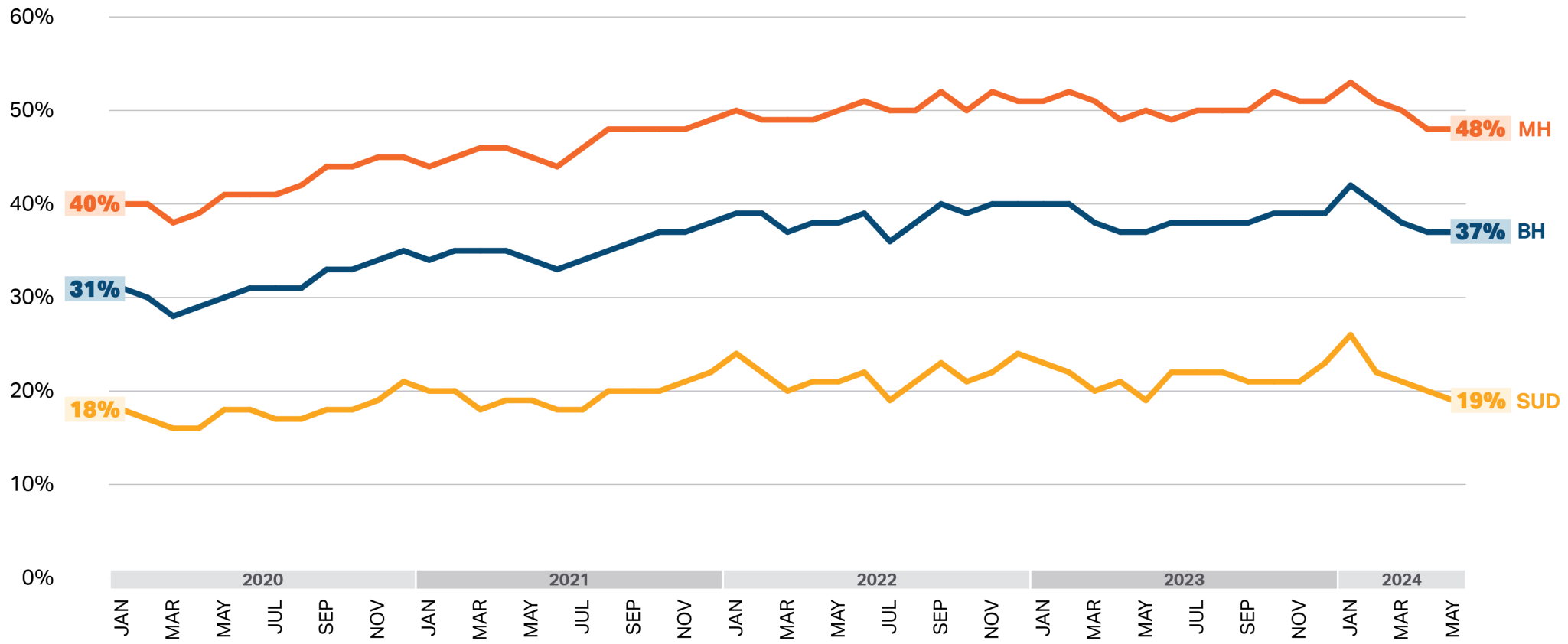
- Massachusetts Center for Health Information and Analysis (CHIA) Massachusetts Acute Care Hospital Case-Mix Databases:
  - Hospital Inpatient, Observation, Emergency Department Discharge Data
- Massachusetts All-Payer Claims Database
  - Commercial & MassHealth (mental health diagnoses only)

ANALYIC NOTES

- **Population:** Massachusetts residents with an emergency department visit or an inpatient or observation stay that was admitted through the ED
- **Linkage to APCD:** **Case-mix data was linked to APCD data to estimate spending** and **examine follow-up care** for patients who seek care in the ED for a mental health problem.
- **Exclusions:** Several hospitals were excluded for analyses based on poor data quality for ED length of stay. MGB hospitals were excluded prior to 2023 due to incorrect submission of observation stays as ED visits.

By May 2024, nearly half of mental health-related ED visits boarded.

Percent of behavioral health-related ED visits that boarded (visits that were ≥12 hours in the ED) by type of visit, January 2020 to May 2024



Notes: The HPC defines ED boarding as greater than or equal to 12 hours in the hospital ED. Analysis includes both "treat and release" ED visits as well as ED visits ultimately admitted to a higher level of care. Does not include visits by non-Massachusetts residents. Behavioral health ED visits, observation stays, and inpatient stays were identified using AHRQ's CCSR for the primary diagnosis. BH visits were identified using CCSR categories MBD001-MBD034, MH visits were identified using CCSR categories MBD001-MBD013 and MBD027, and SUD visits were identified using MBD017-MBD025 and MBD028-MBD033. Visits with diagnosis codes identified as MBD026 or MBD034 were categorized as mental health-related or substance use disorder-related based on categorizations from CHIA *Massachusetts Acute Care Hospital Emergency Department Data – Quarterly Update* methodology (November 2023).
Sources: HPC analysis of Center for Health Information and Analysis (CHIA) Case Mix databases, FY2018 to FY2024

Residents who boarded during a BH ED visit were more often covered by MassHealth, Asian, Black, or Hispanic, and living in the lowest income communities.

Characteristics of Massachusetts residents who boarded during a behavioral health-related ED visit, 2023

11%

were children aged 0-17

10% of BH ED visits overall were children

33%

were Asian, Black, Hispanic, or a race other than White

33% of BH ED visits overall were among residents of color

56%

were male

59% of BH ED visits overall were among male residents

49%

had health insurance coverage through MassHealth

47% of BH ED visits overall were covered by MassHealth

35%

lived in the lowest income communities

34% of BH ED visits overall were among residents in the lowest-income communities

17%

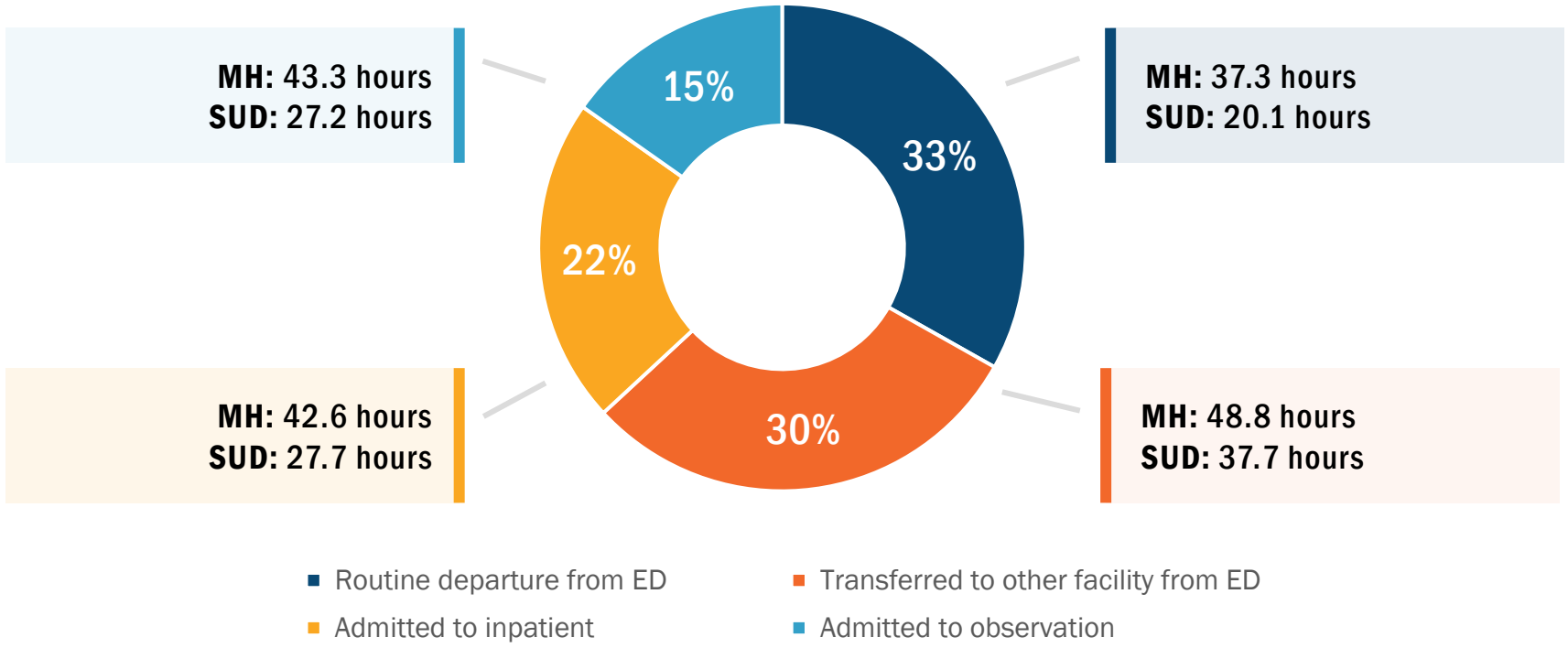
did not have permanent housing

17% of BH ED visits overall were among residents without permanent housing

Notes: The HPC defines ED boarding as greater than or equal to 12 hours in the hospital ED. Analysis includes both "treat and release" ED visits as well as ED visits ultimately admitted to a higher level of care. Does not include visits by non-Massachusetts residents. Behavioral health ED visits, observation stays, and inpatient stays were identified using AHRQ's CCSR for the primary diagnosis. BH visits were identified using CCSR categories MBD001-MBD034, MH visits were identified using CCSR categories MBD001-MBD013 and MBD027, and SUD visits were identified using MBD017-MBD025 and MBD028-MBD033. Visits with diagnosis codes identified as MBD026 or MBD034 were categorized as mental health-related or substance use disorder-related based on categorizations from CHIA *Massachusetts Acute Care Hospital Emergency Department Data – Quarterly Update* methodology (November 2023). Lowest income communities are zip codes with median income in the first income quintile, based on the 2022 American Community Survey (ACS). MassHealth category includes MassHealth, self pay, free care, health safety net, and CommonwealthCare/ConnectorCare plans.
Sources: HPC analysis of Center for Health Information and Analysis (CHIA) Case Mix databases, FY2018 to FY2024

Approximately a third of patients that experience BH ED boarding are discharged directly from the ED and not sent to a higher level of care. This has remained consistent over time.

Behavioral health-related ED visits that boarded (visits that were ≥12 hours in the ED) by departure status and average lengths of stay (hours), 2023

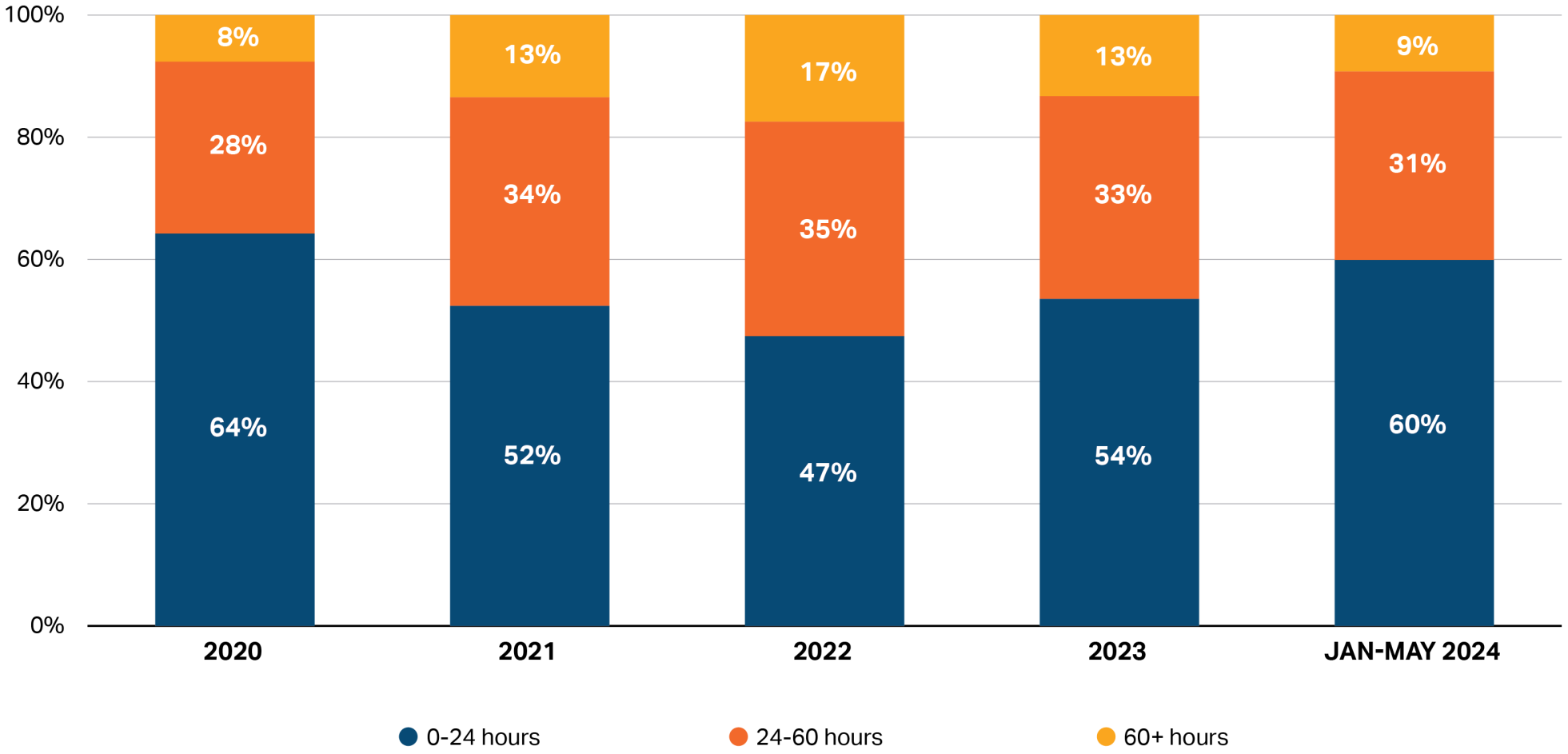


Notes: Visits that left against medical advice, eloped, or had another departure from the ED accounted for approximately 1% of visits each year and are not shown. The HPC defines ED boarding as greater than or equal to 12 hours in the hospital ED. Analysis includes both "treat and release" ED visits as well as ED visits ultimately admitted to a higher level of care. Does not include visits by non-Massachusetts residents. Behavioral health ED visits, observation stays, and inpatient stays were identified using AHRQ's CCSR for the primary diagnosis. BH visits were identified using CCSR categories MBD001-MBD034, MH visits were identified using CCSR categories MBD001-MBD013 and MBD027, and SUD visits were identified using MBD017-MBD025 and MBD028-MBD033. Visits with diagnosis codes identified as MBD026 or MBD034 were categorized as mental health-related or substance use disorder-related based on categorizations from CHIA *Massachusetts Acute Care Hospital Emergency Department Data – Quarterly Update* methodology (November 2023).
Sources: HPC analysis of Center for Health Information and Analysis (CHIA) Case Mix databases, FY2018 to FY2024. (1) Medicare.gov. Inpatient or outpatient hospital status affects your costs. Available at: https://www.medicare.gov/coverage/inpatient-hospital-care/inpatient-outpatient-status.

- Routine departure from the ED (i.e., discharge home) differed by type of BH ED visit. For mental health-related ED visits, 26% were discharged home, while 42% of substance use disorder-related visits were discharged home.
- Observation services are hospital outpatient services that a patient receives while awaiting an admission decision. Depending on the hospital, patients may still be in the ED or in separate area.[1]
- Some hospital stakeholders indicated that they would move BH patients in the ED to observation status when it was clear that a patient would not have an inpatient bed within 24 hours.

Among adults ultimately admitted to an inpatient psychiatric bed at an acute care hospital, more than half spent over 24 hours in the ED in 2022. That proportion has declined recently.

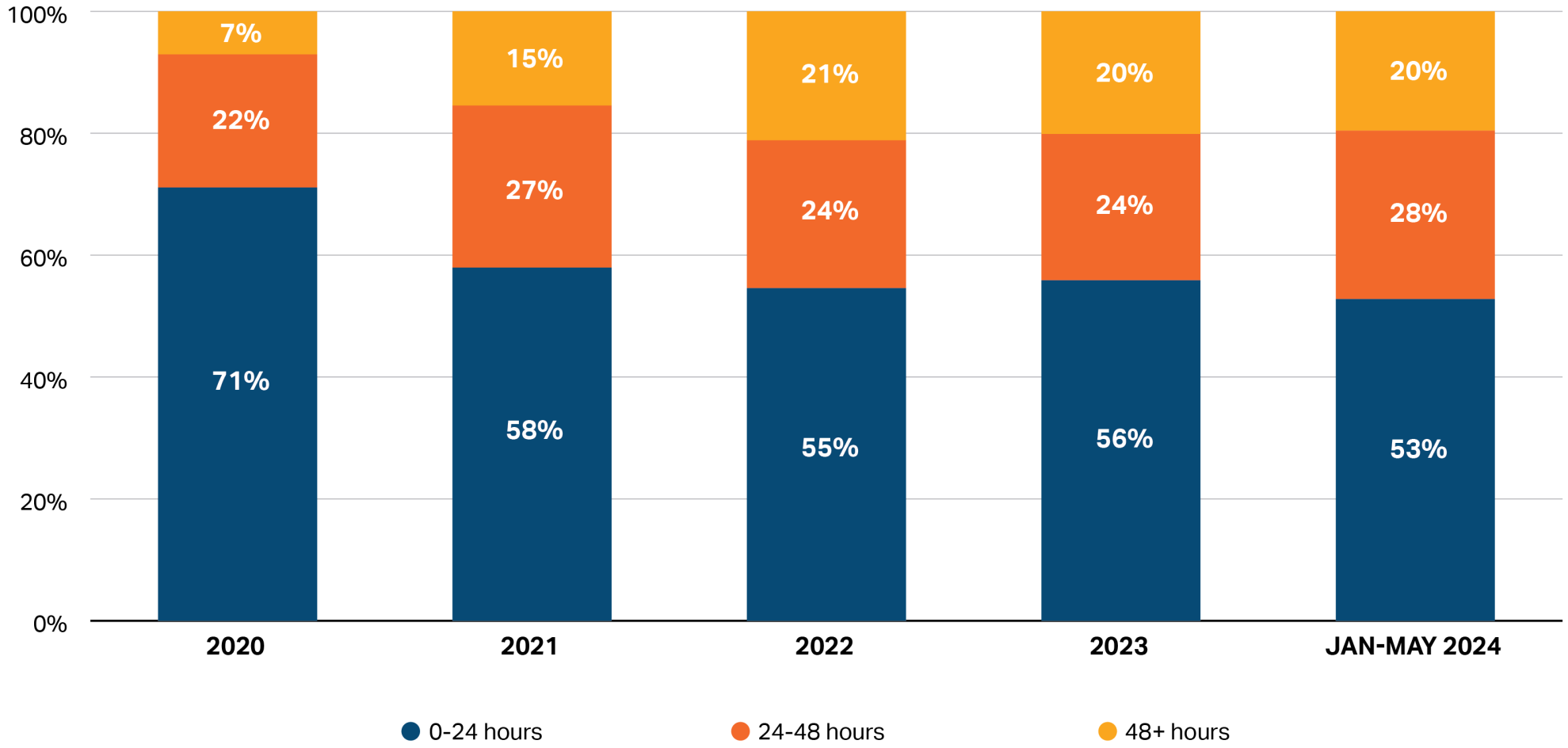
Time until admission to a psychiatric bed among behavioral health-related ED visits for adults, January 2020 to May 2024



Notes: Only includes admissions to psychiatric beds in acute care hospitals. Analysis includes both "treat and release" ED visits as well as ED visits ultimately admitted to a higher level of care. Does not include visits by non-Massachusetts residents. Behavioral health ED visits, observation stays, and inpatient stays were identified using AHRQ's CCSR for the primary diagnosis (MBD001-MBD034).
Sources: HPC analysis of Center for Health Information and Analysis (CHIA) Case Mix databases, FY2018 to FY2024

Among children who were ultimately admitted to a psychiatric bed in an acute care hospital, the proportion staying in the ED more than 24 hours has steadily increased to 47% in 2024.

Time until admission to a psychiatric bed among behavioral health-related ED visits for children, January 2020 to May 2024



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Sources: HPC analysis of Center for Health Information and Analysis (CHIA) Case Mix databases, FY2018 to FY2024

In the past several years, state policies have been updated to increase payments and services for patients experiencing emergency department boarding.

INPATIENT PAYMENT POLICIES

- MassHealth and several commercial payers pay on a **per diem basis starting the day of their ED visit** for patients who end up admitted to an inpatient stay. As of 2022, HPC has identified only one major commercial payer that currently pays for BH stays on a per stay (e.g. DRG) basis.
  - For example, the spending related to boarding for the majority of commercial and MassHealth BH inpatient stays will add on to the inpatient stay as a visit (e.g., if a patient came to the ED on Saturday, was moved to inpatient on Tuesday, and discharged Friday the total inpatient stay would be 7 days at the per diem rate).
- Medicare pays per diem for stays at inpatient psychiatric facilities and per stay for BH stays at acute care hospitals.

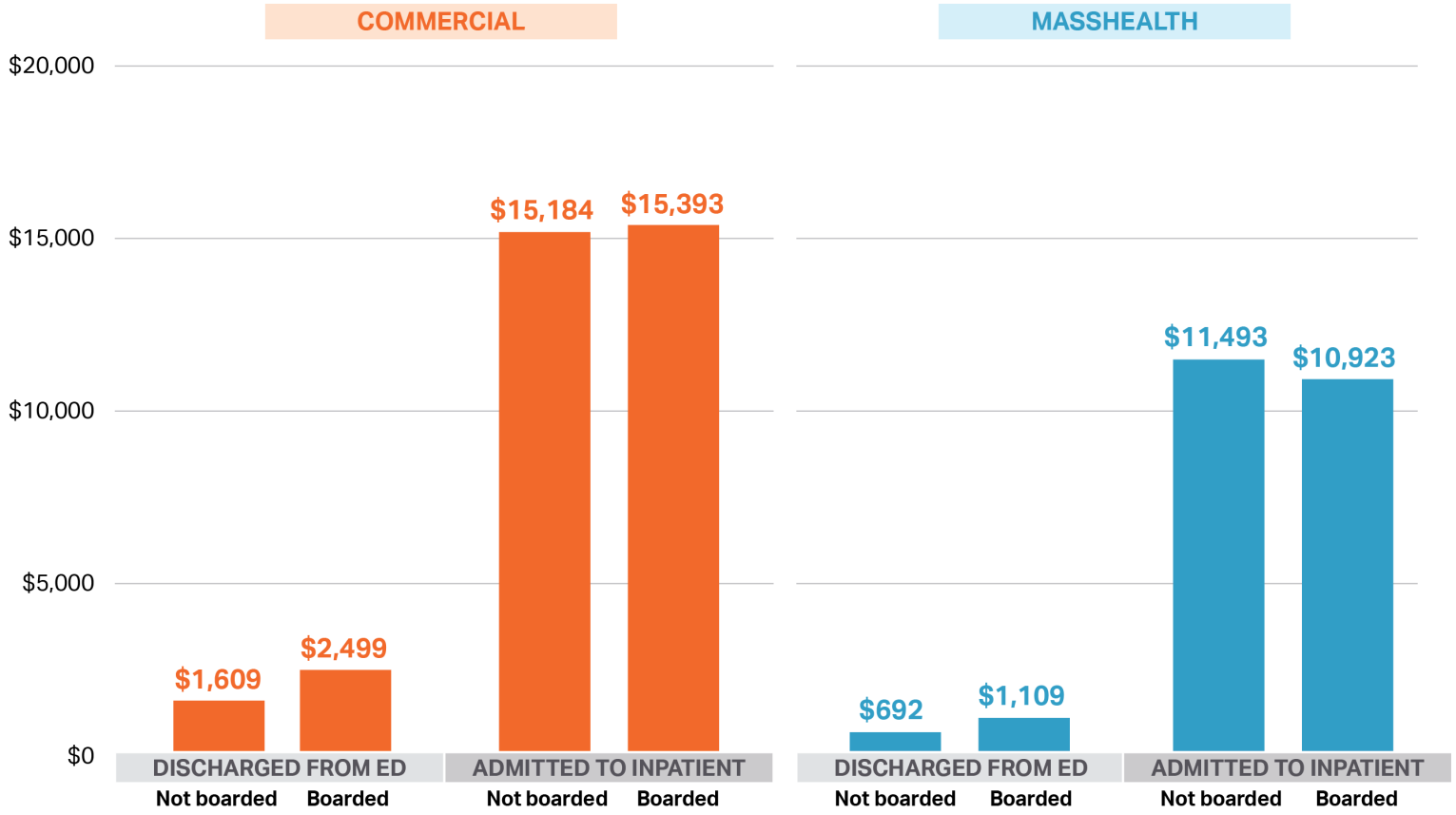
PAYMENT POLICIES RELATED TO BH ED BOARDING

- As of January 2023, MassHealth managed care entities pay hospitals directly for crisis evaluations instead of requiring patients to be first evaluated by Emergency Service Providers (ESP) and Mobile Crisis Intervention (MCI) teams to determine the right level of care. This payment is in addition to the standard ED payment (e.g. for facility and professional services in the ED). [1]
- As of September 2023, in accordance with the *ABC Mental Health Act,* section 78 of chapter 177 of the Acts of 2022 [2], the Division of Insurance expects commercial **carriers to reimburse acute care hospitals for ongoing monitoring and stabilization for patients awaiting inpatient psychiatric placement** at a rate "at least equivalent to crisis intervention services as reimbursed by MassHealth". [3]
- As of October of 2022, MassHealth pays an additional per admission rate for weekend admissions and admissions for harder-to-place patients such as children.[1]
  - Stakeholders noted that finding inpatient placements on weekends and holidays was especially challenging.

Sources: (1) MassHealth Managed Care Entity Bulletin 93, November 2022. (2) Mass General Laws Chapter 177 of the Act of 2022 Section 78. (3) DOI Bulletin 2022-08 Reimbursing Acute Care Hospitals for Services Provided to Behavioral Health Patients Awaiting Psychiatric Inpatient Admissions.

Both commercial payers and MassHealth paid more for ED visits that boarded and were ultimately discharged from the ED (55% and 60% more, respectively). Commercial patients had similar spending for inpatient admissions, regardless of boarding status.

Median allowed amounts for mental health-related ED episodes among commercially-insured and MassHealth-insured residents by admission and boarding status, 2022

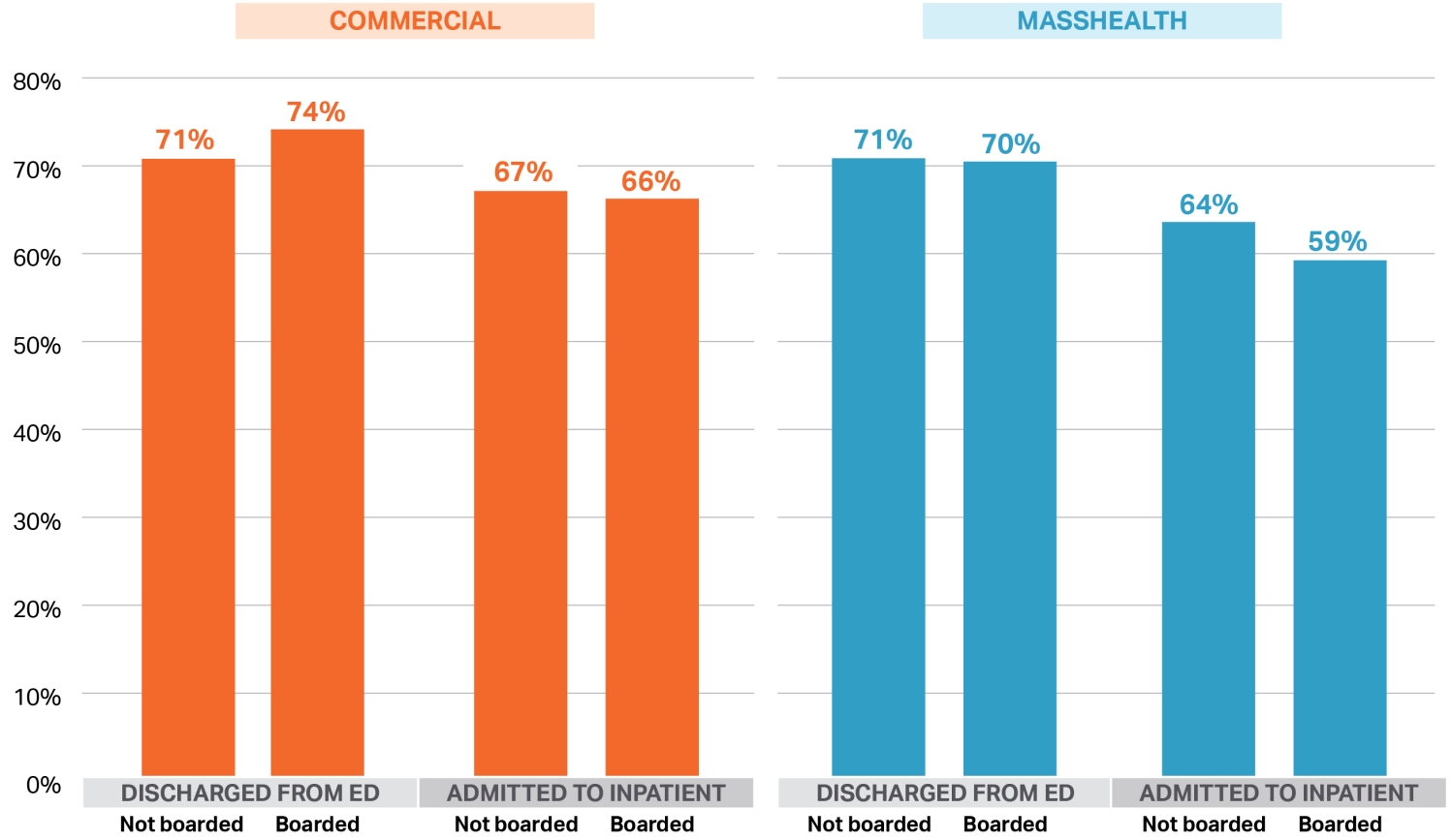


- The higher spending for boarded patients among those discharged home from the ED is consistent with HPC expectations.
- The fact that observed spending is not higher for boarded patients who are ultimately admitted to an inpatient stay is still being explored.

Notes: The HPC defines ED boarding as greater than or equal to 12 hours in the hospital ED. Mental health-related emergency department visits were defined as any ED visit or observation or inpatient stay that resulted from an ED visit with a primary diagnosis code in AHRQ CCSR categories MBD001-MBD013 or MBD027 in the Case Mix datasets. Data shown are for ED visits from the Case Mix databases that were matched (same person, same date) to commercial or MassHealth APCD claims data.
Sources: HPC analysis of Massachusetts Acute Case-Mix Databases, CY2022, All-Payer Claims Database, V2022, 2022.

Regardless of boarding status or payer, patients discharged from the ED were more likely to receive additional services within 7 days than those who had an inpatient stay.

Percent of mental health-related ED episodes that incurred at least one medical claim for any service within seven days by boarding status and discharge destination, 2022



Notes: The HPC defines ED boarding as greater than or equal to 12 hours in the hospital ED. Restricted to residents with 12 months of coverage in 2022. Mental health-related ED visits were defined as any ED visit or observation or inpatient stay that resulted from an ED visit with a primary diagnosis code in AHRQ CCSR categories MBD001-MBD013 or MBD027 in the Case Mix datasets. Data shown are for ED visits from the Case Mix databases that were matched (same person, same date) to commercial or MassHealth APCD claims data.
Sources: (1) HPC analysis of Massachusetts All-Payer Claims Database, V2022, 2022. (2). Center for Health Information and Analysis. Quality of Care in the Commonwealth: Select Clinical Quality and Patient Experience Measures: 2020-2022. August 2024. Available at: https://www.chiamass.gov/a-focus-on-provider-quality-selected-clinical-measures.

- A recent CHIA report on quality of care found that 77.0% of members aged 6 years of age and older with an ED visit for mental illness had a follow-up visit for mental illness within seven days of their ED visit.
- For those who were hospitalized for mental illness, CHIA reported 62.1% had a follow-up visit by a mental health provider within seven days of their discharge.[2]

Additional ED Boarding Study Analyses and Behavioral Health Reporting

The HPC's full report will also include:

- Information on behavioral-health related boarding in other states and other state policies to address BH ED boarding
- More information from stakeholder meetings, including resources provided by health plans to care for boarders, the impact on acute care hospitals, the ability to facilitate care communication, and the impact of workforce on ED boarding
- Policy recommendations

Additional upcoming studies will also help understand BH ED boarding in the Commonwealth:

- Behavioral Health Access Line and Behavioral Health Crisis Intervention
- Pediatric Behavioral Health Planning Report
  - This report will also include BH Treatment and Referral Platform data from PointClickCare. The platform is intended to reduce BH ED boarding times by facilitating inpatient placement.[1]

HPC will continue to monitor and research hospital capacity.

Sources: (1) https://www.hcinnovationgroup.com/population-health-management/behavioral-health/news/53067802/pointclickcare-to-develop-massachusetts-behavioral-health-treatment-referral-platform