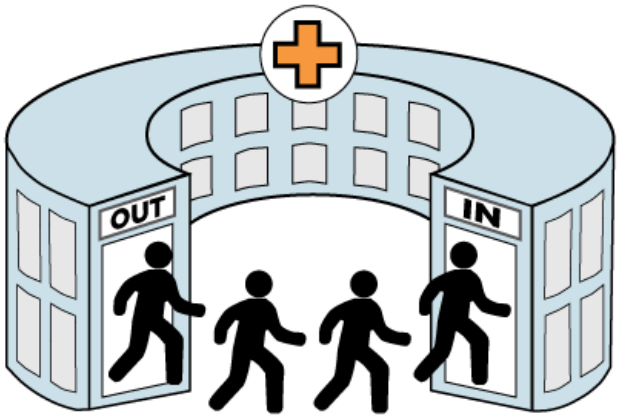
Emergency Department Visits After Inpatient Discharge in Massachusetts: Applying Insights from Data to Inform Improvement



November 15, 2017

MASSACHUSETTS Health & Hospital ASSOCIATION

COLLABORATIVE HEALTHCARE STRATEGIES

CHIA

Today

- Introductory Remarks
  Patricia M. Noga, PhD, RN, FAAN, Vice President, Clinical Affairs
  Massachusetts Health & Hospital Association

- Emergency Department Visits After Inpatient Discharge in Massachusetts
  Mark Paskowsky, MPP, Research Manager
  Center for Health Information and Analysis

- Applying Insights from Data to Inform Improvement
  Amy Boutwell, MD, MPP, President
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- Questions & Answers

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Rationale

- Hospital readmissions is a quality measure as well as a health system performance measure
- A patient who was discharged from inpatient and returns to the **emergency department** is not captured in the “readmission rate”
- Increasing attention by providers and policy makers about whether the patient returns to the acute care setting at any level (ED, observation, inpatient) within 30 days of inpatient discharge
- Measuring the rate of “ED visits after inpatient discharge” or “revisits” may reveal opportunities to improve care transitions and reduce avoidable acute-level hospital use

Background

- A revisit is defined as “a visit to the emergency department within 30 days of an eligible inpatient discharge”
- Used the same index of eligible adult inpatient discharges as readmissions*
- Used statewide Case Mix data submitted by acute care hospitals in Massachusetts :
  - Inpatient discharges
  - Observation stays
  - Emergency department visits
- Measure includes visits to the same facility as well as to other hospital facilities in the state
- Revisit analysis is all-cause and all-payer

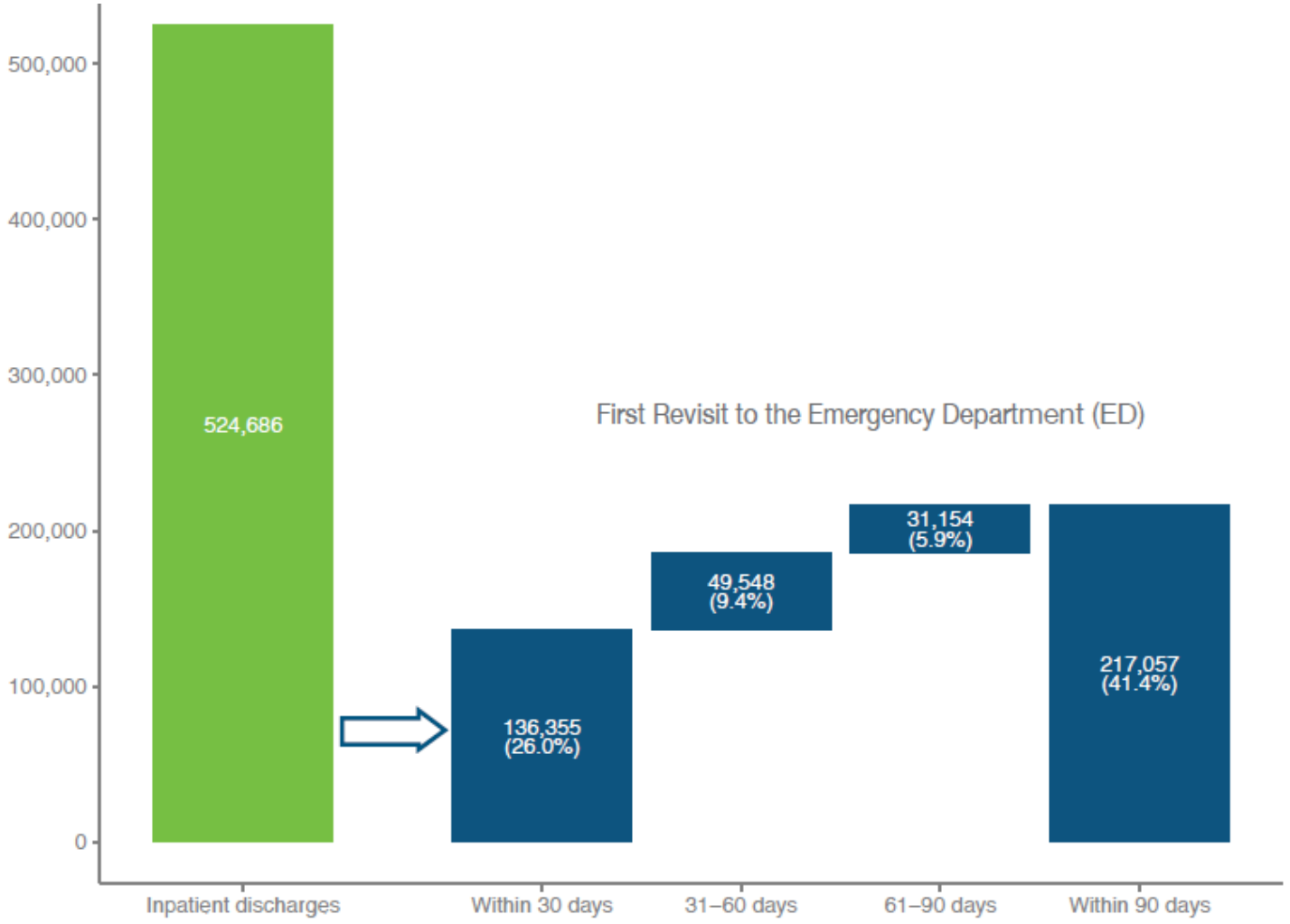
* For the revisit analysis, eligible inpatient discharges also included those with a primary psychiatric diagnosis, unlike readmissions

Analysis Overview

Purpose is to better understand the patterns of revisits and who is experiencing a revisit

- Overall **Statewide** visits to the ED after inpatient discharge (revisits) in SFY 2015
- 30-day revisits **by patient and hospitalization characteristics**
- 30-day revisits by **hospital**

Statewide 30-Day and 90-Day Revisit Rate



Note: A revisit is defined as an emergency department visit after an eligible inpatient discharge.

Data source: Massachusetts Acute Hospital Case Mix Database, July 2014 to June 2015.

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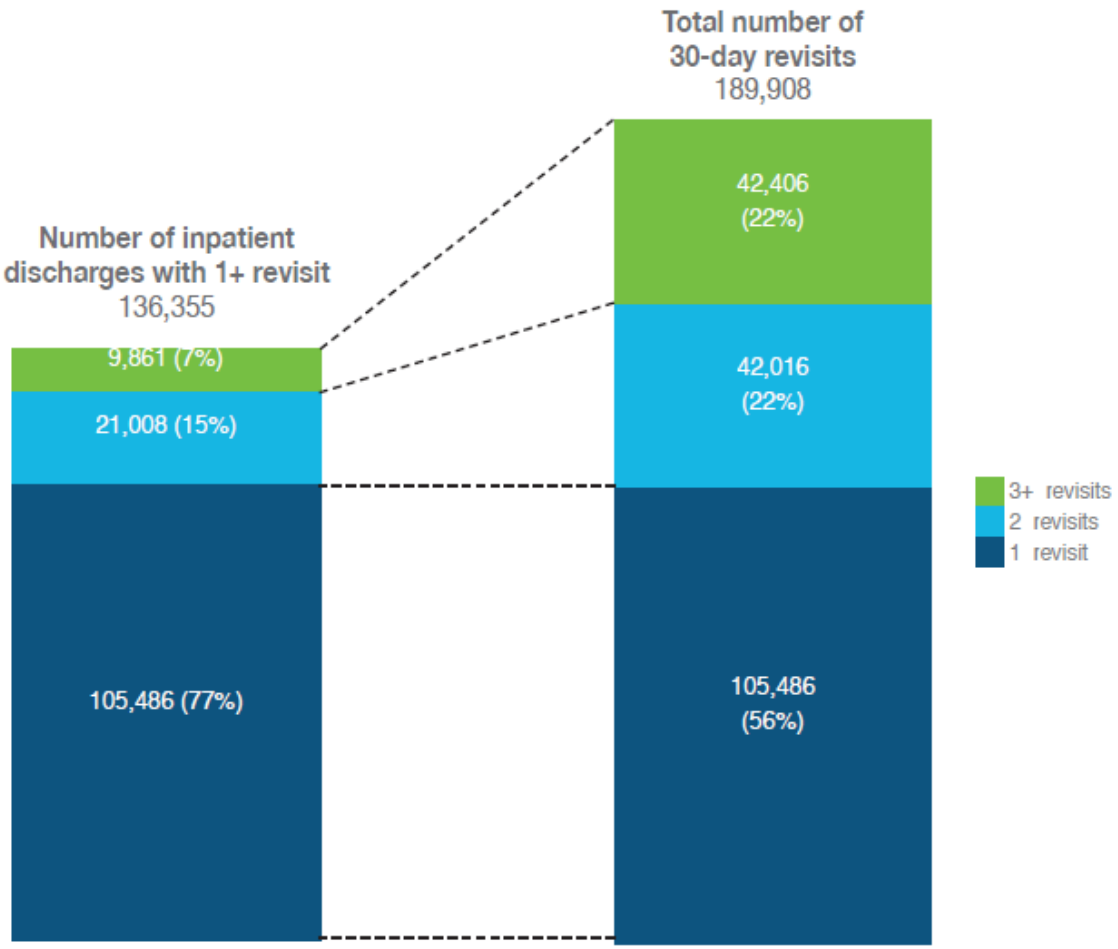
Total Number of 30-Day Revisits



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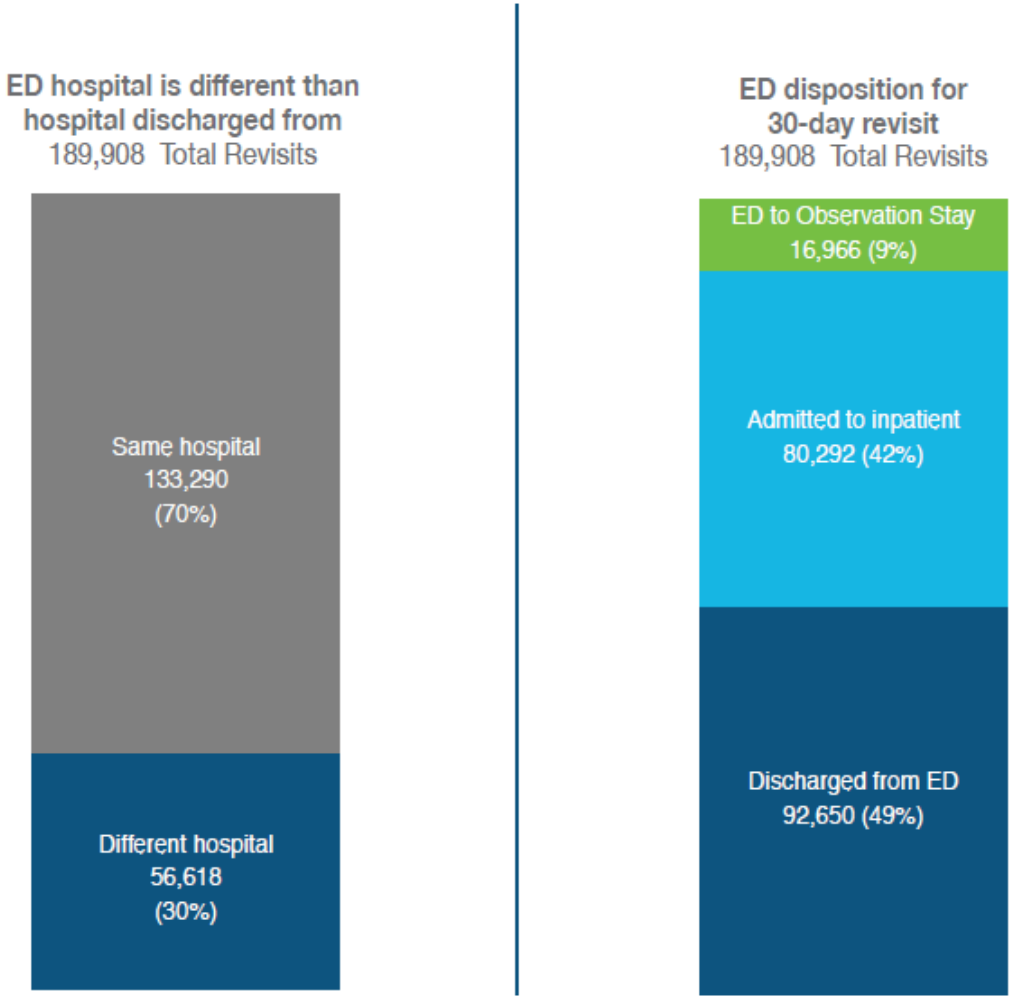
All 30-Day Revisits by Different Facility and ED Disposition



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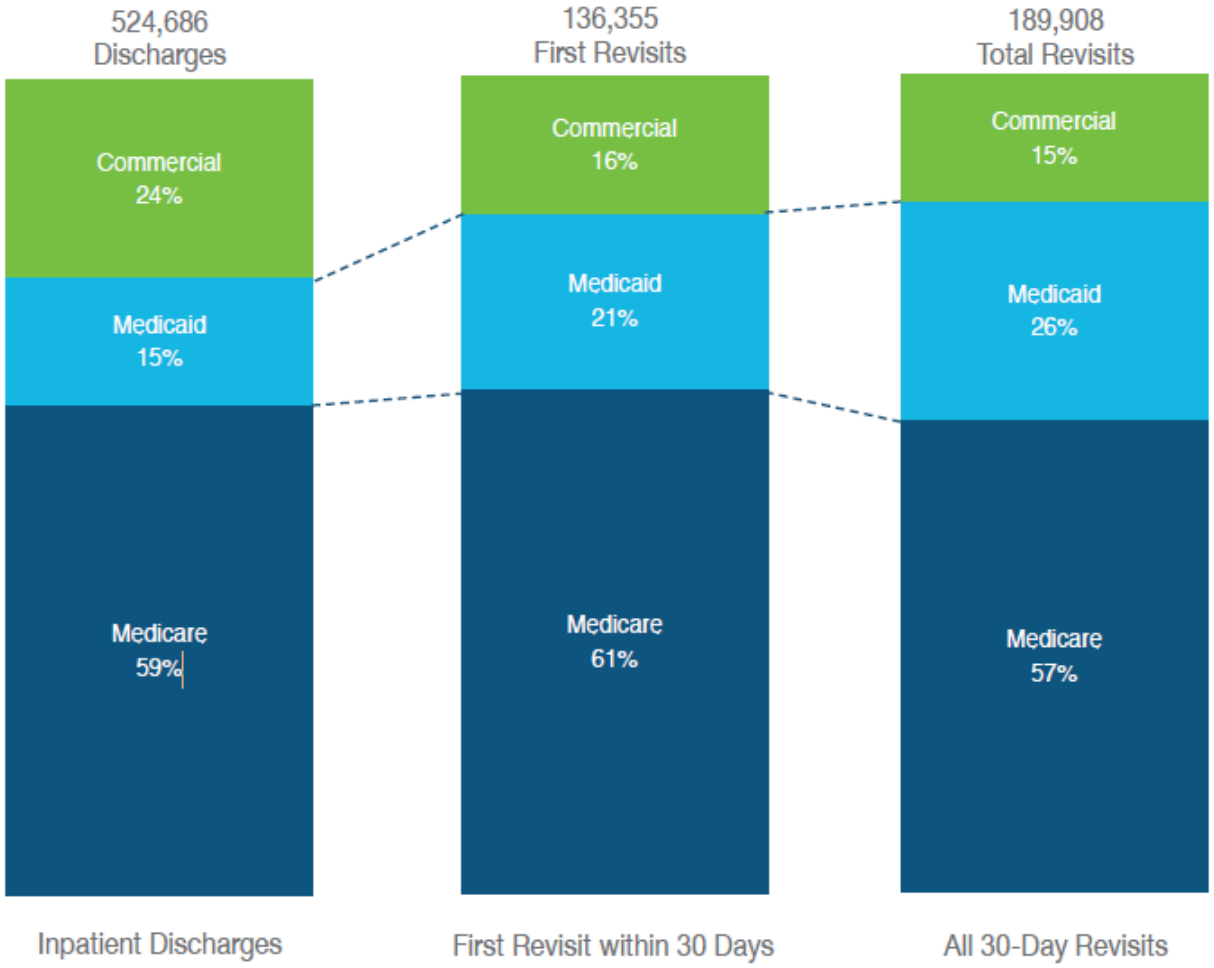
All 30-Day Revisits by Payer Type



Note: A revisit is defined as an emergency department visit after an eligible inpatient discharge.
Not shown in each of the column bars above is the 2% categorized as "other" payer types, including self-pay.

Data source: Massachusetts Acute Hospital Case Mix Database, July 2014 to June 2015.

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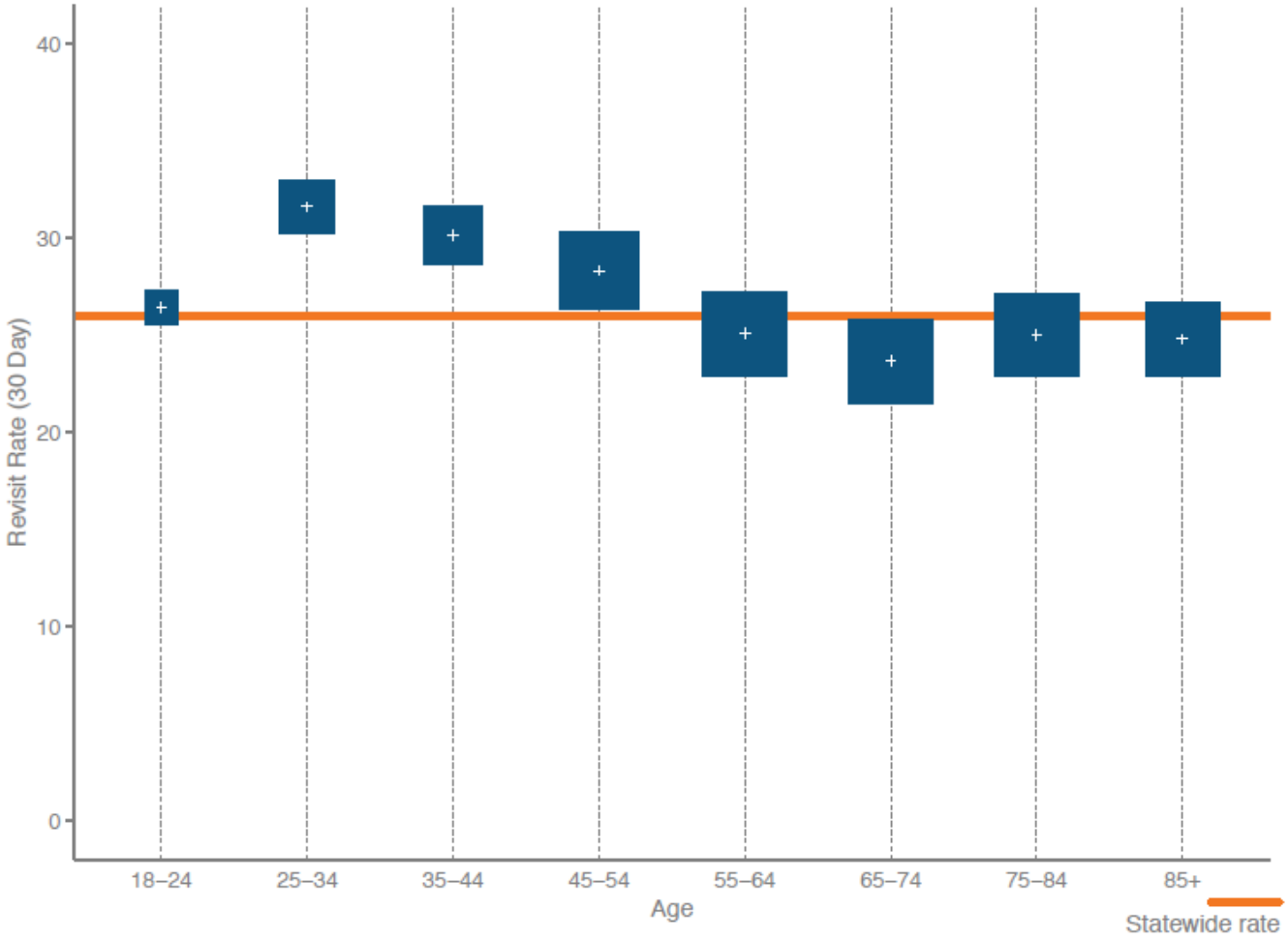
30-Day Revisits by Age



Note: A revisit is defined as an emergency department visit after an eligible inpatient discharge.
The size of the box represents the number of inpatient discharges with a revisit.
The midpoint of the box (marked with a plus sign) represents the 30-day revisit rate.

Data source: Massachusetts Acute Hospital Case Mix Database, July 2014 to June 2015.

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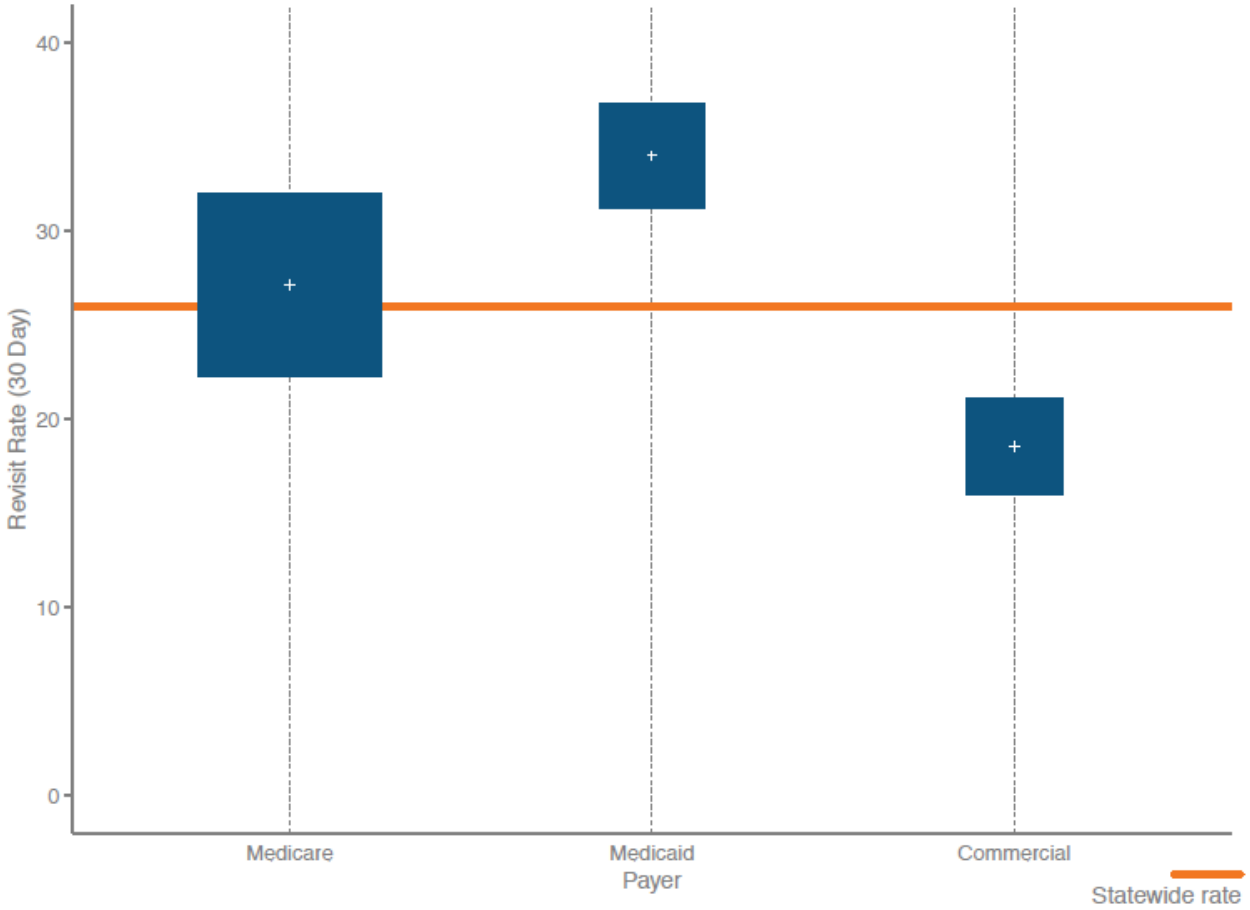
30-Day Revisits by Payer Type



Note: A revisit is defined as an emergency department visit after an eligible inpatient discharge.
The statewide 30-day revisit rate also includes other payers, including self-pay (data not shown).
The size of the box represents the number of inpatient discharges with a revisit.
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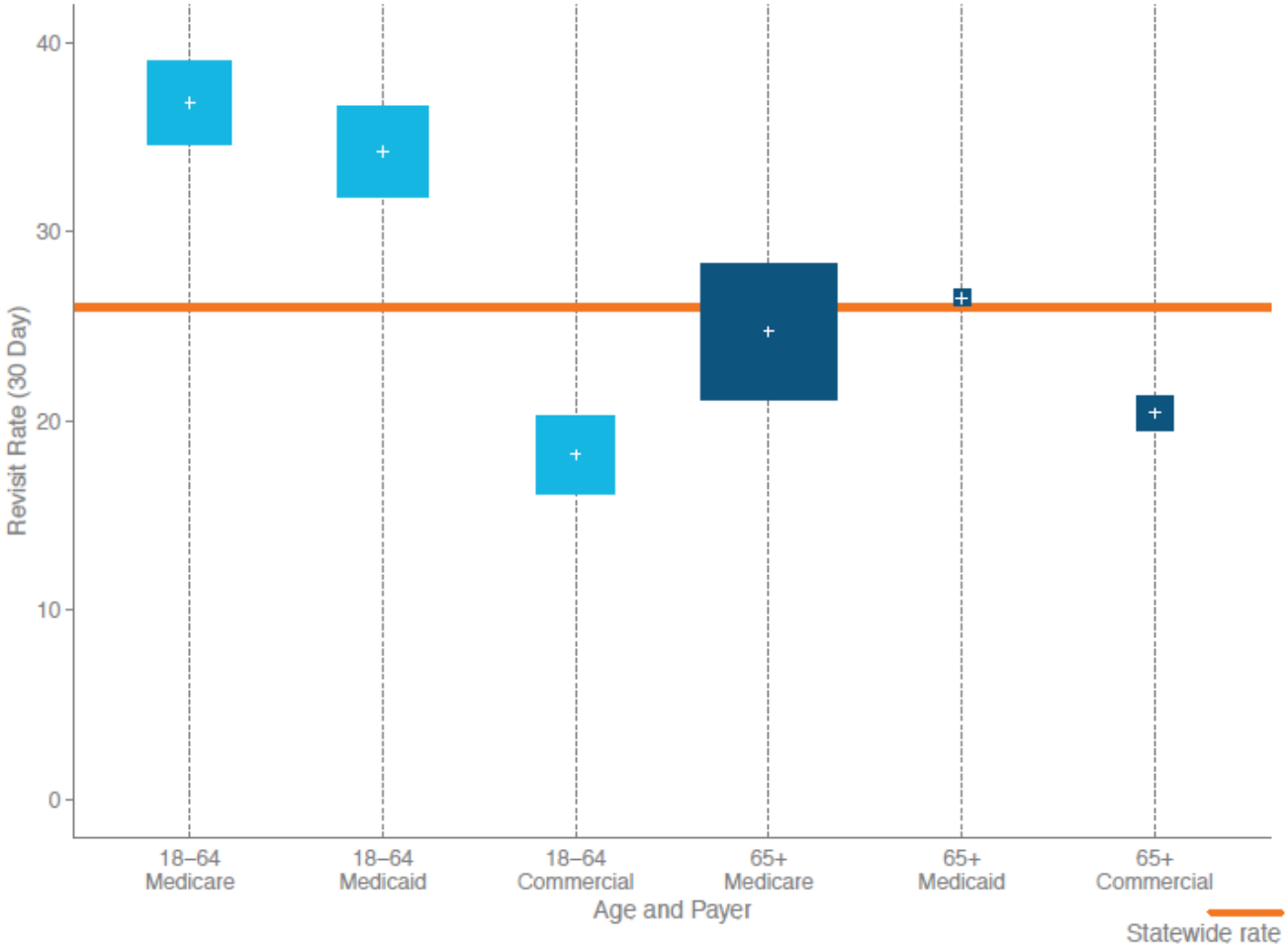
30-Day Revisits by Age and Payer Type



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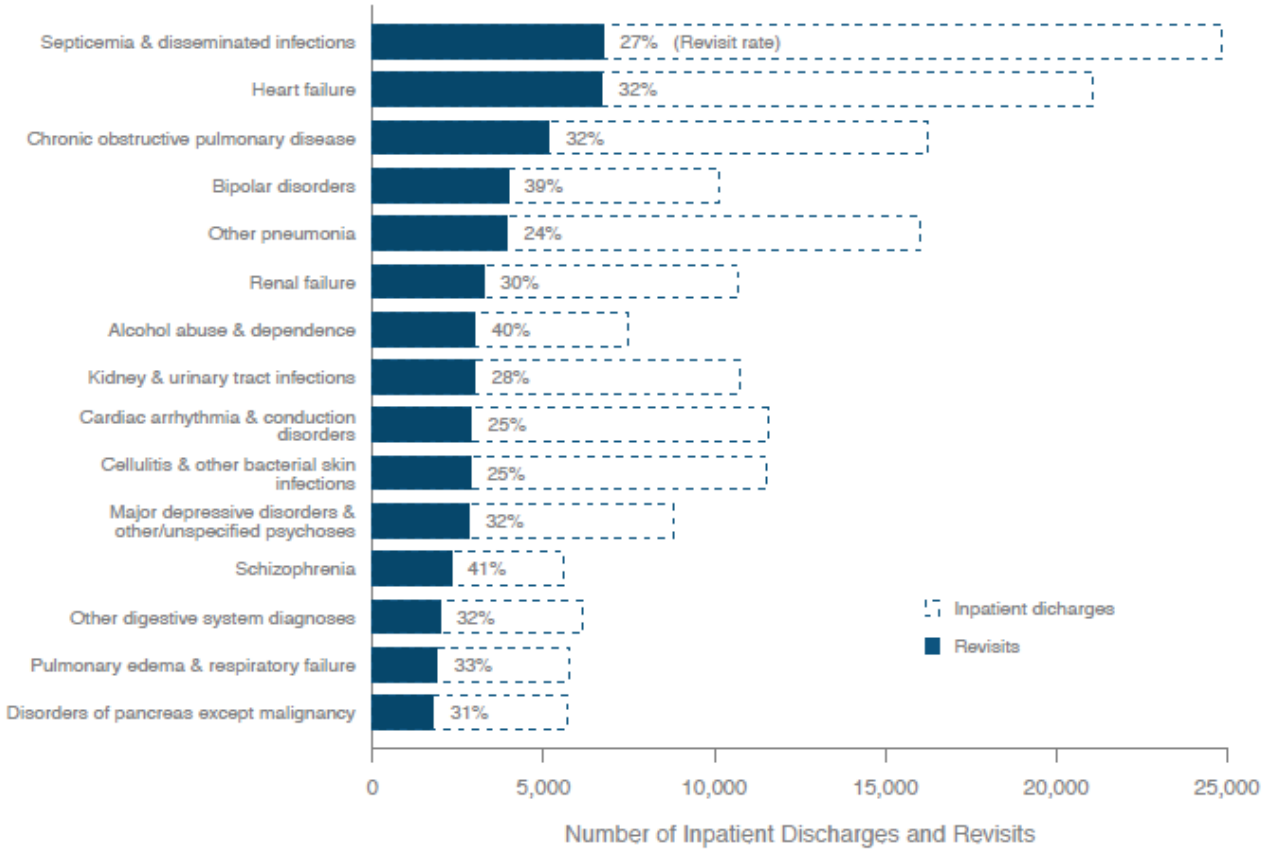
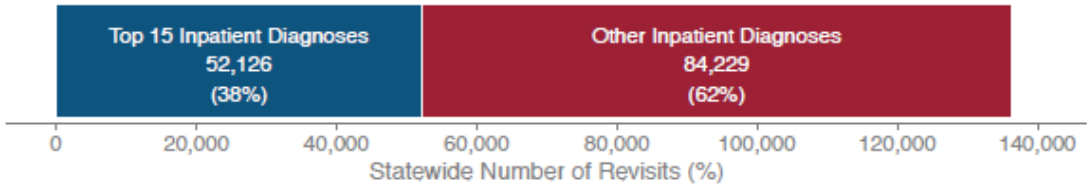
30-Day Revisits by Discharge Diagnosis (Top 15 by Volume)





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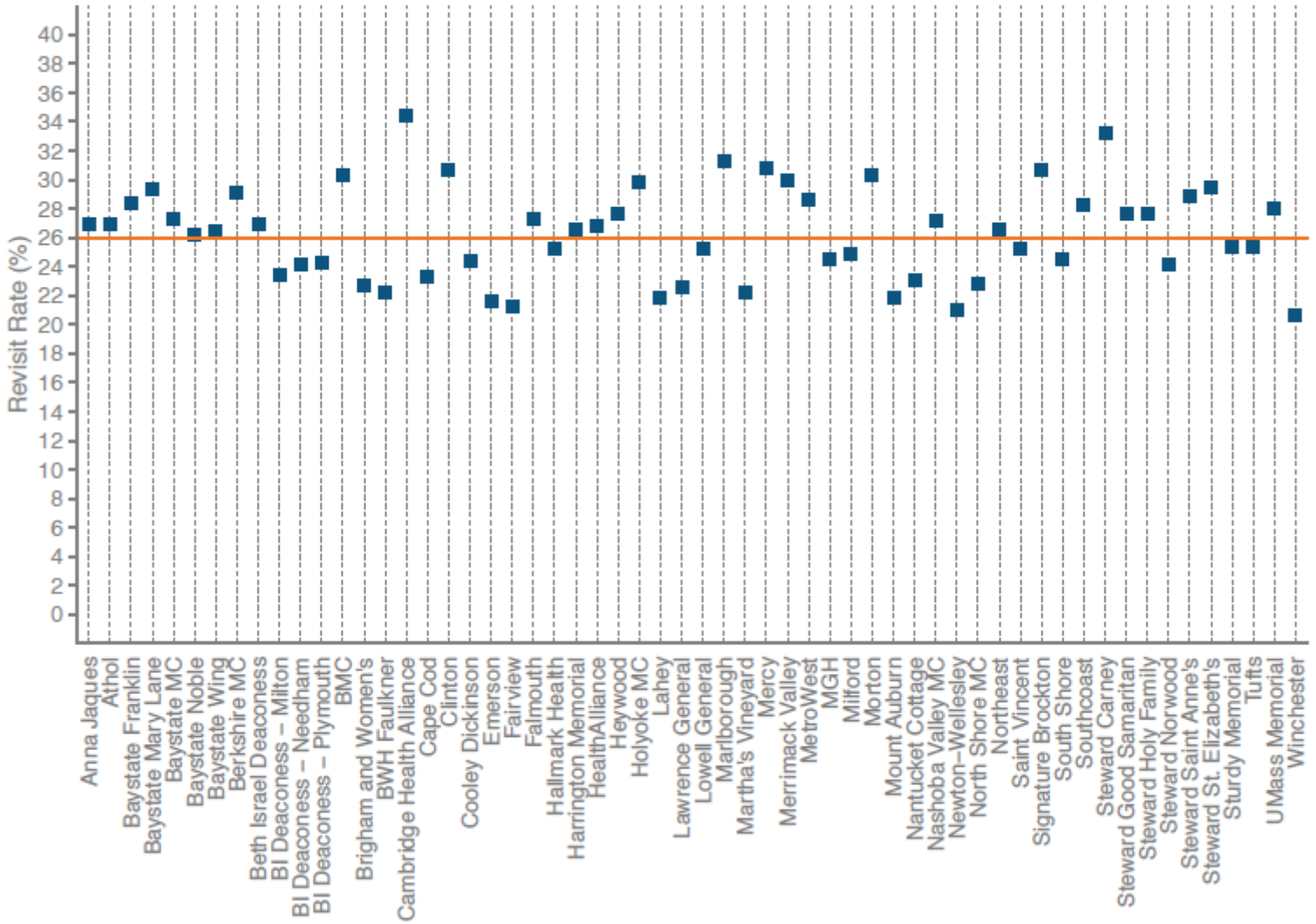
30-Day Revisit Rates by Massachusetts Hospital



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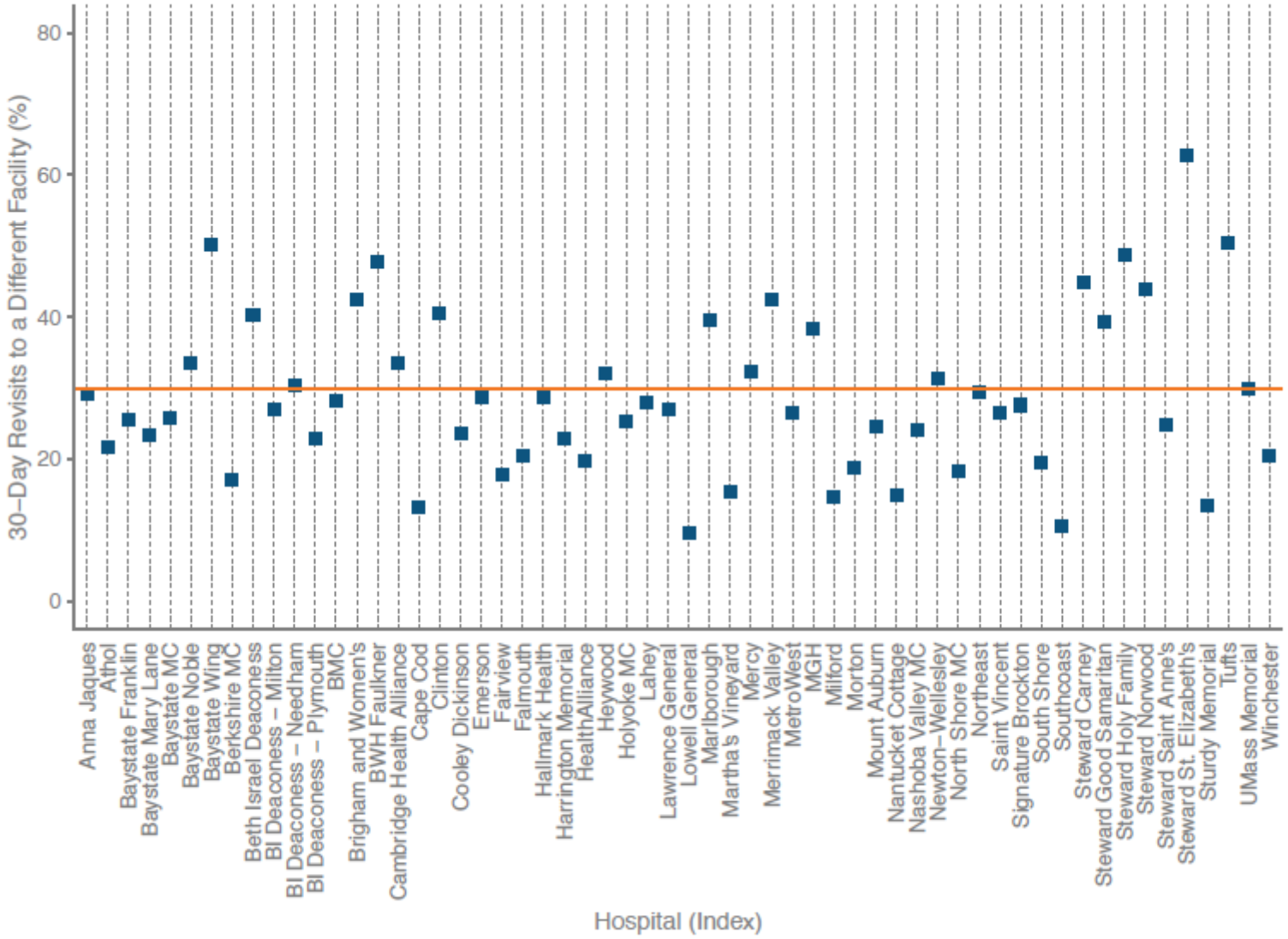
Revisit to a Different Facility by Hospital



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Data Summary

- 26% of inpatient discharges were followed by a return to the ED within 30 days.
- Of all revisits, 70% were to the same facility and 30% were to a different facility.
- 30-day revisit rates were the highest for
  - younger adults, particularly Medicaid members; and
  - younger adults with Medicare (who typically qualify through a disability).

Data Summary (continued)

- Behavioral health conditions were among those discharges with the highest volume and highest rates of 30-day revisits.

- Wide variation in 30-day revisit rates among acute care hospitals, ranging from a low of 20.6% to a high of 34.5%.

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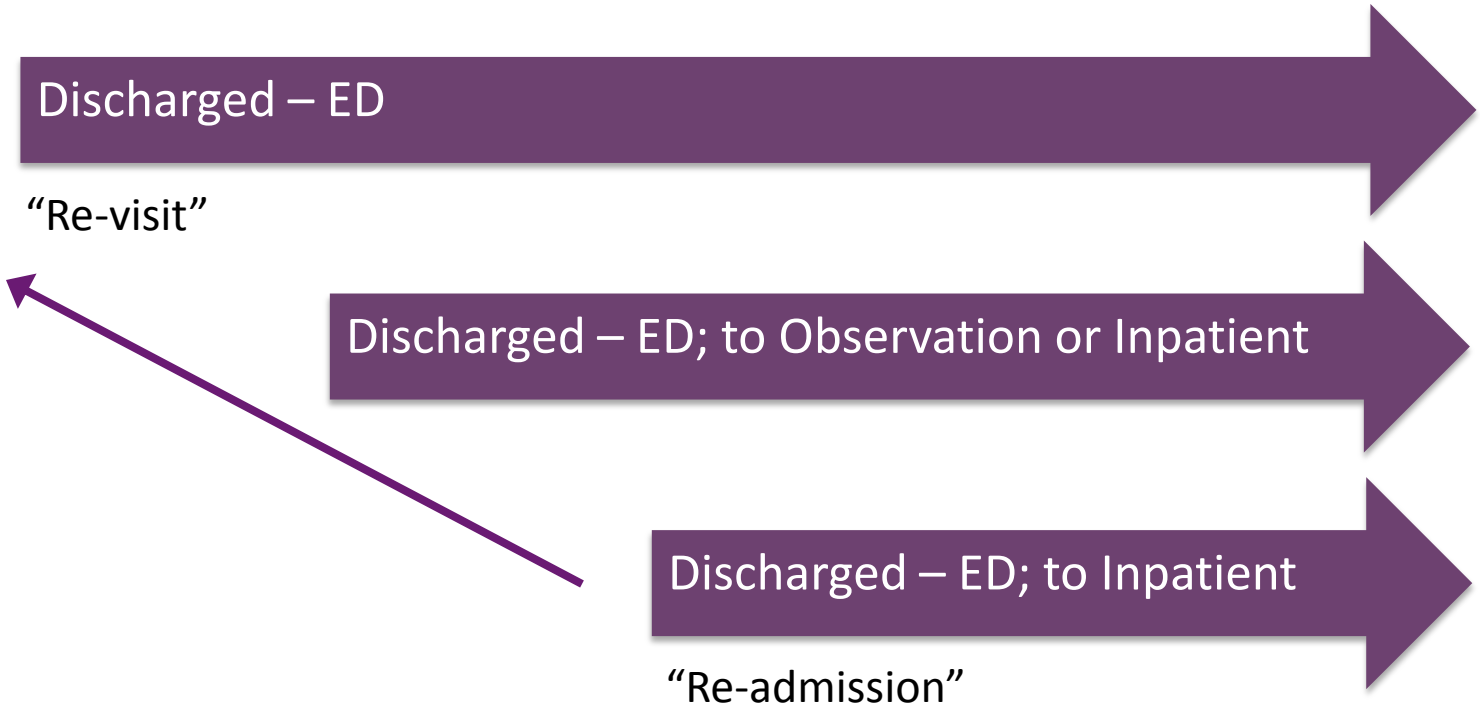
ED Revisits

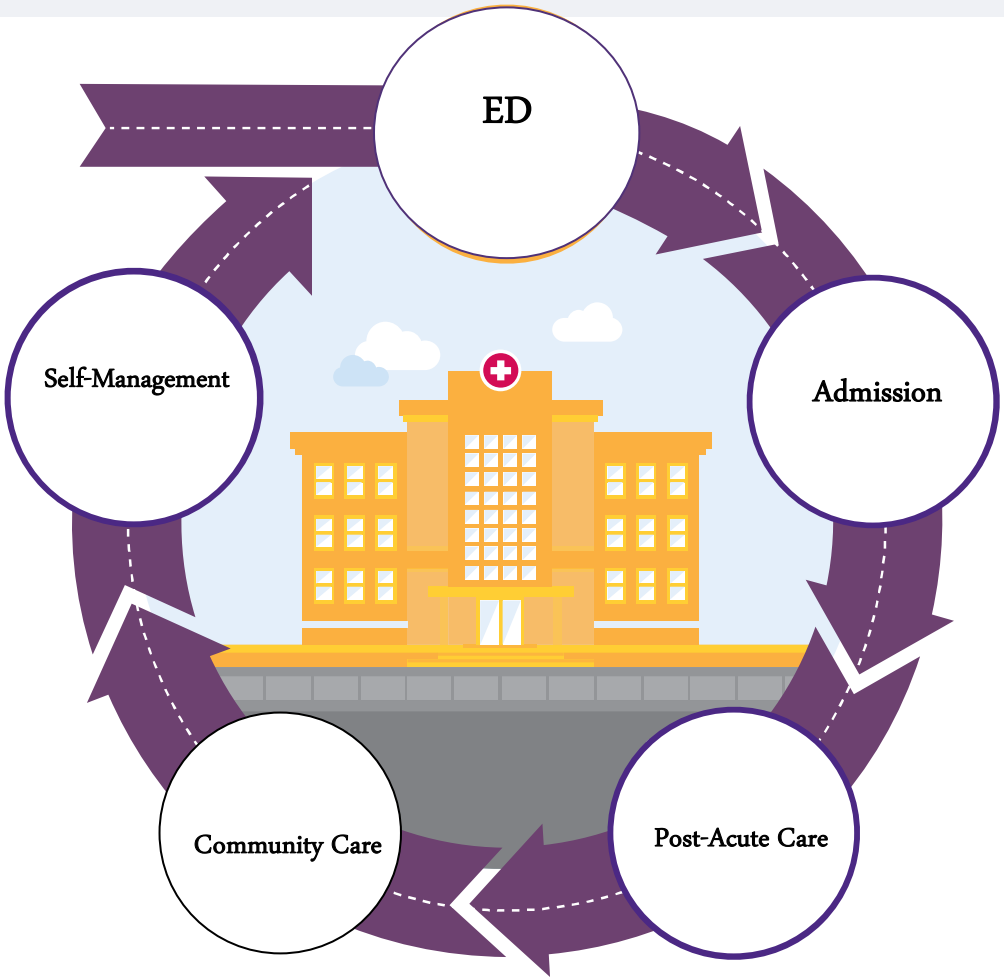
Applying insights from data to inform improvement

Amy E. Boutwell, MD, MPP
President, Collaborative Healthcare Strategies
Expert Advisor, CHIA Readmission Program of Study
November 15, 2017

Broader View: More Opportunity



ED Revisit Analysis Describes the Full Cycle

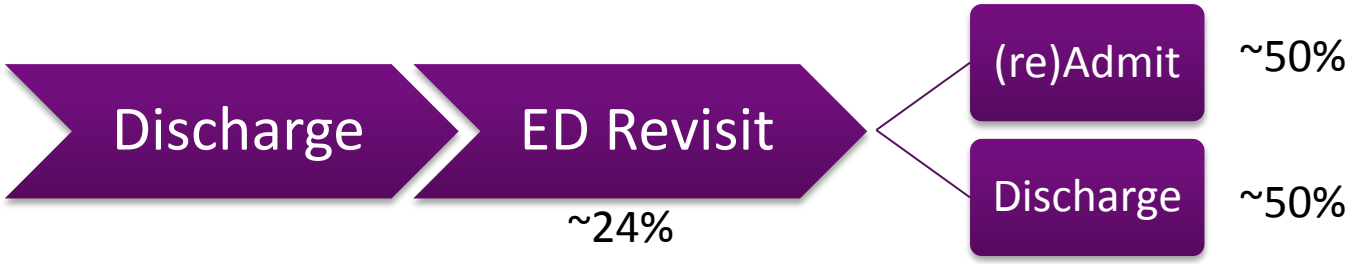


Emergency Department Visits After Hospital Discharge: A Missing Part of the Equation

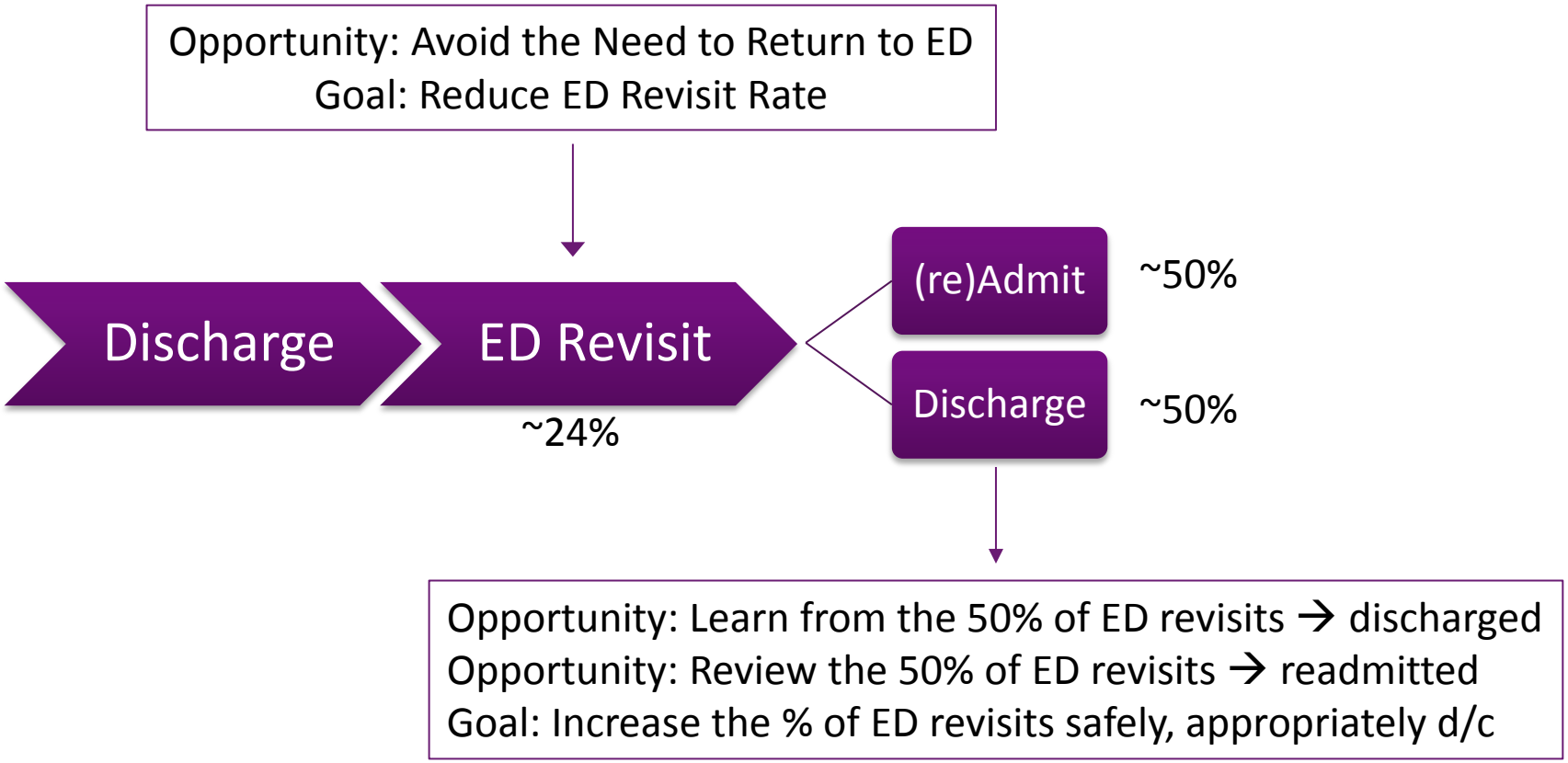
Kristin L. Rising, MD Laura White PhD, Willian G. Fernandez, MD, MPH, Amy E. Boutwell, MD, MPP

Annals of Emergency Medicine 62(2):145-150 August 2013

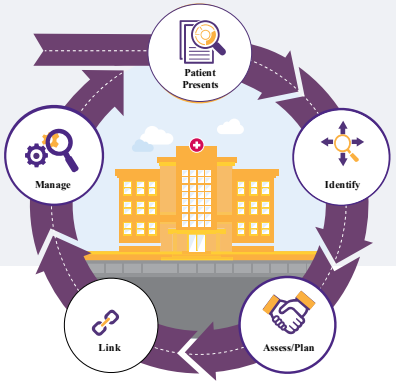
- 2012 study at Boston Medical Center
- ~15,500 adult, non-OB inpatient discharges
- ~24% discharges resulted in at least 1 ED visit <30 days
- ~4,400 total ED visits <30 days of discharge
- Of those ~4,400 total ED visits, ~2,200 (50%) were d/c; 50% were admitted
- Looking only at “readmission” misses 50% of returns to acute care



Opportunities in Value-Based Care



Data → Root Causes



- Ask “why”
- Be curious
- Listen and ask, ”tell me more”
- Put a pathophysiological ddx aside as much as possible
- Observe: anxious/concerned? normalized/routine? 3rd party?
- Look for the care seeking patterns, the practice patterns, the logistics, the elements of urgency, convenience, or uncertainty

➢ *Opportunities for improvement can only be identified if you are looking for them and if you believe improvement should be possible*

Return Visits to the Emergency Department: The Patient Perspective

Kristin L. Rising, MD, MS*; Kevin A. Padrez, BA; Meghan O'Brien, MD, MBE; Judd E. Hollander, MD; Brendan G. Carr, MD, MA; Judy A. Shea, PhD

- Interviewed 60 patients who returned to ED <9days of visit
  - Average age 43 (19-75)
  - Majority had a PCP,
  - Preferred the ED: more tests, quicker answers, ED more likely to treat symptoms
  - Most reported no problem filling medications
  - 19//60 thought they didn't get prescribed the medications they needed (pain)
  - 24/60 expressed concerns about clinical evaluation and diagnosis

- Primary reason: ***fear and uncertainty*** *about their condition*
- Patients need *more* ***reassurance*** *during and after* episodes of care
- Patients need access to ***advice between*** visits

Annals of Emergency Medicine April 2015

Design Interventions to Address Root Causes

- Many teams start in the reverse order!
- Teams skip root cause analysis and move straight to designing interventions that seem logical (most are rooted in medical model)
- If the interventions do not address root causes you won't see results
- Consider findings: fear, uncertainty, reassurance, preference
- What interventions are we currently implementing?
- What interventions would we implement to address root causes?

Responding to the ED Revisit

Strategies of Bundles, ACOs, Readmission Teams

Identify

- Identify the 30-day return in real-time with a visual cue

Notify

- ED providers see visual cue on tracker board/ on EMR banner
- Readmission prevention/bundle/accountable team notified

Respond

- "ED care alert" informs provider about available support options
- Accountable team responds virtually or in-person to facilitate d/c

Manage

- Utilize "care alert" to promote safe, consistent care plan
- Evaluate and reconnect to accountable team if no acute change
- Provide care in home or in alternate settings in ways that meet needs

In practice: High-risk Care Team Averts (Re)admits from ED

"Our patients look bad on their best day"

A highly successful high-risk, high-cost care management demonstration program leveraged the emergency department as an important opportunity to avert an admission or readmission. When a high-risk patient registered in the ED, a notification was sent to the care management team. The expectation was that the team would collaborate with the emergency department staff to identify whether a discharge, rather than (re)admission, was a safe and appropriate option.

In reflecting on their success factors, the program cited the care managers' and primary care physicians' longitudinal knowledge of their patients as critical to providing context to admission decisions, stating "our patients look bad on their best day," reflecting the importance of knowing a patient's "baseline" in order to accurate determine whether an acute change in clinical status has occurred. In addition, the fact that a high cost complex patient had a "team" willing to provide timely and close follow up allowed care to be delivered in the home or other lower-cost settings.

https://www.ahrq.gov/professionals/systems/hospital/medicaidreadmitguide/index.html

ED Care Alerts: Emerging Tool in the Field

- High-value, need-to-know information about a patient to support better decision-making at the point of care
  - Instantly accessible
  - Brief
  - Guidance from a clinician who knows the patient
  - Convey baseline
  - Identify responsive care team with contact info
  - Intended to inform the decision to admit

~Patricia Czapp, MD
Chair, Clinical Integration
Anne Arundel Medical Center

New Tool: ED Care Alerts

Use to promote high quality care across settings and providers

"Mr. F is a gentleman who commonly dials 911 on weekends and holidays, noting shortness of breath. He does have COPD and his baseline, everyday physical exam is notable for wheezes and rhonchi. His CXR will show a LLL 'infiltrate' that has been stable for 15 years. Please call his PCP, Dr. C, on her cell phone (#) if you are contemplating invasive testing or admission. Please note patient can be (and often is) seen daily in her office, which is located in his apartment building. Please note he has low literacy skills and will not be able to comprehend written discharge or medication instructions."

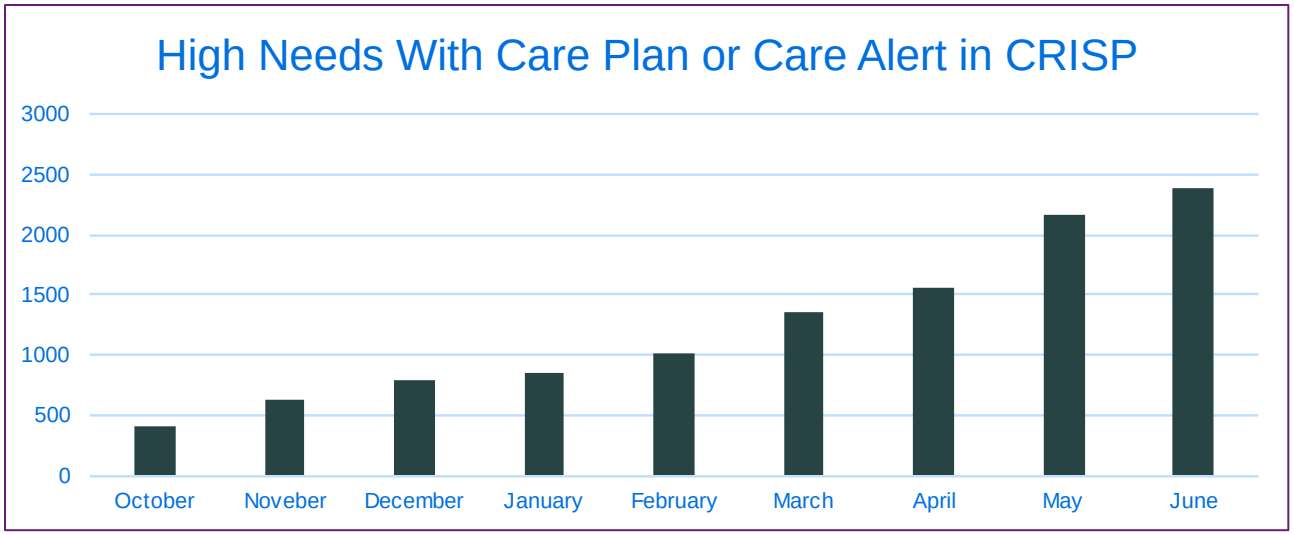
Courtesy Dr Patricia Czapp, Anne Arundel Medical Center

ED Care Alert “Sprint” in Maryland

State-wide practice change to reduce avoidable utilization

- “Mr. X has dementia, DM, COPD; his baseline is notable for wheezes and there is a stable finding of a LLL “infiltrate” on CXR. Typically his presentations for SOB are driven by anxiety. Please text Dr. Y if admission or testing is considered.”

- “Mr. Z has CHF exacerbations that typically rapidly respond to 40mg IV lasix in the ED with close follow up next day in the office. Call/text Dr. A if admission is considered.“



State-Wide “Sprint”

6-fold increase / 6 mos

20% MVPs have alerts

>20,000 alerts

Recommendations

Use the insights from this report to ask questions

- Why are so many patients discharged from our hospital returning to ED?
- What are the root causes of ED revisits?
- What strategies do we have in place to support patients post-discharge?
- What strategies do we have in place to respond urgently to patient needs?
- What tools do we have in place to identify a 30-day return in real time?
- Do we have ED Care Alerts in place – especially for multi-visit patients?
- What are we doing to slow a cycle of avoidable acute care utilization?

Thank you for your commitment to improving care

Amy E. Boutwell, MD, MPP

President, Collaborative Healthcare Strategies
Advisor, Massachusetts Center for Health Information and Analysis
Co-Principal Investigator, AHRQ Reducing Medicaid Readmissions Project
Strategic and Technical Advisor New York State Medicaid High Utilizer ”MAX” Program
Strategic and Technical Advisor, Massachusetts Health Policy Commission CHART Program

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