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# ED LOS Subgroup Meeting

June 21, 2024

HSCRC Quality Team

# Subgroup 2 Members

First and Last Name	Title and Organization
Gai Cole/Alia Khan backup	Johns Hopkins Health System
Dr.Peter Hill	Senior Vice President of Medical Affairs at John Hopkins
Alex Yazaji, MD	Chief Medical Officer Medstar Union Memorial and Good Samaritan Hospitals
Brenda Watson	Advanta Government Services
Brian sims	Vice President, Quality & Equity
Carrie Adams	COO Meritus Medical Center
James B. Sherwood	VP, Business Development, ED, and Pediatrics
John Moxley	Senior Director- Department of Medicine, Luminis Health
Katie Eckert/Patsy McNeil backup	VP Reimbursement and Strategic Analytics
Kristen Geissler	Managing Director, BRG
Christina Martin	UPMC Western Maryland
Dr. Mark Goldstein	Medical doctor - Sinai Hospital
Michele Patchett	Director of Performance Improvement and Innovation Greater Baltimore Medical center
Michael Sokolow	UMMS Sr Director, Quality Business Intelligence
Dr. Revathi Jyothindran	Medical doctor - Northwest Hospital
Taneisha Laume	CRISP Representative
Eileen MacDonald, MD	Chief of Medicine, Physician Advisor, Luminis Health
Zahid Butt	CEO, Medisolv

Thank you to the industry and stakeholders for contributing your interest, time, and expertise to this work.

Workgroup information can be found on the HSCRC website:

<https://hscrc.maryland.gov/Pages/ED-length-of-stay-workgroup.aspx>

# Workgroup Learning Agreements

- **Be Present** – Make a conscious effort to know who is in the room, become an active listener. Refrain from multitasking and checking emails during meetings.
- **Call Each Other In As We Call Each Other Out** – When challenging ideas or perspectives give feedback respectfully. When being challenged - listen, acknowledge the issue, and respond respectfully.
- **Recognize the Difference of Intent vs Impact** – Be accountable for our words and actions.
- **Create Space for Multiple Truths** – Seek understanding of differences in opinion and respect diverse perspectives.
- **Notice Power Dynamics** – Be aware of how you may unconsciously be using your power and privilege.
- **Center Learning and Growth** – At times, the work will be uncomfortable and challenging. Mistakes and misunderstanding will occur as we work towards a common solution. We are here to learn and grow from each other both individually and collectively.

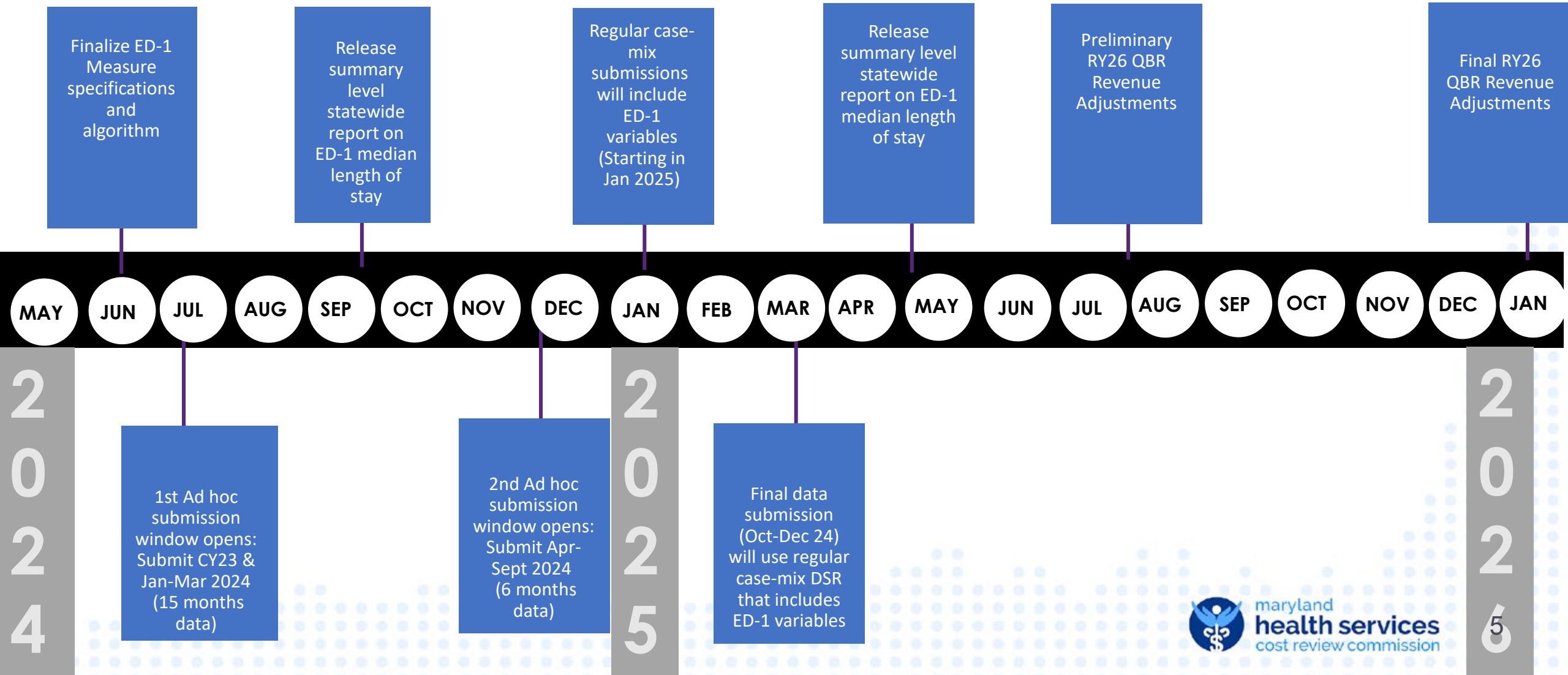
**REMINDER:** These  
workgroup  
meetings are  
recorded.

## Agenda: What We Will Accomplish In Today

- ✓ Update on ED LOS data collection
- ✓ Recap of first Subgroup 2 meeting
- ✓ Literature Review on Interventions to Reduce ED LOS
- ✓ Pay-for Performance Measure Incentive
  - ✓ Improvement Only vs. Improvement and Attainment
  - ✓ Performance Standards/Benchmarking
  - ✓ Risk-Adjustment



# Data Submission and Reporting Timeline





# ED LOS Data Collection

- Memo sent to hospitals on required reporting
- Hospitals with concerns on data collection need to reach out ASAP
- HSCRC staff will use 1<sup>st</sup> ad-hoc submissions to review data and measure definitions
  - Will update data requirements if changes need to be made for December submission

Tasks	Key Dates
Finalize ED-1 LOS & OP-18 Measure specifications and algorithm	May 2024
1st Ad hoc submission window opens: Submit CY23 & Jan-Mar 2024 (15 months data)	July 2024 (Submission window 7/16/24-8/1/24)
Release summary level statewide report on ED-1 and OP-18 median length of stay	September/October 2024
2nd Ad hoc submission window opens: Submit Apr-Sept 2024 (6 months data)	December 2024 (Submission window 12/16/24-12/30/24)
Starting in Jan 2025 regular case-mix submissions will include ED-1 LOS and OP-18 variables	From January 1, 2025
Final data submission (Oct-Dec 24) will use regular case-mix DSR that includes ED-1 LOS & OP-18 variables	March 2025
Release summary level statewide report on ED-1 & OP-18 median length of stay	April/May 2025
Final RY26 QBR Revenue Adjustments (ED-1 LOS Only)	January 2026 (preliminary July 2025)

## Subgroup 2: Recap of 1<sup>st</sup> Meeting



- Meeting's primary focus was on Subgroup 2 (Measure and Incentive Methodology) with Subgroup 1 (Data Collection) represented
  - Subgroup 2 stated Measure Title HSCRC ED 1 LOS is reflective of ED operations. Creates negative public perception.
  - Participants offered various title changes for HSCRC to consider
    - Admit 1 and Admit 2
    - Hospital Admit 1, Hospital Admit 2
    - IP Admit 1. ED Admit
    - IP-1 and IP-2
- Participants offered rationale for Measure Incentive being for Improvement only or Improvement and Attainment.
  - 8 representatives favored Improvement only
- Discussed Risk Adjustment for:
  - Occupancy
  - Discharge disposition
- Participants stated support for ED 1b stratification (non-Psych patients)
  - HSCRC staff indicated that this could be starting point for CY24

# Nomenclature Discussion

- Stakeholders have expressed concern that ED LOS puts too much focus on ED
- Title or use of ED Length of Stay (ED LOS) terminology found in multiple scientific journals, including:
  - National Institute of Health
  - New England Journal of Emergency Medicine,
  - International Federation of Emergency Medicine,
  - Western Journal of Emergency Medicine

ORIGINAL CONTRIBUTION

## Managing and Measuring Emergency Department Care: Results of the Fourth Emergency Department Benchmarking Definitions Summit

Maame Y. A. B. Yiadom, MD, MPH, MSCI<sup>1\*</sup>, Anthony Napoli, MD, EMHL<sup>2\*</sup> , Michael Granovsky, MD<sup>3</sup>, Rebecca B. Parker, MD<sup>4</sup>, Randy Pilgrim, MD<sup>5</sup>, Jesse M. Pines, MD, MSCE, MBA<sup>6</sup>, Jeremiah Schuur, MD, MHS<sup>2</sup>, James Augustine, MD<sup>7</sup>, Nicholas Jouriles, MD<sup>8</sup> , and Shari Welch, MD<sup>9</sup>

Key Time Intervals in ED Operations

Term	Definition
Standard time intervals	
ED LOS	The interval from ED arrival to ED departure. It may be tracked by disposition (see below), by ESI level, by geographic zone, by patient group.
ED LOS admitted patients	The interval from ED arrival to ED departure for admitted patients.
ED LOS discharged patients	The interval from ED arrival to ED departure for discharged patients.

Observation Definitions: Specifies with and outside of ED, which corresponds with HSCRC/TJC decision to include time in observation that is within ED.

Term	Definition
<i>Observation</i>	
ED observation	An admission status in which the patient's hospital stay is billed as an outpatient service but is cared for by ED personnel. This involves a transition of care, often to an ED observation unit, but can occur despite the patient staying within the ED or being placed in a unit outside of the ED. This is differentiated from hospital observation when completed by a non-ED service.
ED observation unit/clinical decision unit (CDU)	A specialized unit, often adjacent to the ED, for the continued management of ED patients following their initial ED care. The patient is managed by ED personnel and is in the hospital but the encounter is designated as outpatient care.
Hospital observation	A subset of in-hospital visits for which a patient has an in-hospital stay billed as an outpatient service. This does not include patients who have their observation care in the ED or in an ED observation unit.
Hospital/in-hospital observation unit	A specialized unit for continued management following initial ED care, typically managed by hospitalists with anticipated LOS under 24 hours.

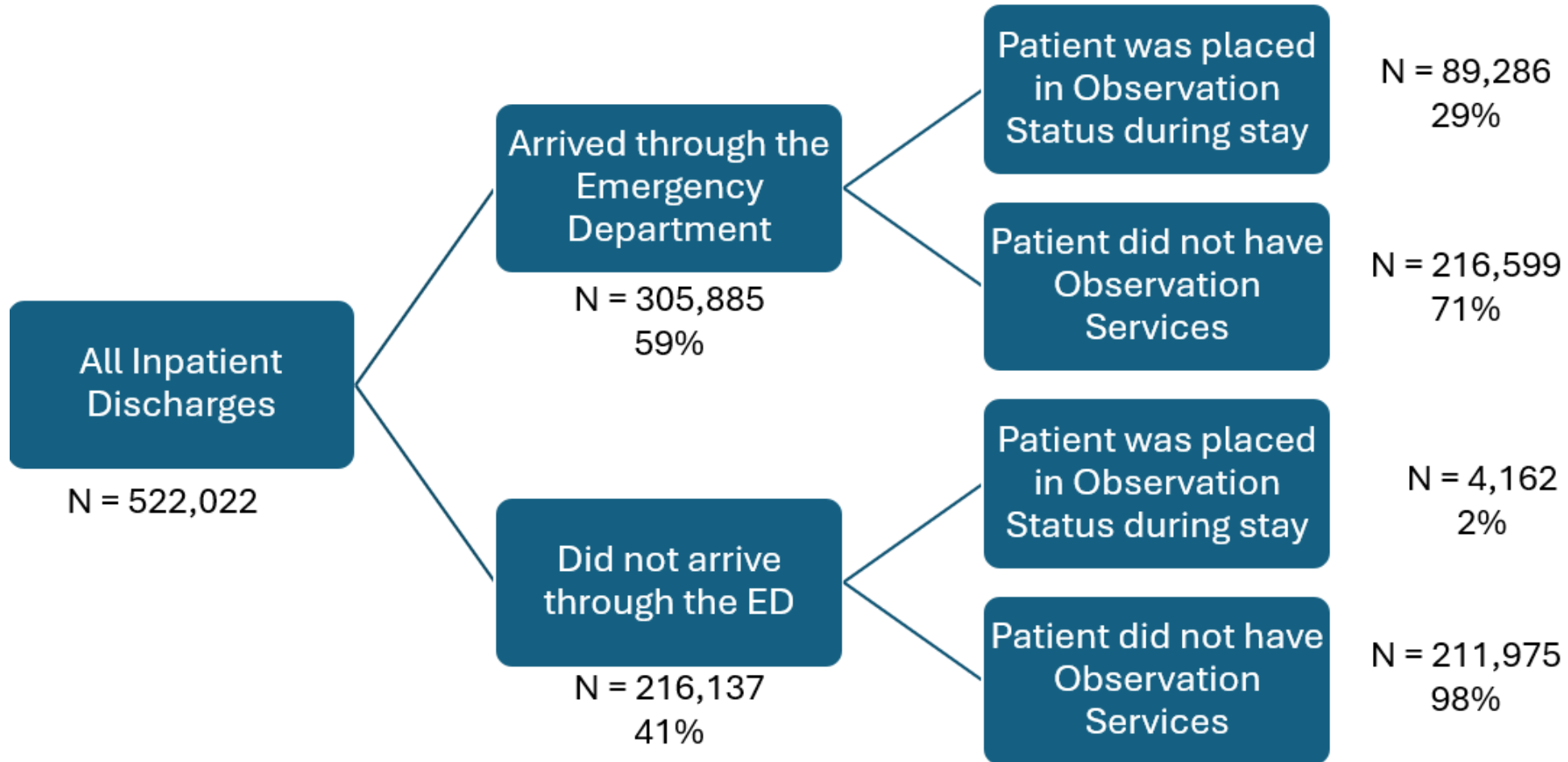
LOS = length of stay.

\*Key revised definitions included here from the "Emergency Department Definitions Dictionary." 2018. Copyright 2019 by the ED Benchmarking Alliance. From the Fourth Emergency Department Benchmarking Summit. Referenced and shared with permission.



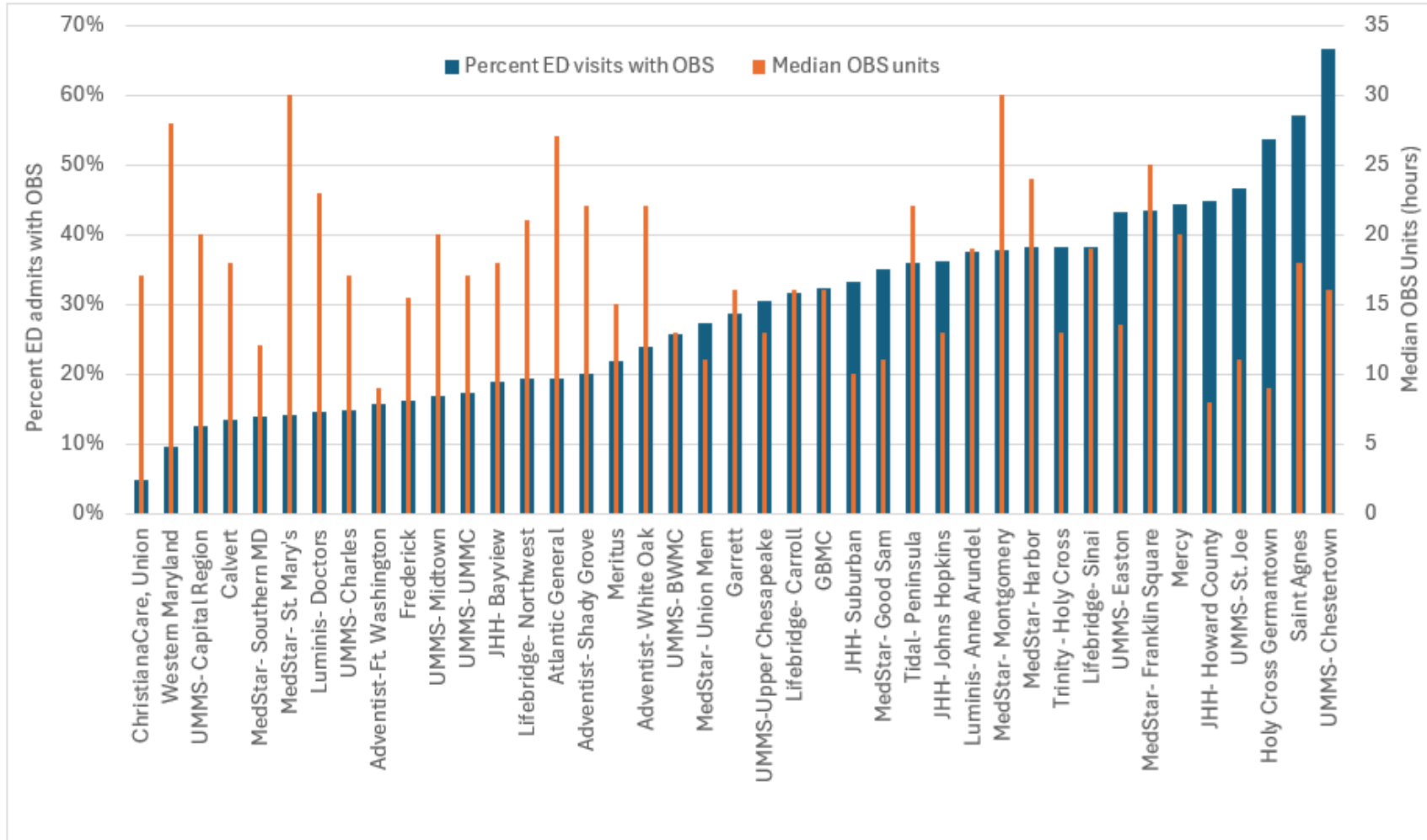
# Observation Use for Admitted Patients

## CY 2023 Inpatient Case Mix Data



# Observation Use for Admitted Patients by Hospital

Units should correspond to number of hours in Observation (state average 17 units/hrs)



## Subgroup 2: QBR Measure and Incentive Structure

- RY26 QBR recommendation:
  - Within Person and Community Engagement Domain, add ED wait time measure weighted at 10 percent.
- Decisions still to be made for CY 2024 performance:
  - Which ED1 measure strata should be used for payment?
  - Should incentive be for improvement only? Or improvement and attainment?
  - What performance standards will we use? Threshold/benchmarks?
  - Should measure be risk-adjusted? What additional data is needed for risk adjustment?
  - Minimum cell sizes? Missing data?

# ED LOS Improvement Initiatives

## Literature Review Overview

ED Inputs
GP-led walk-in centers / Co-located GP
Extended GP opening hours
Choice of ED
Social interventions including; education campaigns, financial disincentives, redirection
Posting wait times
Patients make ED appointments
Forecast spikes in census, manage resources, and balance elective admissions.

ED Output
Active bed management
Leadership program/Support
Implementation of nationally mandated, timed patient disposition targets
ED staff direct admit rights
Admitting team priorities ED admissions
Alternative admission policies (i.e., admitting MD to see patient on the floor vs. ED)
Increased inpatient beds and staff
Inpatient Admissions Unit within ED
Move ED patients to other holding areas
Provide a discharge lounge
Early inpatient discharge planning

ED Throughput	
Split ESI 3 on presentation	Nurse initiated protocols (aka clinical practice pathways)
Earlier physician assessment, including physician-led/supported triage	Earlier inpatient consultation
Fast-track / flexible care area	Increased ED bed numbers
Rapid Medical Evaluation Team	Increased ED staff
Shorter turnaround-times for laboratory tests & point of care tests	Medical scribes
Shift tests and procedures to outpatient when possible; cancel tests not necessary	Maximize use of EHR functionality
ED nurse flow coordinator	Apply LEAN methodology to identify bottlenecks
Bedside registration/ registration kiosks	Straight-back process brings a patient to bed when open, skip triage
Patient communication, education, and follow up	



## ED LOS Improvement Initiatives - Commonalities

- **Admission Unit** - Cleveland Clinic opened an 8-bed inpatient Admissions Unit within the ED, reducing LOS by 30 minutes.
- **Rapid Medical Evaluation (RME) Team** - Oregon Health & Science Univ. Created RME team for peak hours to evaluate and treat lower acuity patients, initial results showed a 35% reduction in similar patients' LOS.
- **Providers in triage** – shown improved patient flow, satisfaction, decreased LOS, LWBS, and mortality within 7 days.
- **Apply LEAN methodology** - One ED identified the following areas of improvement that shortened LOS by 1.5 hours: match **staffing with volume** and **implement fast-track** for low acuity patients.
- **Clinical Practice Pathways** – one study showed orders initiated by nurses have been associated with 16% reduction of in-room ED care.
- **Rapid registration** – saves an average of 30 minutes LOS.

# ED LOS Improvement Initiatives - Discussion

- **Which improvement initiatives have your organization implemented?**
- **Which were successful? Or did not meet expectations/goals?**
- **Were there notable lessons learned that you can share?**
- **Are there initiatives that your organization has not tried? Is there a reason?**

# Summary of HSCRC Analysis on Factors Associated with ED LOS (full presentation in Appendix)

- HSCRC staff analyzed hospital referral regions and hospital factors
- Differences between hospitals within Hospital Referral Regions account for 63% variation in ED1b performance
  - This indicates that hospital factors (e.g. staffing, bed management, organizational structure) are likely driving ED performance
  - HRR/regional factors (IP Beds per capita, SNF beds) are less important
- Primary care access is an important and modifiable determinant of ED length of stay
- Addressing social determinants may also improve ED length of stay performance
- Structural hospital factors (Bed size, complexity, teaching status, ED size) that are not as easily modifiable have a large effect on ED performance

## Performance of MD Hospitals vs. Nation

- Maryland hospitals are larger, more complex, and more likely to be teaching facilities. All of these factors are associated with longer ED Length of Stay
- This is a blessing and a curse. Larger, higher-volume and more complex hospitals typically provide better outcomes in terms of risk-adjusted mortality, readmission and inpatient length of stay
- After accounting for structural differences, Maryland hospitals are not doing as poorly as reported
  - However, some big, complicated hospitals nationally still perform well in ED Length of Stay, so Maryland has significant room for improvement
- Can we provide both excellent IP results and better streamlined ED experience by finding ways to make big hospitals feel more like small ones (or high performing hospitals elsewhere in the nation that are big and complicated)?



# What About Occupancy?

- Hospital occupancy is an important determinant of ED Length of Stay, and a complex topic in its own right
- We evaluated the independent association of multiple variables with inpatient occupancy
  - IP beds per capita
  - Length of Stay
  - End of Life Care
  - SNF beds per capita
  - Surgical volume
- Occupancy =  $\text{AHA IP bed days} / (365^* \text{IP beds staffed EOY})$
- Surgical volume, LOS, end of life ICU days, and SNF availability are significant determinants of occupancy
- MD differs from the nation unfavorably on all measures
- IP beds per capita has a smaller association that did not rise to statistical significance
- MD beds per capita (exclusive of beds in nearby regions, e.g., DC) are lower than national average due to reduced demand under TCOC model

# What Does Analysis Tell Us About Policy/Program Directions?

- Policies addressing primary care may result in improved ED Length of Stay
  - Reimbursement Enhancements: Maryland Primary Care Program (MDPCP)
  - Investments in additional primary care supply
- Policies addressing social determinants may also result in improved ED Length of Stay
- Policies addressing IP occupancy may result in improved ED Length of Stay
  - Improved hospice access
  - Improved SNF access
  - Planning elective surgery and medical admissions to avoid constraining ED admissions
- Increasing inpatient bed capacity is not likely to be a viable and sustainable solution to ED Length of Stay in Maryland
  - Stacking more beds in institutions that have structural impediments to low ED throughput may worsen the problem
  - Expanding IP capacity would likely be a costly, long-range solution that has negative implications for TCOC model performance
- Other interventions discussed above may provide similar or better outcomes with limited cost and downside

# ED LOS Factors - Discussion

- **What systemic barriers are the biggest concerns for your hospital and/or statewide?**
- **How do these factors impact ability to improve?**

## Incentive Design: CY 2024

- **Improvement in Goal (Internal Benchmarking):** Allows an organization to focus on its own performance and improvement and can be tailored to specific, relevant goals based on patient population, resources, and other unique traits. Improvement does not provide an external perspective of how well an organization is performing compared to others.
- **Attainment of Goal (External Benchmarking):** Allows an organization to compare against other hospitals and helps the organization understand where it stands relative to peers and industry standards and may lead to the identification of best practices.
- **Better of Improvement and Attainment of Goal:** Allows an organization to focus on its own performance over time and in comparison, to peer organizations which serves as a more robust indicator of time in the ED and provides greater information on an organization's status and performance.



# Improvement Target Modeling Scenarios

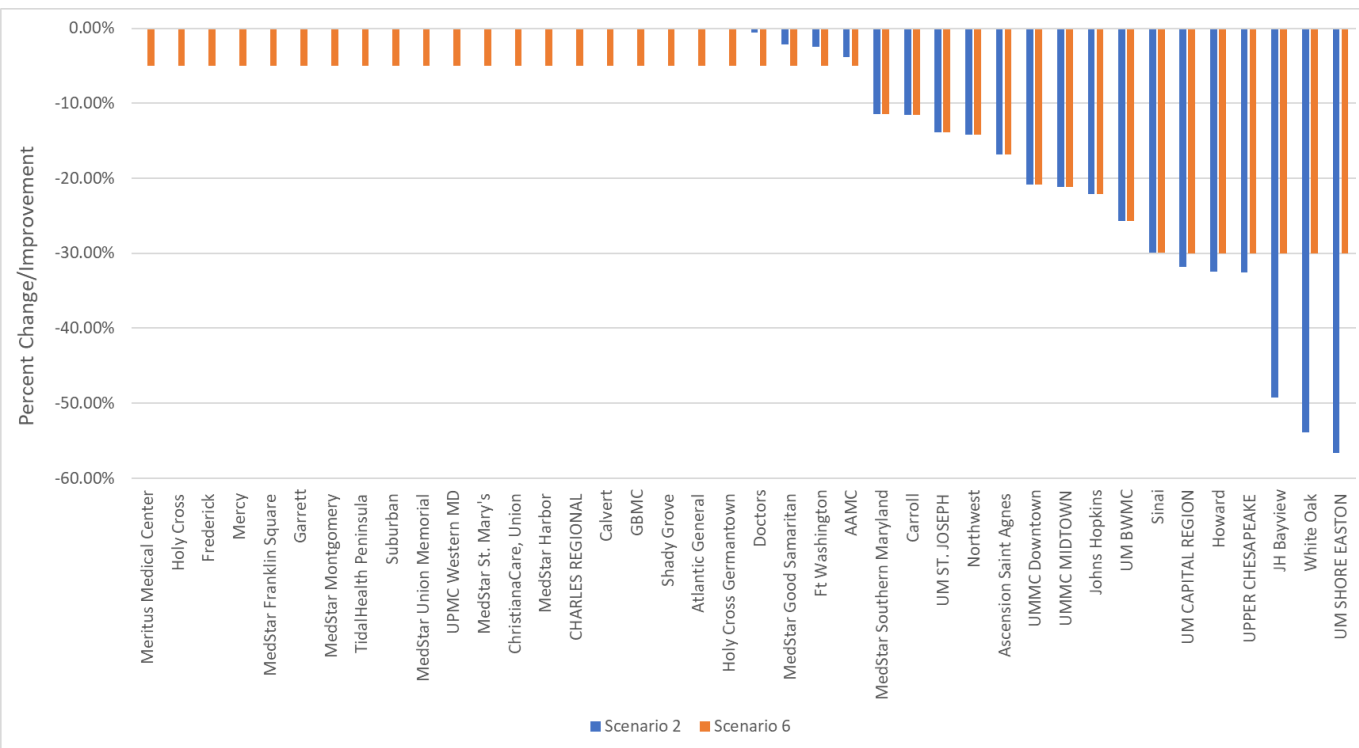
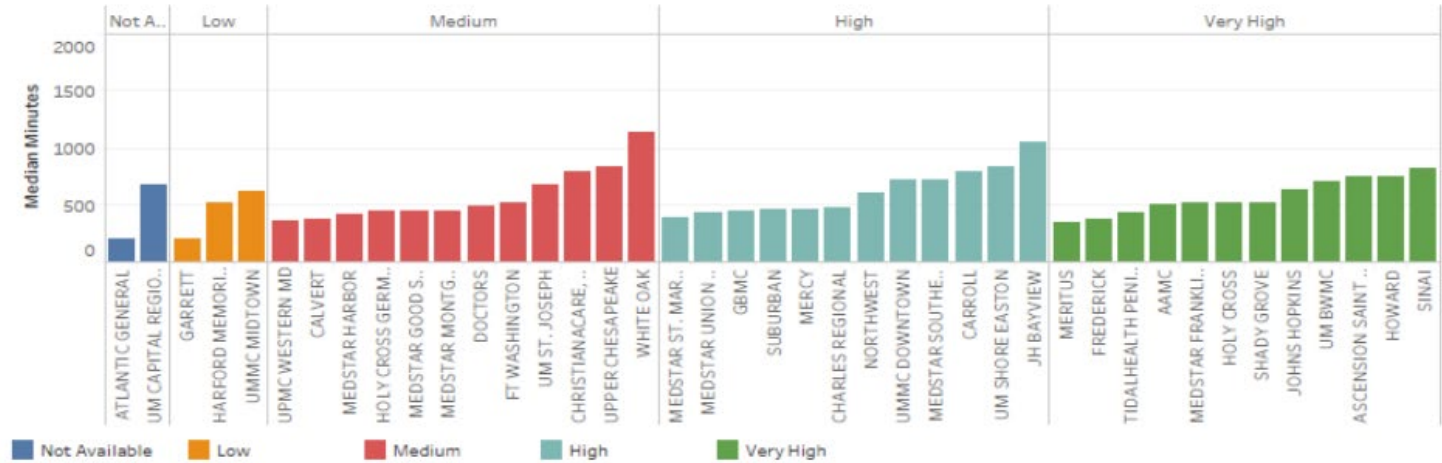
- Calculate new statewide average if all hospitals in Maryland performed at the current average/median for the state and by volume category.
  - Performed using overall statewide average/median and by volume group statewide average/median
  - Capped improvement for hospitals above statewide average/median at 30 percent and required hospitals that performed better than statewide average/median to improve by 5 percent
- Calculate gap between MD and Nation in CY 2018 for ED1b; divide gap by number of years to get to the nation.
  - National ED1b LOS in 2018 was 32.3% lower than Maryland
- Average improvement from literature review.

# Improvement Scenario Results (ED1b)

#	Scenario	New Statewide Average of Hospital Medians	Percent Improvement from May 2023-April 2024 Statewide Average (EDDIE EB1b 569)
1	All Hospitals Above Statewide Average Improve to Statewide Average, all other hospitals have no change	495	-13%
2	All Hospitals Above Statewide Median Improve to Statewide Median, all other hospitals have no change	473	-17%
3	Repeat of #1 but Statewide Average by Volume Category is used	494	-13%
4	Repeat of #2 but Statewide Median by Volume Category is used	471	-17%
5	Using ED1b from 2018 CMS Care Compare, calculate the difference between MD and the nation. Calculate annual change needed to hit this goal by 3 years.	2024: 500 2025: 439 2026: 385	2024: -12.2% 2025: -22.9% 2026: -32.29%
6	All Hospitals worse than Statewide Median Improve to Statewide Median (minimum improvement 5%, maximum improvement capped at 30%), and all Hospitals Below Statewide Median Improve by 5 percent.	482	-15%

# Statewide vs. Hospital Specific Improvement Goal

Should goal for improvement be hospital specific?



Improvement needed for Scenario 1 and 6 shows variation across hospitals in hitting average or median

# Risk Adjustment

- **Patient Characteristics**

- Age (Pediatrics/Geriatrics)
- Severity of Illness (Comorbid Conditions)
- Mental Health Diagnosis
- Social Factors (language/insurance/social support)

- **Operational Considerations**

- Occupancy (Hospital beds available)
- High ED Patient Volumes (ED Capacity)
- Discharge Disposition (SNF/rehab vs. community)
- Staffing Levels/Ratios
- Trauma Center Level

HSCRC will explore risk-adjustment with MPR but we do not have data for all of these factors or consensus that risk-adjustment is warranted. For CY 2024, HSCRC staff believe the focus should be on improvement.

# Update on Occupancy Data

- **NHSN Connectivity Initiative: Hospital Bed Capacity Project**

- **Vision**

- Build infrastructure for the near-time national datastore for healthcare capacity that supports local, state, regional decision-making needs for situational awareness and emergency response
- Opportunities for expansion and innovation: collecting bed capacity data in other healthcare settings and combining capacity data with other data sources (pathogen specific, vaccination, PPE, etc.)

- **Expected Outcomes**

- More accurate and timely tracking of hospitalizations
- Improved collaboration among decision-makers to optimize and mitigate resource constraints
- Better understanding of healthcare system capacity across the nation



# Elements of Multi-Year Incentive Policy

Commission would need to approve RY27/CY25 and beyond

	RY26/CY24	RY27/CY25	RY28/CY26 (AHEAD) and beyond
Measure	ED LOS admitted patients	ED LOS for Admitted patients, Monitor ED LOS discharged patients	ED LOS for admitted patients, Consider ED LOS for discharged patients
P4P Incentive	Improvement Only	Improvement Only, develop and monitor Attainment with risk-adjustment	Better of Improvement and Attainment
Risk-Adjustment	No	No	Potentially
QBR Weight	10 percent	TBD	TBD
Improvement Goal	?	?	?
Attainment Goal	NA	NA	TBD

## Next Steps and Discussion

- HSCRC should have data by mid-August
  - Should subgroup reconvene after data is reviewed?
- Do hospitals need improvement goal now?
- What do you think a reasonable improvement goal would be for CY 2024 and beyond?
- Other suggestions?

# Appendix



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## Emergency Department Length of Stay Initiatives

Healthcare Financial Management Association  
HSCRC Workshop

Alyson Schuster, PhD, MPH, MBA

Geoff Dougherty, PhD, MPH

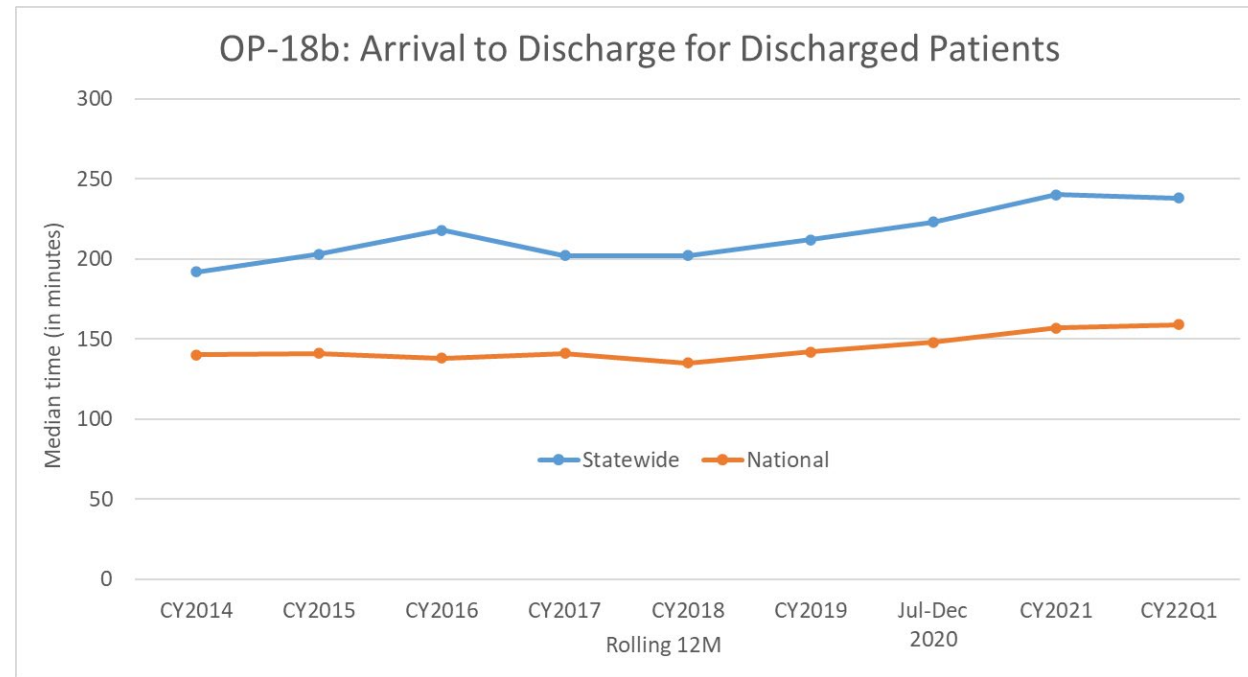
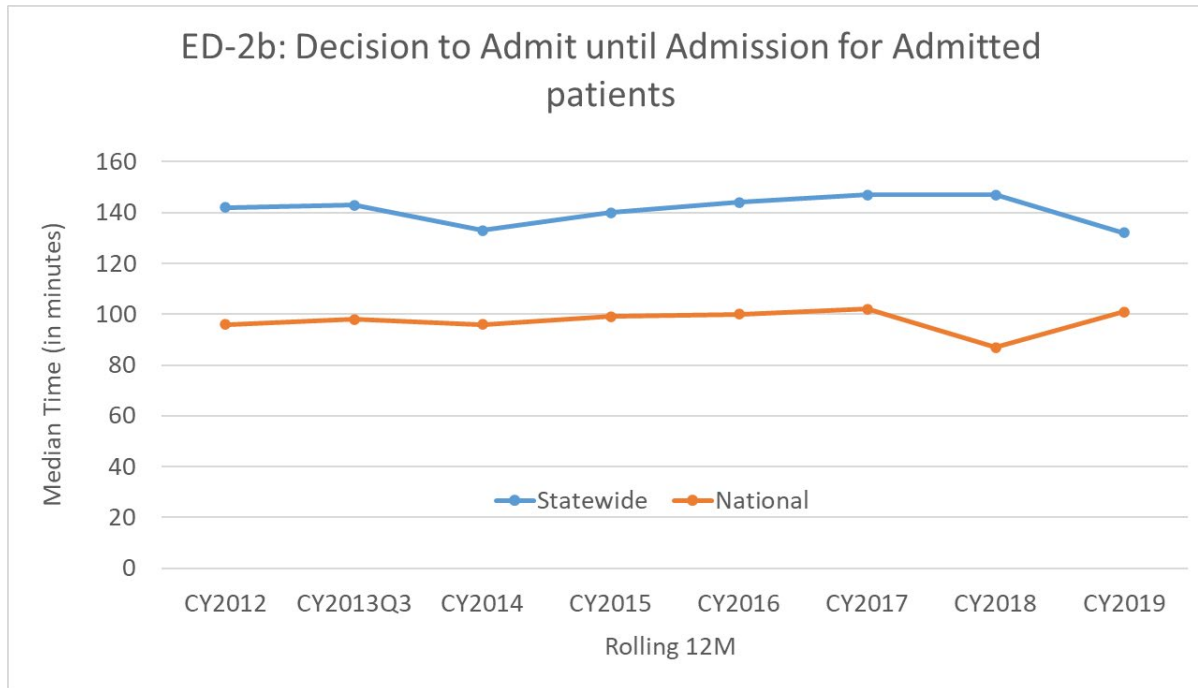
## Learning Objectives

At the end of this session, you will be able to

- Understand the historical context on ED Length of stay and utilization in MD
- Identify hospital and regional factors associated with ED LOS
- Understand HSCRC initiatives to address ED LOS

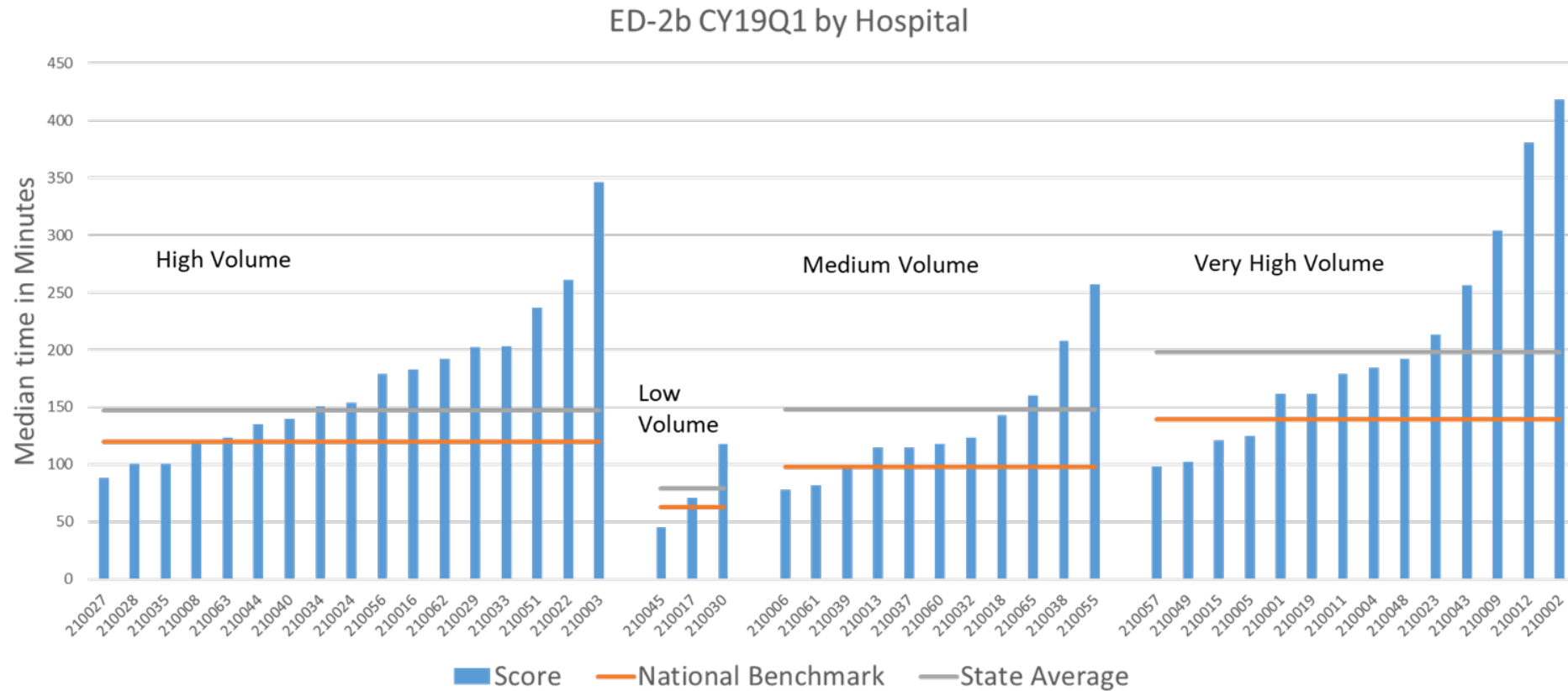


# What is the Extent of the ED Length of Stay Problem?



- Maryland's performance has been poor since measures were first publicly reported in CY 2012 (CY 2014 for OP-18b)
- Performance gap has remained relatively unchanged

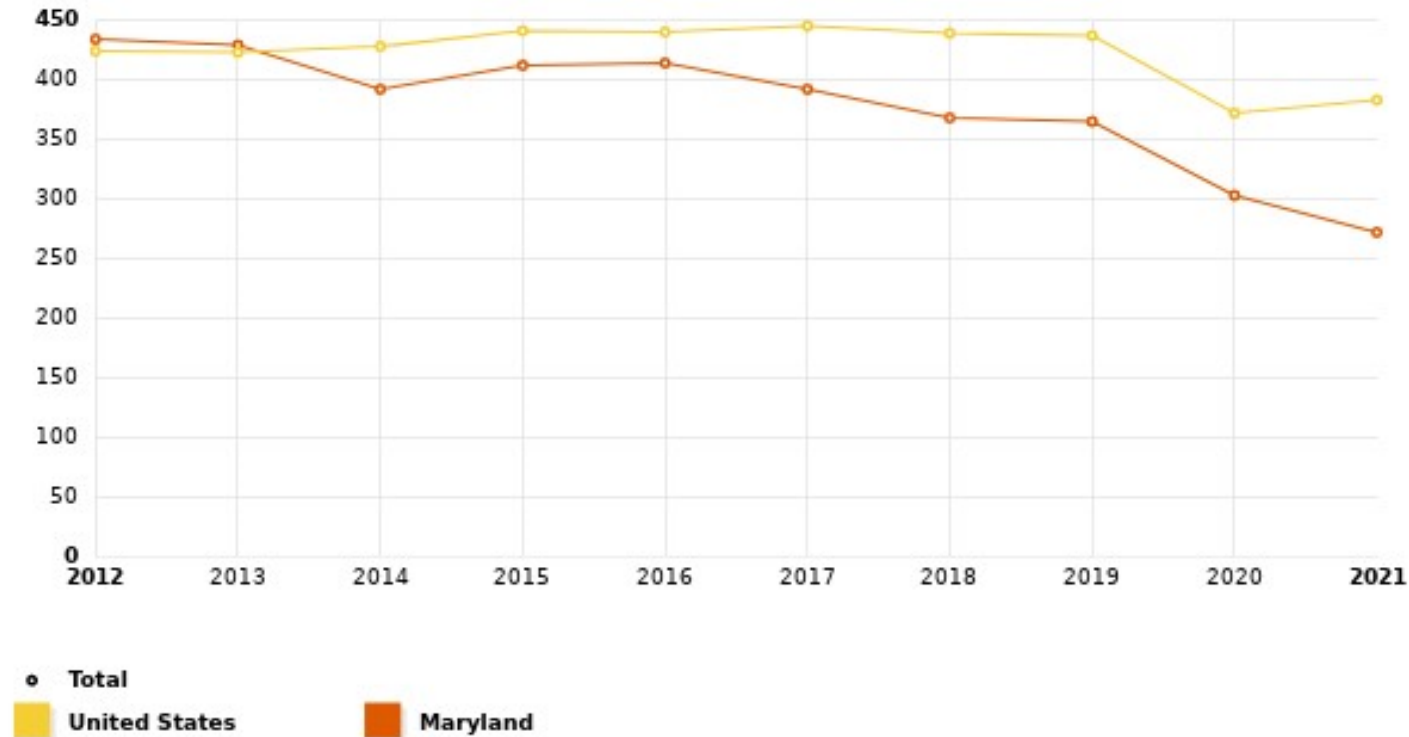
# Are ED Length of Stay Issues Widespread?



- CMS stratified hospitals into volume categories to account for different expected levels of performance; Maryland tends to have higher volume hospitals (more on that later)
- With the exception of low volume hospitals (0-19,999 ED visits), the vast majority of Maryland hospitals exceed the national median for their volume category

# How Does Our ED Volume Compare to US?

Hospital Emergency Room Visits per 1,000 Population by Ownership Type: Total, 2012 - 2021



SOURCE: KFF's State Health Facts.

Maryland has reduced ED visits per capita well below national average, likely due to:

- Care management investments
- Primary care investments
- New site alternatives (e.g., urgent care)

Similar findings were outlined in the evaluation of the TCOC Model

- “The Maryland Model reduced [Medicare FFS] outpatient ED visits and observations stays by an average of 16 visits per 1,000 beneficiaries (90% CI -25, -8; 3.8 percent) in the first three years of the MD TCOC period” (Page 13)

- <https://www.kff.org/other/state-indicator/emergency-room-visits-by-ownership/> (only includes community hospitals)
- <https://www.mathematica.org/publications/evaluation-of-the-maryland-total-cost-of-care-model-quantitative-only-report-for-the-models-first>

## Intermediate Conclusions

- There is a meaningful decline in ED Visits in Maryland ED over the last decade
- Despite reductions in ED visits, which should have depressurized emergency rooms, ED Length of Stay is still high
- Other factors may be driving high ED Length of Stay and by extension lower patient satisfaction

## Factors Associated with ED LOS: HSCRC Analysis

- We modeled
  - Hospital Referral Region (N=306)
  - Individual Hospital (N=3019)
- The model assesses the degree to which each determinant is associated with added ED Length of Stay
  - e.g.,: “A change of one year in median population age is associated with an increase of 10 minutes ED Length of Stay”
- The model also provides guidance on what proportion of variation in ED Length of Stay is driven by HRR and hospital-specific factors
- Finally, we evaluated factors underlying one particular determinant of ED Length of Stay: inpatient occupancy rate



# Data Sources

## Hospital Referral Region

- US Census: Population size, age, density
- CDC: Social Vulnerability Index
- AHA Survey: IP Beds per capita
- CMS: PCPs and SNFS per capita
- Dartmouth Atlas: Primary care access and surgical volume for Medicare population

2019 AHA Survey: ED visits, IP visits, services provided, teaching status, hospital staffing, IP occupancy

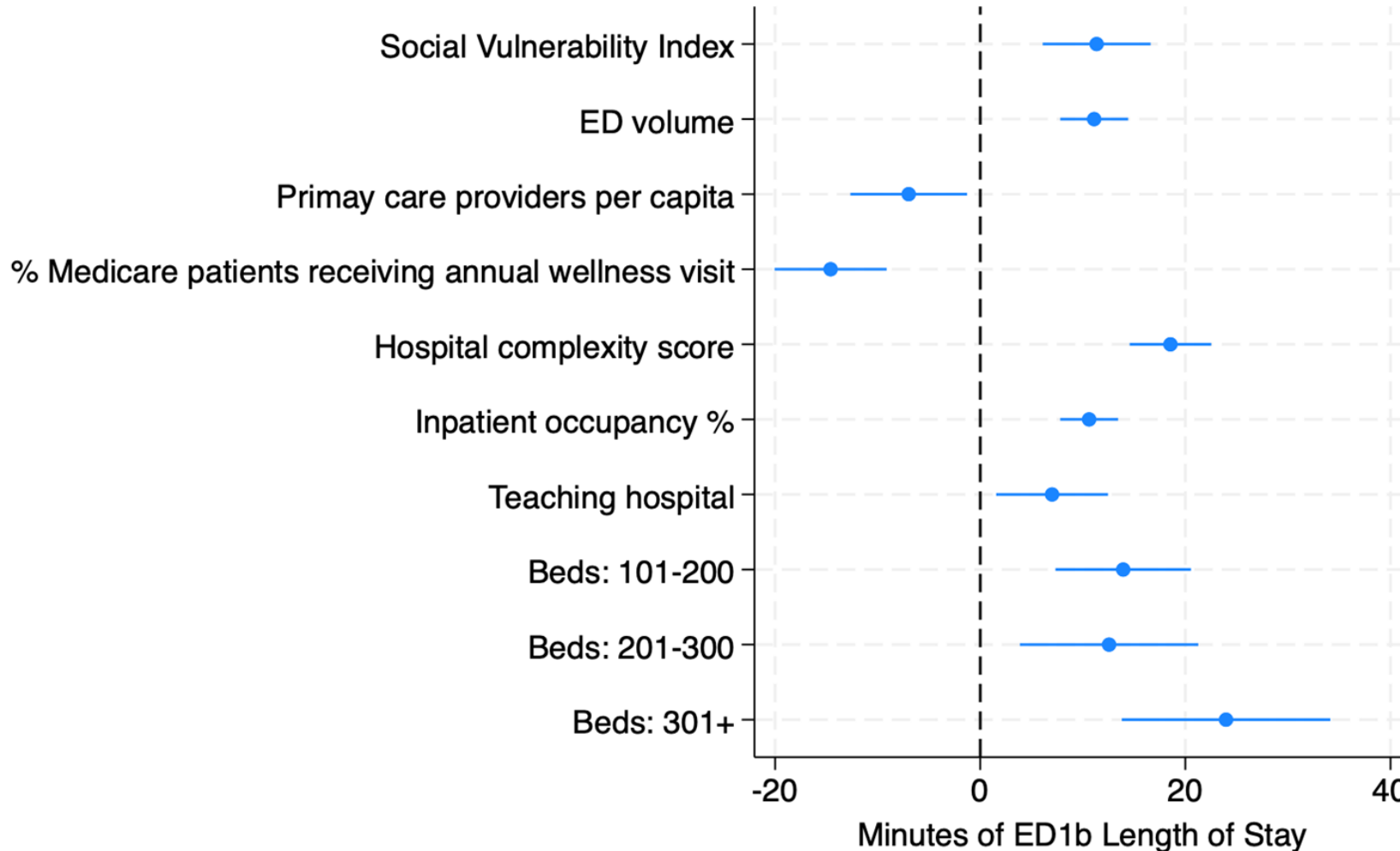
## CMS Hospital Compare

- 2019 ED1 and OP18

## Summary of Analytic Findings

- Differences between Hospital Referral Regions account for 37% of variation in Median Time from ED Arrival to ED Departure for Admitted ED Patients (ED1b)
- Differences between hospitals within Hospital Referral Regions account for 63% variation in ED1b performance
  - This indicates that hospital factors (e.g. staffing, bed management, organizational structure) are likely driving ED performance
  - HRR/regional factors (IP Beds per capita, SNF beds) are less important
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# Relative Strength of Association with ED Length of Stay



Comparative ED Length of Stay effect size of all statistically significant variables in national model

Model accounts for 67% of variation in ED1b performance across hospitals

## Performance of MD Hospitals vs. Nation

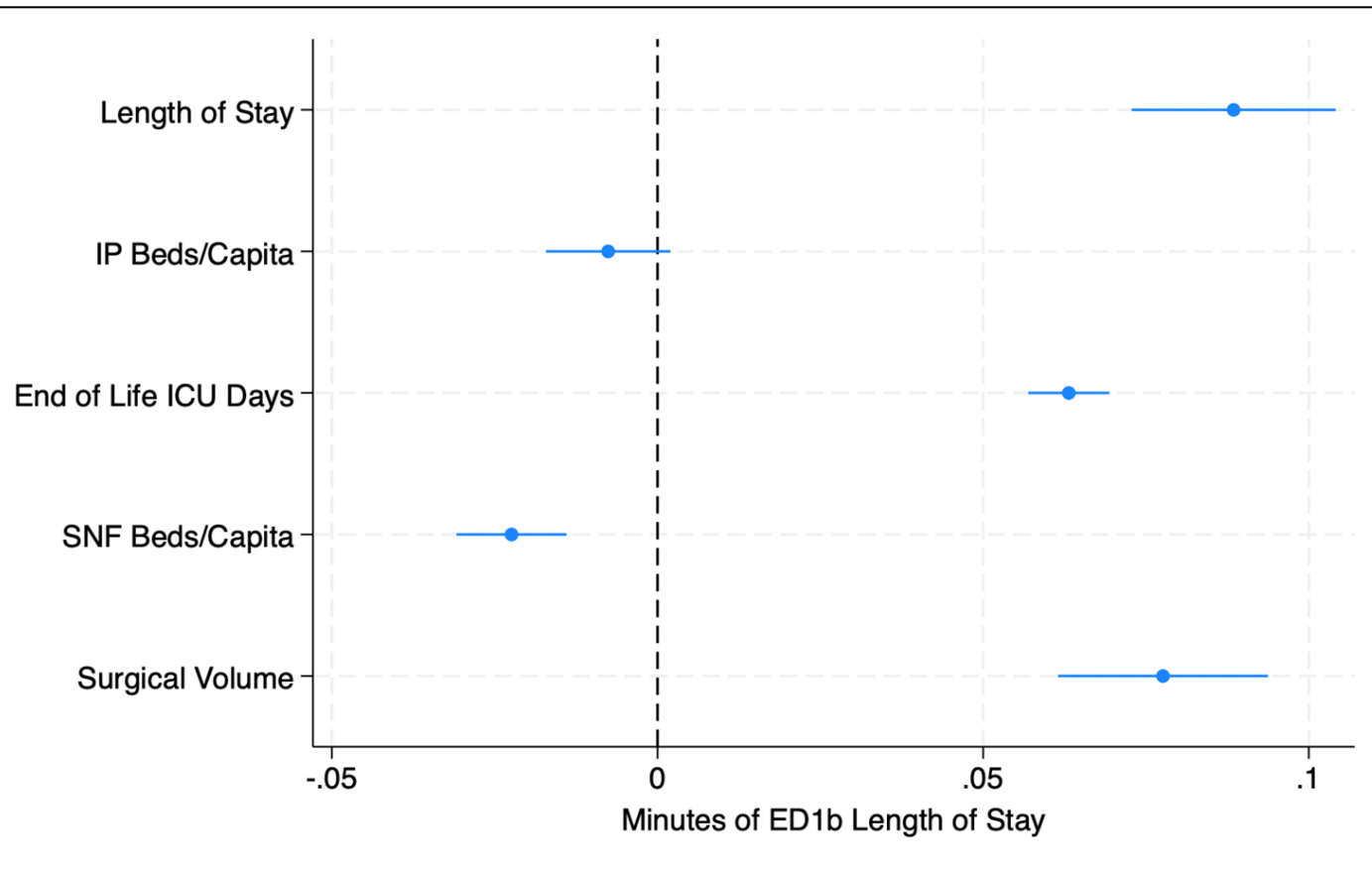
- Maryland hospitals are larger, more complex, and more likely to be teaching facilities. All of these factors are associated with longer ED Length of Stay
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- We evaluated the independent association of multiple variables with inpatient occupancy
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# Relative Strength of Association with IP Occupancy



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# What Does Analysis Tell Us About Policy/Program Directions?

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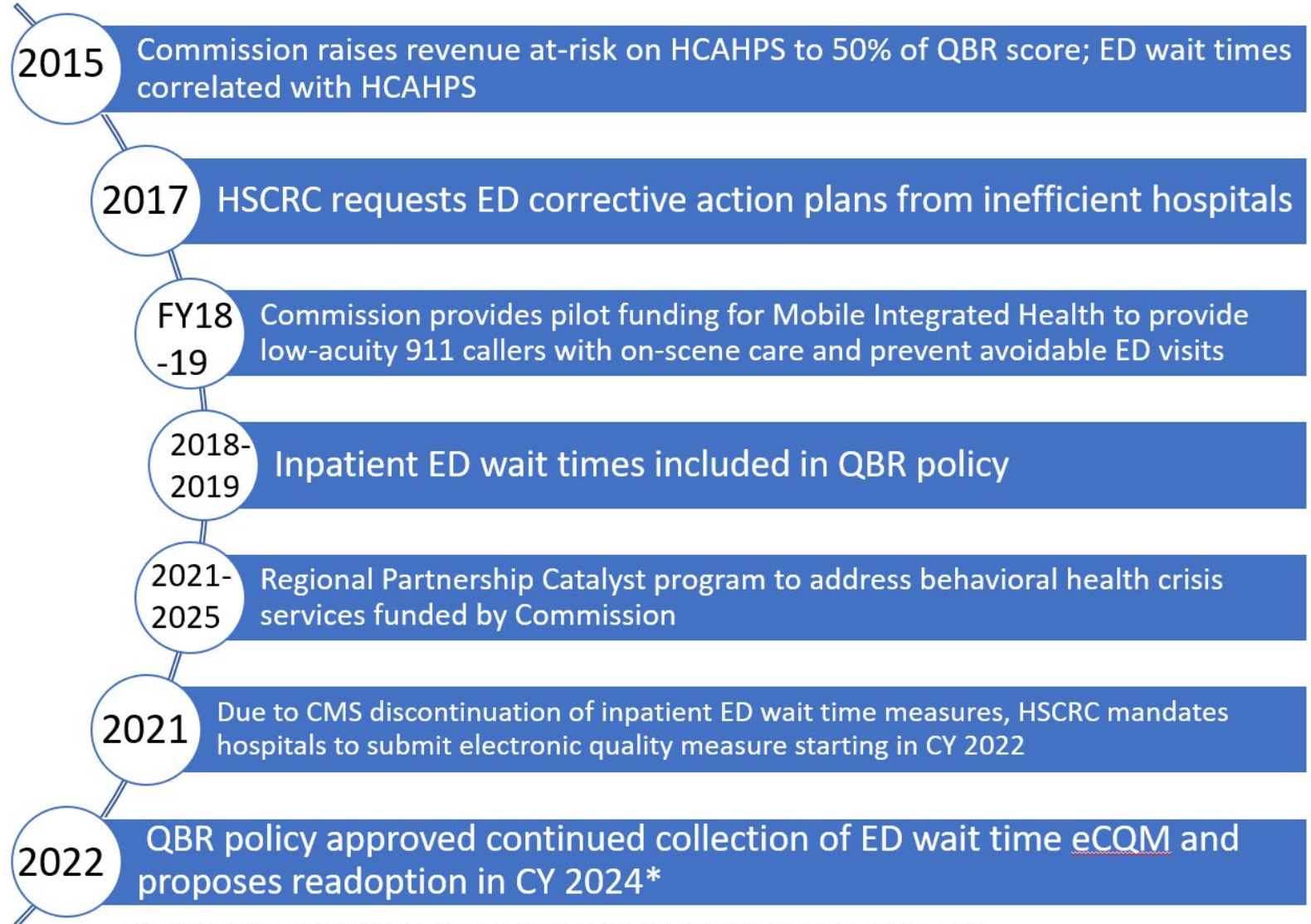
# Our Policy Goals

- Improve ED throughput/wait times to:
  - Improve patient experience
    - Get patients to a care setting where their issues can be definitively treated in an efficient and patient-centered manner
  - Improve patient access
    - Our goal is not to cut off ED access for anyone who slips through the cracks
  - Improve patient outcomes
- Address challenges holistically
  - Encourage ED teams to make operational changes where feasible
  - Encourage health systems to build care pathways for people whose needs are not best met in the ED
  - Encourage health systems to make operational changes that reduce ED boarding and improve overall hospital throughput

# Historical Commission Actions to Address ED Wait Times

Despite multiple actions by the Commission, ED wait times continue to be worse than the nation.

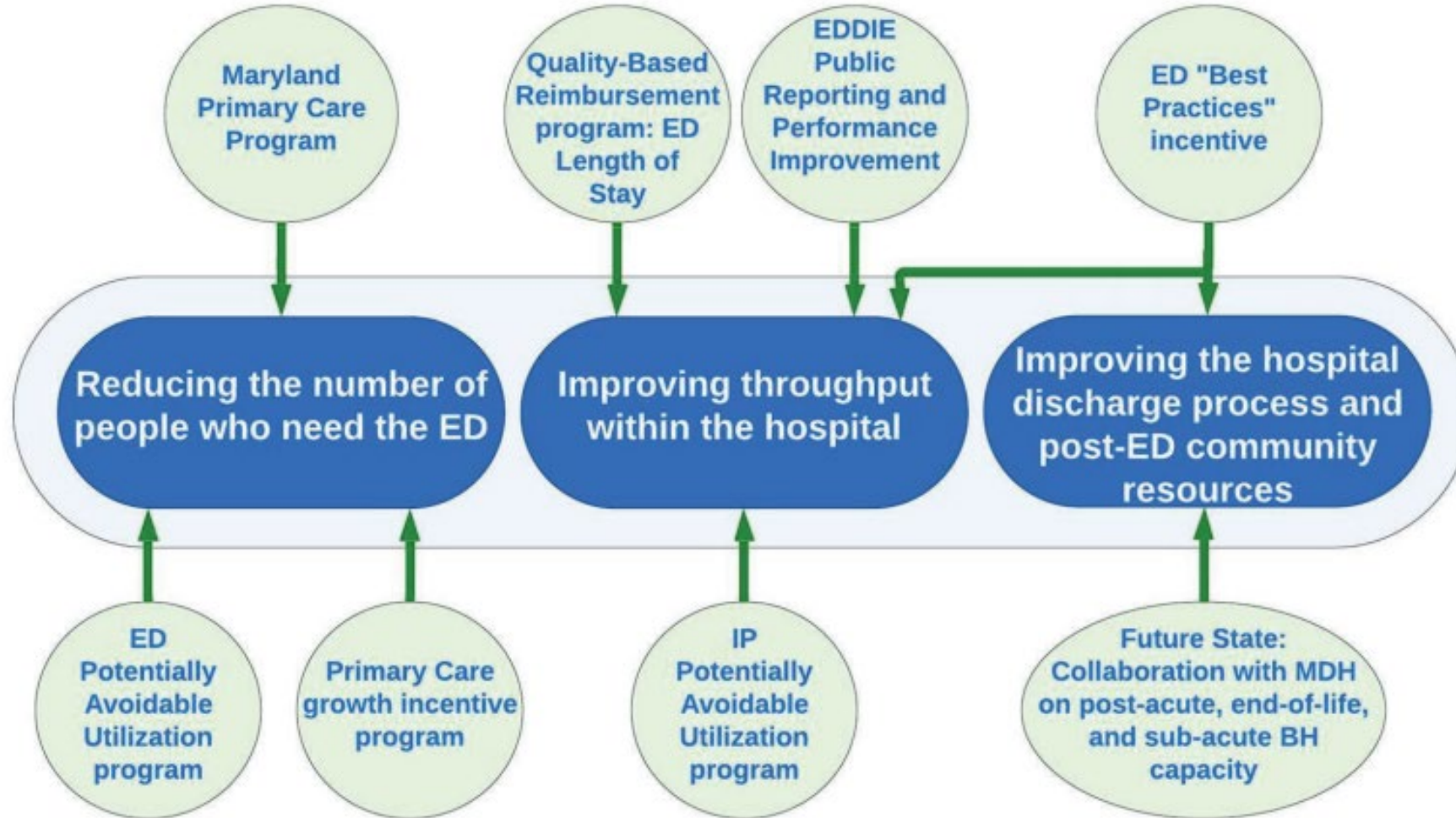
Multipronged strategy to address ED wait times is needed, including initiatives to address ED overcrowding



\*ED wait time eCQM will be discontinued by CMS in CY 2024; HSCRC working with vendor to require continued submissions



# Current/Proposed Interventions to Impact ED LOS





# EDDIE Overview

- Maryland has underperformed most other states on ED throughput measures since before the start of the All-Payer model
- EDDIE is a Commission-developed quality improvement initiative that began in June 2023 with two components:

## EDDIE: Improved ED Experience for Patients

### Quality Improvement

- Rapid cycle QI initiatives to meet hospital set goals related to ED throughput/length of stay
- Learning collaborative
- Convened by MHA

### Commission Reporting

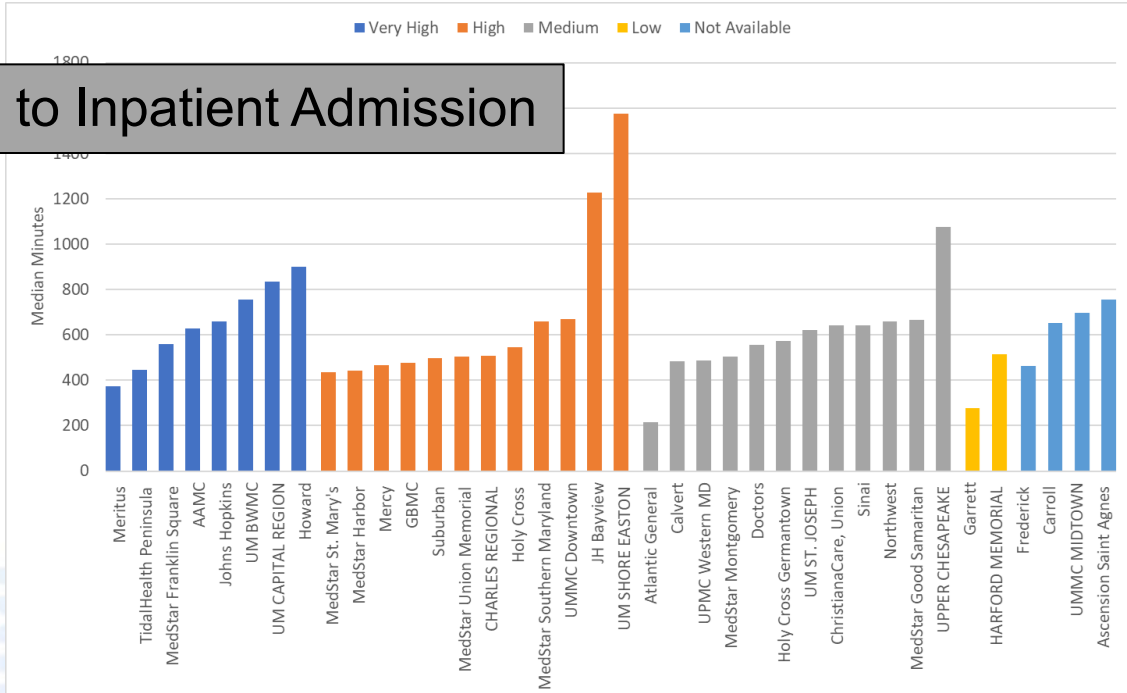
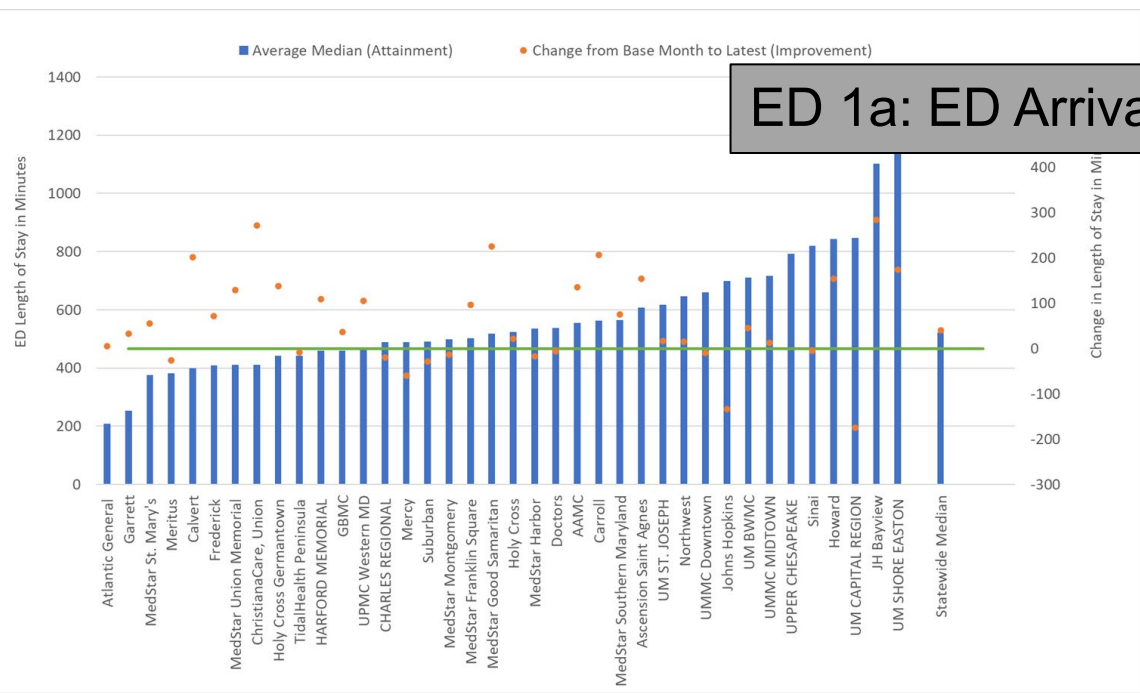
- Public reporting of monthly data for three measures
  - ED-1, OP18, EMS Turnaround times
- Led by HSCRC and MIEMSS

# Monthly Commission Presentation

- Staff present EDDIE data at each monthly Commission meeting with any trends noted (presentations can be found in the post-meeting Commission packets)
- Changes over time and performance by volume are provided (overall and stratified by psychiatric status)

EDDIE data is submitted within a week of the end of the month (timely); should be considered self-reported, unaudited, preliminary results for trending purposes.

ED 1a: ED Arrival to Inpatient Admission



# EMS Turnaround Remains a Challenge

- Delays in patient handoff from EMS to hospital staff are causing significant capacity reduction in EMS system statewide
- Data are tracked by MIEMSS
- Turnaround data elements
  - Time of EMS unit arrival at hospital, as captured by EMS dispatch
  - Time RN signs for patient care responsibility, as captured on EMS report
  - Turnaround time is difference between two events
- In order to limit the impact of outlier cases/data issues, MIEMSS reports time at the 90th percentile for each hospital
- Monthly EDDIE reporting shows limited change

# EMS Turnaround Times: December Performance

## 90th Percentile: 0-35 Minutes

Atlantic General Hospital  
Cambridge Free-Standing ED  
Frederick Health Hospital  
Garrett Regional Medical Center  
Germantown Emergency Center  
Harford Memorial Hospital  
Holy Cross Germantown Hospital  
Holy Cross Hospital  
Johns Hopkins Hospital PEDIATRIC  
McCready Health Pavilion  
Meritus Medical Center  
Montgomery Medical Center  
Peninsula Regional  
Queenstown Emergency Center  
R Adams Cowley Shock Trauma Center  
Shady Grove Medical Center  
St. Mary's Hospital  
Union Hospital  
Union Memorial Hospital  
Walter Reed National Military Medical Center  
Western Maryland

## >35 Minutes

Baltimore Washington Medical Center  
Bowie Health Center  
Calvert Health Medical Center  
Carroll Hospital Center  
Charles Regional  
Chestertown  
Easton -  
Franklin Square  
Good Samaritan Hospital -  
Grace Medical Center -  
Greater Baltimore Medical Center  
Harbor Hospital  
Johns Hopkins Bayview  
Johns Hopkins Hospital ADULT  
Laurel Medical Center  
Mercy Medical Center  
Midtown  
Northwest Hospital  
Sinai Hospital  
St. Agnes Hospital  
St. Joseph Medical Center -  
Suburban Hospital -  
University of Maryland Medical Center

## >60 Minutes

Anne Arundel Medical Center  
Capital Region Medical Center  
Doctors Community Medical Center -  
Fort Washington Medical Center  
Howard County General Hospital  
Southern Maryland Hospital  
Upper Chesapeake Medical Center -  
White Oak Medical Center

(+): Hospital improved by one or more categories; (-): Hospital declined by one or more categories

# MHA Quality Improvement Initiative: Aim Statements

- All hospitals submitted an initial aim statement to MHA as part of the rapid-cycle QI initiative
  - Submitting initial aim statements represents an important first step
  - The intent for the EDDIE Project is to engage in a multi-cycle improvement process to bring Maryland ED length of stay (i.e., wait times) towards the national average within an agreed upon time frame
  - Ongoing monthly progress updates will be critical for executing the intended multi-cycle improvement process.
- When reviewing these aim statements the HSCRC looked for the following elements:



HSCRC has requested updates on these Aim statements from hospitals but this process has not been worked out.



# MHA Quality Improvement Initiative: Example of Hospital Goals

Meritus Health will reduce ED arrival to discharge home from median 219 minutes in FY23 to 209 minutes (median) from July 1, 2023 to December 31, 2023.

Commission requests that hospitals submit short term, specific, and measurable goals related to ED throughput to MHA for reporting at October Commission meeting

Luminis Health Anne Arundel Medical Center will reduce ED arrival to discharge home (OP-18a measure) from FY23 median of 258 minutes to median of 245 minutes for the timeframe July 1, 2023 to December 31, 2023.

Luminis Health Doctor's Community Medical Center will reduce ED arrival to discharge home (OP18a measure) from FY23 median of 289 minutes to median of 275 minutes for the timeframe July 1, 2023 to December 31, 2023.

# Quality Based Reimbursement (QBR) Program

## Purpose

To incentivize quality improvement across three patient-centered quality measurement domains:

1. **Person and Community Engagement (HCAHPS)** - 8 survey-based measures + follow-up + ED Length of Stay
2. **Clinical Care** - inpatient mortality rate + hip/knee replacement complication rate
3. **Safety** - 6 measures of inpatient Safety (National Healthcare Safety Network (NHSN) Healthcare Associated Infections) + Patient Safety Index (PSI-90)



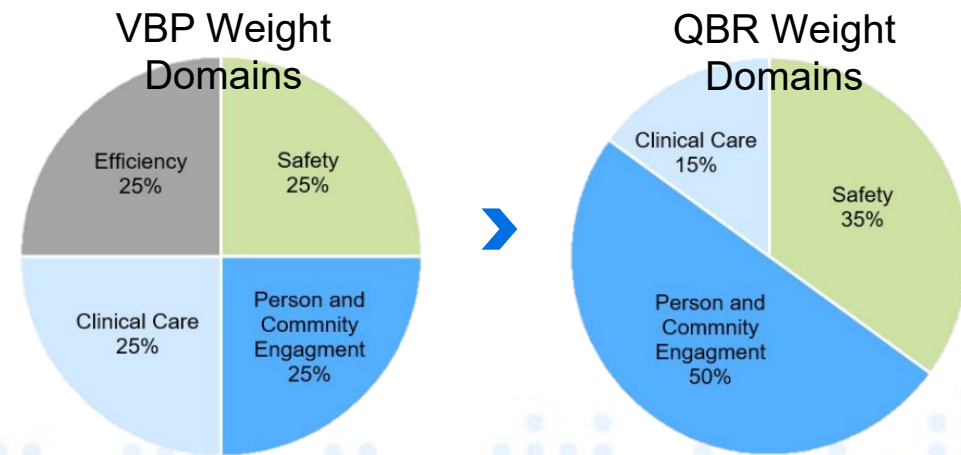
## How it Works: Revenue-at-Risk

The Program puts **2 percent** of inpatient hospital revenue at risk (maximum penalty/reward)



## Federal Alignment

The QBR program uses **similar measures to the federal Medicare Value-Based Purchasing (VBP) program** but has an all-payer focus and adjustable domain weights that focus on MD-specific improvements.



# Weighting of ED LOS Measure

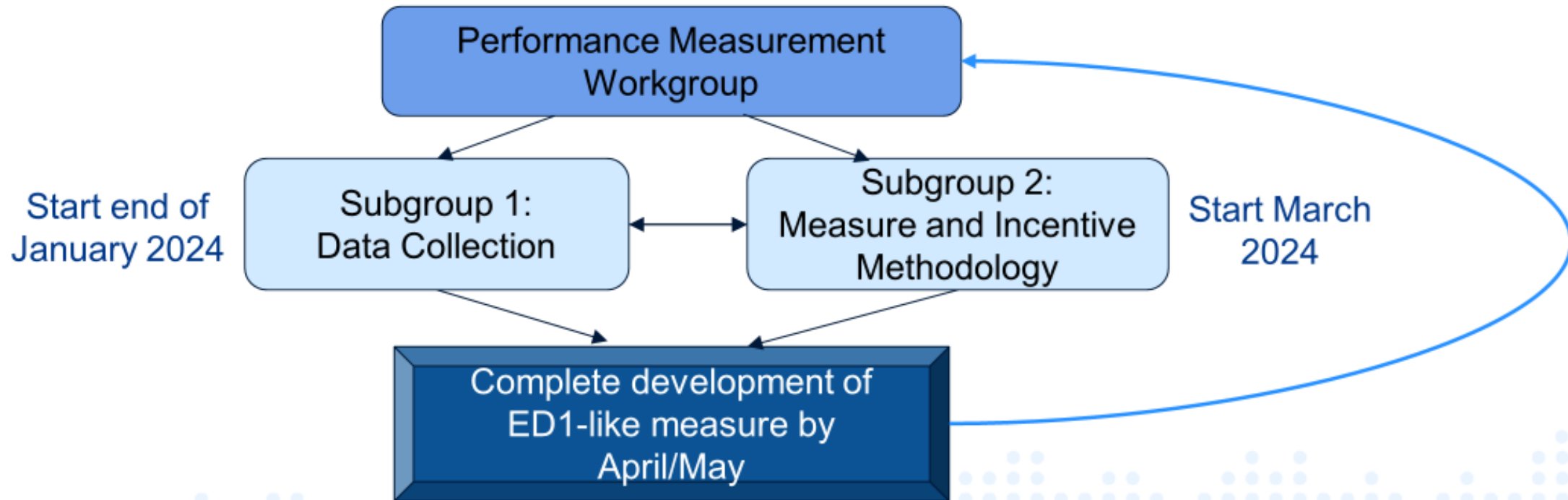
RY2026 Proposed Weighting (2% total at-risk)	Model 1: Current Policy w/o THA-TKA	Model 2: Draft Recommendation w/o THA-TKA	Model 3: Modified Staff Recommendation	Model 4: No Weight Changes w/o THA-TKA or ED LOS
<b>PCE Domain</b>	50.0%	60%	60%	50%
HCAHPS TopBox (8)	25.0%	25.0%	20%	25.0%
HCAHPS Consistency	10.0%	10.0%	10%	10.0%
HCAHPS Linear (4)	10.0%	5.0%	10%	10.0%
ED Wait Times	0.0%	10.0%	10%	0.0%
TFU Medicare	2.5%	3.3%	3.3%	1.7%
TFU Medicare Disparity Gap	0.0%	3.3%	3.3%	1.7%
TFU Medicaid	2.5%	3.3%	3.3%	1.7%
<b><u>Clinical Care Domain</u></b>	<b><u>15%</u></b>	<b><u>15%</u></b>	<b><u>10%</u></b>	<b><u>15%</u></b>
IP Mortality	15.0%	7.5%	5%	7.5%
30-Day Mortality	0.0%	7.5%	5%	7.5%
THA/TKA	0.0%	0.0%	0%	0%
<b><u>Safety Domain</u></b>	<b><u>35%</u></b>	<b><u>25%</u></b>	<b><u>30%</u></b>	<b><u>35%</u></b>
CAUTI	5.8%	4.2%	5%	5.8%
C. Diff	5.8%	4.2%	5%	5.8%
SSI (2)	5.8%	4.2%	5%	5.8%
CLABSI	5.8%	4.2%	5%	5.8%
MRSA	5.8%	4.2%	5%	5.8%
PSI 90 (10)	5.8%	4.2%	5%	5.8%

**ED LOS is weighted at 10 percent, which is about \$22.5 M statewide**

# QBR: ED LOS Measure Development Plan

## Objective:

- Subgroup 1: Develop mechanism to collect ED length of stay for patients admitted to the hospital
- Subgroup 2: Develop ED LOS measure and incentive methodology for RY 2026 QBR



# Options for Data Collection

## Potential Ways to Collect Data:

1. Add date and timestamps and other needed variables to monthly HSCRC case-mix data
2. Allow hospitals to calculate summary measures and submit to HSCRC (similar to EDDIE reporting)
3. Use retired ED1 electronic clinical quality measure/Adapt ED2 eCQM to capture time of admission and observation stays
4. Other ideas?



## Other HSCRC Initiatives

- Commissioners will vote on policy related to Multi-Visit Patients at the February Commission meeting
  - Designed to incentivize reduction in ED visits by Multi-Visit Patients on a reward-only and improvement only basis.
- Staff have been tasked by leadership to develop an ED Best Practices Incentive
  - Will incentivize hospital best practices, alignment with EDDIE initiative, and value based arrangements with non-hospital providers that will improve hospital throughput and by extension reduce ED LOS.
- Collaboration with MDH to address post-acute, end-of-life, and sub-acute behavioral health capacity

## Final Thoughts

- ED LOS challenges existed prior to the advent of global budgets
- The TCOC model provides Maryland and its hospitals with a unique opportunity to use both institutional programs and statewide policy to improve performance on HCAHPS and ED LOS
- Hospital global budgets determine revenue, but not how funds are spent
  - Are there opportunities to reallocate dollars toward programs that improve ED performance?
- If we are successful, this will have a significant impact on patient experience and outcomes, as well as staff wellbeing