Performance Measurement Workgroup

November 17, 2021

HSCRC Quality Team

Agenda

- CMS quality exemption update
- Health Equity Update: CMMI Strategic Priorities
- COVID Analytics Plan
- MHAC RY 2024 update
  - Office of Healthcare Quality Serious Reportable Events overview
  - Adopting subset of monitoring PPCs for payment, including:
    - Key considerations
    - Updated PPC analysis
  - Palliative care Update
  - Draft policy recommendations discussion
- Readmission Reduction Incentive Program RY 2024 discussion
  - RRIP vs. CMS HRRP program overview
  - Readmission Trends, CY 2021
  - EDAC Measurement Update
- Disparity Gap Update--SIHIS Discussion

CMS Quality Exemption Status

Update from CMMI - FY 2022 Exemption Request Granted

- Exemption Request Granted 10/29/21

"CMS expects the State to advance hospital quality improvement, total population health, and health equity. State improvements in each of these three areas are fundamental to the overall success of the TCOC Model. As such, they should be comprehensively integrated and aligned across the spectrum of healthcare delivery. CMS' evaluation of future CMS Quality Program Waiver requests will consider Maryland's performance improvement and advancement in these three high-priority areas."

CMS Commentary on QBR Redesign

- Priority Areas:
  - HCAHPS:
    - Formalized Framework for "Sharing of Best Practices"--added rec to final RY24 QBR
    - Collection of detail-level HCAHPS data (in motion via MHCC)
  - Consider Health Equity concerns raised in ED Throughput Challenges
  - Integrate expanded Timely Follow-up for Medicaid/Other Payers, Behavioral Health as able
  - Maintain focus on NHSN Safety Measures within VBP
  - Support longer-term expansion of quality measurement:
    - OP Measurement, including THA-TKA
    - Measurement beyond Hospitals, including 30-day Mortality measurement

Health Equity: CMMI Strategic Priorities

CMMI's Strategic Refresh

A HEALTH SYSTEM THAT ACHIEVES EQUITABLE OUTCOMES THROUGH HIGH QUALITY, AFFORDABLE, PERSON-CENTERED CARE

DRIVE ACCOUNTABLE CARE

ADVANCE HEALTH EQUITY

SUPPORT INNOVATION

ADDRESS AFFORDABILITY

PARTNER TO ACHIEVE SYSTEM TRANSFORMATION

https://innovation.cms.gov/strategic-direction-whitepaper

Advancing Health Equity

Aim: Ensure health equity is embedded in every model and increase focus on underserved populations with focused efforts on the following domains:

1. Develop new models and modify existing models to address health equity and SDoH
2. Increasing participation of Medicare and Medicaid providers that serve underserved communities
3. Evaluate models for their impact on health equity and share data and "lessons learned" to inform future work
4. Strengthen data collection and intersectional analyses

CMMI Next Steps for Advancing Health Equity

- Conduct analyses of participating providers and beneficiaries
- Develop approaches to model design and application process to improve participation of applicants that serve underserved populations
- Require collection of beneficiary-level demographic data
- Standardize screening and referral for social needs
- Incorporate equity in model quality strategies
- Provide learning supports to model participants
- Provide learning supports to model participants on equity; provide data and model design support to states seeking to align with CMMI's models

Implications for the Maryland TCOC Model RE: "Advancing Health Equity"

1. TCOC Model is an existing Model - how should it be modified to better advance Health Equity?
2. Additional impetus to highlight quality of care for Medicaid beneficiaries
   a. What measures are Medicare-Only, as opposed to All-Payer Measures? How can this improve?
3. Evaluation of Impact on Health Equity - what does this look like for HSCRC?
4. Strengthen Data Collection - As has been previously presented, we believe that there are several areas where our data collection efforts are strong, we also believe that there are several areas where our collection efforts can be improved

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Implications for the Maryland TCOC Model RE: Next Steps

CMMI Health Equity Strategy	Maryland Model Status; Suggested Next Steps?
Conduct analyses of participating providers and beneficiaries	Conduct analyses of quality programs that stratify by patient demographics
Develop approaches to model design and application process to improve participation of applicants that serve underserved populations	Develop a framework for assessing access to care for those with historic limitations/barriers
Require collection of beneficiary-level demographic data	Completed as required under the Maryland Health Improvement and Disparities Reduction Act of 2012
Standardize screening and referral for social needs	As presented in Oct 2021 PMWG, "screening and referral for social needs" are occurring, but not presently standardized
Incorporate equity in model quality strategies	An opportunity that we should dedicate time and attention to in the coming years. Presently assessing equity within hospitals in the RRIP; need to evaluate pilot methodology.
Provide learning supports to model participants	Provide learning supports to improve the quality of care for the measures which Maryland performs poorly
Provide learning supports to model participants on equity; provide data and model design support to states seeking to align with CMMI's models	Provide data to hospitals to support the goal of advancing health equity; ask CMMI to provide data and learning supports for TCOC model
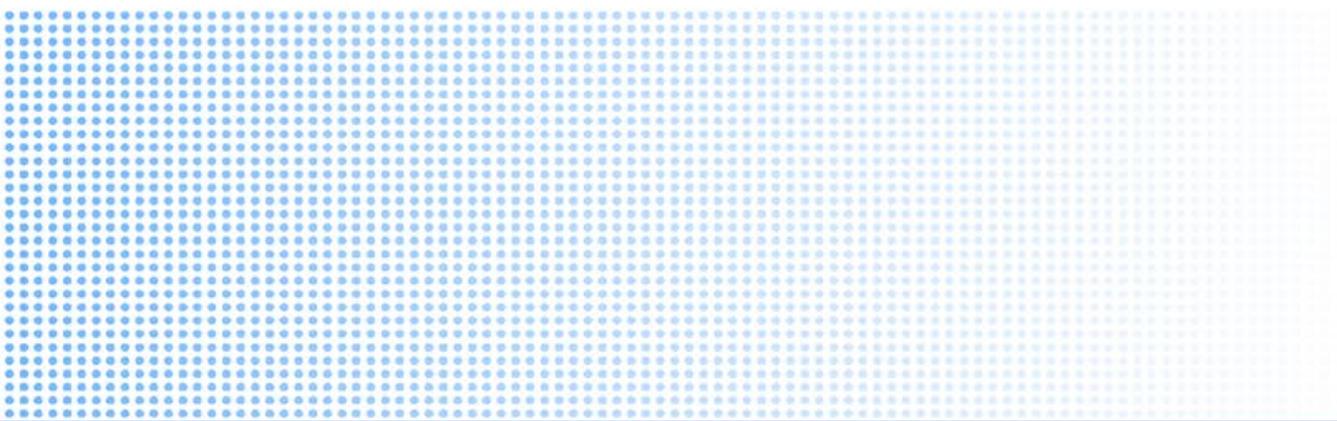
COVID Analytics Plan

Goals

To explore options for assessing hospital performance during the COVID-19 pandemic

- What is the impact of altering baseline time periods to improve accuracy of expected values?
- What is the impact of including or excluding COVID-19 patients?
- What is the impact on equity?

Programs and Measures for Analysis

Readmissions Reduction Incentive Program's (RRIP's) readmission measure

Maryland Hospital Acquired Conditions (MHAC) Program's potentially preventable complications (PPCs)

Quality Based Reimbursement (QBR) Program's inpatient (IP)-mortality measure

Additional measures used in quality programs

Analyses

Analysis 1: Impact of concurrent normative values

Compare concurrent normative values with the original base period values

Analysis 2: Impact of COVID-19 patient exclusion or inclusion

Compare scores and models both including and excluding COVID-19 patients

Models Under Evaluation for Comparison

Table 1. Summary of models and output requirements			
	Model 1 *original baseline period*	**Model 2a** *concurrent norms with COVID-19 cases*	**Model 2b** *concurrent norms without COVID-19 cases*
Description	original base period norms	concurrent norms including COVID-19 cases	concurrent norms excluding COVID-19 cases from normative values and performance period calculations

Impact of using concurrent norms (Analysis 1) and excluding COVID cases (Analysis 2) on outcomes

- **Hospital scores**: overall and by hospital

- **Reliability of hospital scores**

- **Model fit (risk adjustment)**

- **Equity considerations:** What is the impact of using concurrent norms and excluding COVID cases by hospital and patient characteristics?

- **Impact on DRGs**: Sepsis and DRG 137- Major Respiratory infections and inflammations

Timeline for iterative reporting

- November: analysis plan

- December – February: iterative results for RRIP, MHAC, and QBR

- March: Decisions for RY 2023

MHAC RY 2024 Update

Serious Reportable Events Reporting- Maryland Office of Health Care Quality

- In 2004, legislation was enacted* that requires hospitals to report serious adverse events that cause death or serious injury.
- Serious injury is defined as a physical or mental impairment that substantially limits one or more of the major life activities of an individual and lasts more than seven days or is still present at the time of discharge.
- OHCQ's Hospital Patient Safety Program reviews each event and provides feedback to the hospital on their root cause analysis.

*The regulations for the program are found in COMAR 10.07.06.

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Serious Reportable Events Reporting- Maryland Office of Health Care Quality

- Level 1-Resulted in death or serious disability
  - Includes Joint Commission Sentinel Events
  - Includes National Quality Forum Serious Reportable Events "Never Events"
  - Submit RCA and actions within 60 days
- Level 2-Required medical intervention to prevent death or serious disability
  - RCA required, but not submitted
- Level 3-Does not result in death or serious disability and does not require medical intervention to prevent death or disability
  - No RCA required

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OHCQ Serious Reportable Event Categories

National Quality Forum SRE Taxonomy is used to define events* :

1. SURGICAL OR INVASIVE PROCEDURE EVENTS

2. PRODUCT OR DEVICE EVENTS

3. PATIENT PROTECTION EVENTS

4. CARE MANAGEMENT EVENTS

5. ENVIRONMENTAL EVENTS

6. RADIOLOGIC EVENTS

7. POTENTIAL CRIMINAL EVENTS

*SOURCE: https://www.qualityforum.org/Topics/SREs/List_of_SREs.aspx

OHCQ Serious Reportable Events

- OHCQ has defined additional categories of SREs:
  - death or serious disability related to the use of anticoagulants;
  - death or serious disability resulting from an unanticipated complication;
  - death or serious disability related to a delay in treatment;
  - death or serious disability associated with airway management;
  - death or serious disability related to a healthcare-associated infection;
  - unanticipated fetal or neonatal death or injury; and
  - misdiagnosis causing death or serious disability.

- Hospital reporting timeline: A hospital shall report any level 1 adverse event to the Department within 5 days of the hospital's knowledge that the event occurred (Date of discovery).

For more information: https://health.maryland.gov/ohcq/Pages/Patient-Safety.aspx

# Serious Reportable Events Reporting- Maryland Office of Health Care Quality FY 20 Highlights


FY20 LEVEL 1 EVENTS BY CLASSIFICATION
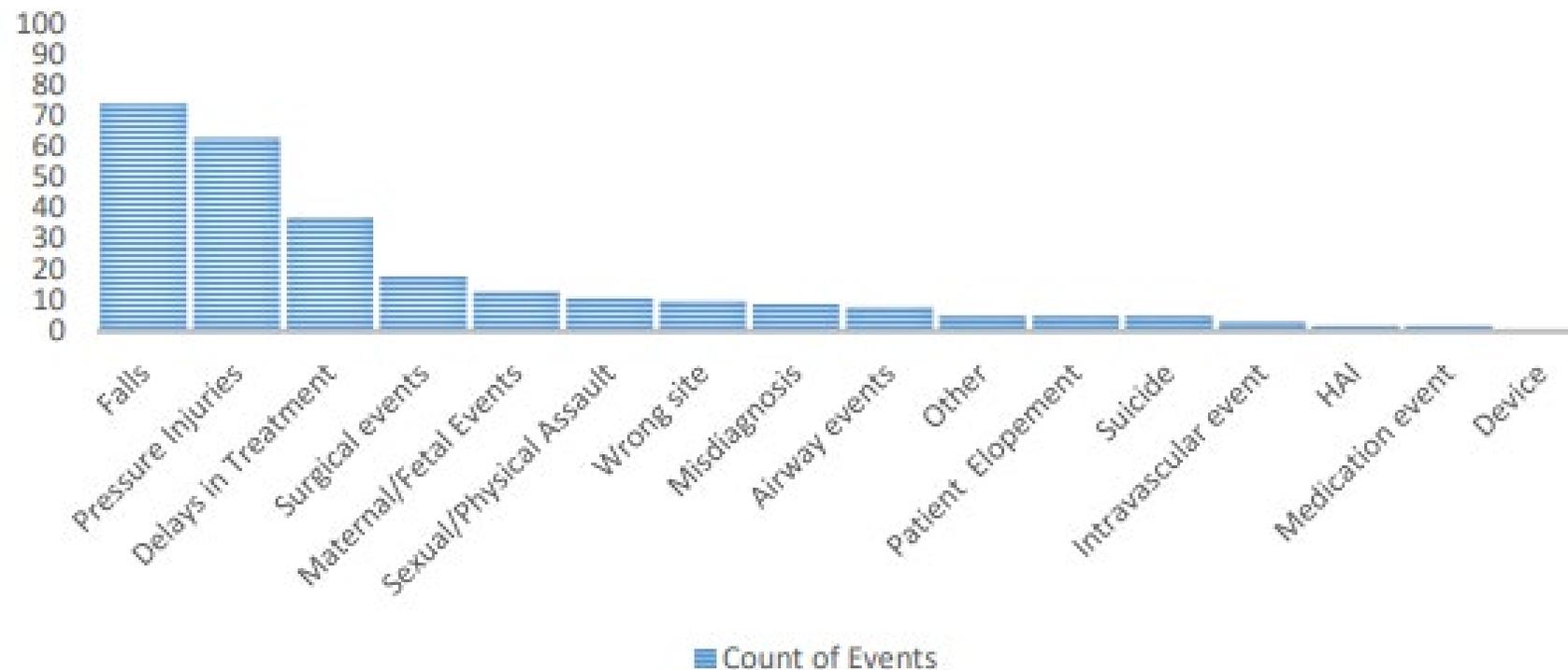
Serious Reportable Events Reporting- Maryland Office of Health Care Quality FY20 Highlights

AGE OF PATIENTS WITH
LEVEL 1 EVENTS
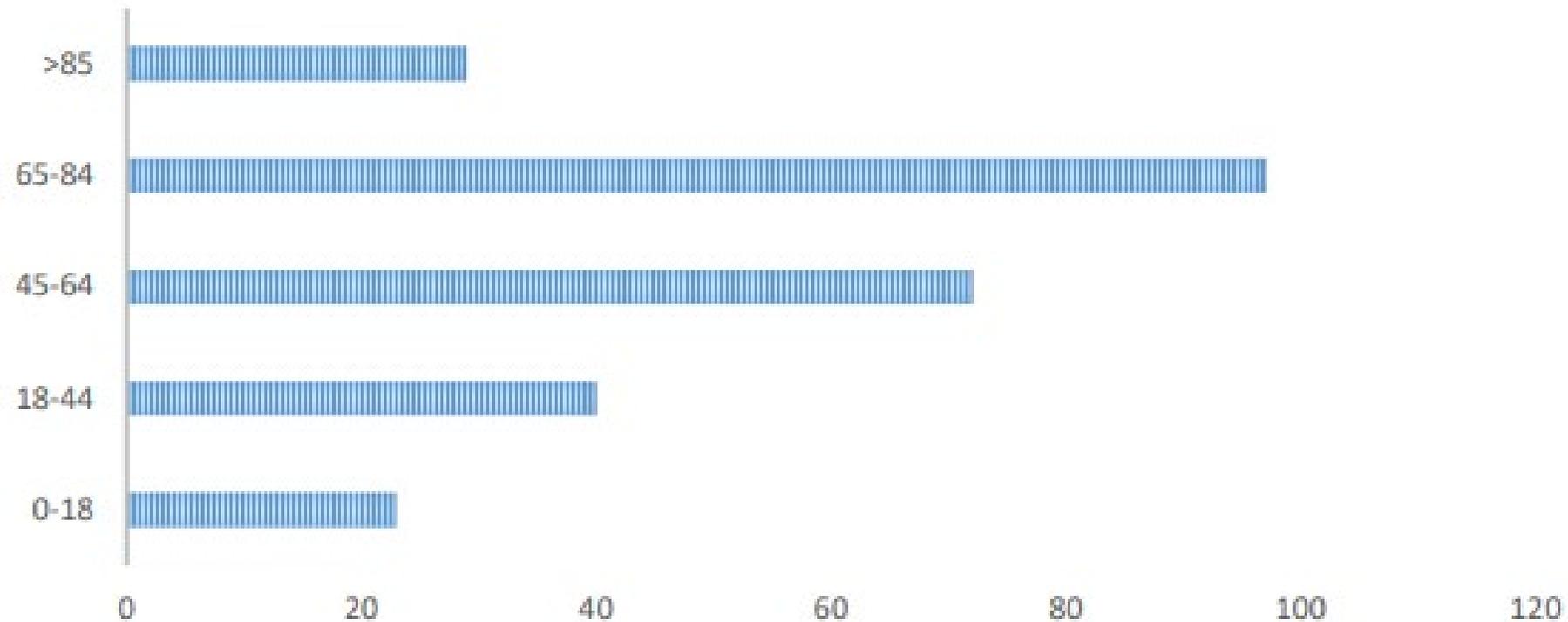
Serious Reportable Events Reporting- Maryland Office of Health Care Quality FY20 Highlights

FATALITIES IN TOP 5 ADVERSE EVENT CATEGORIES
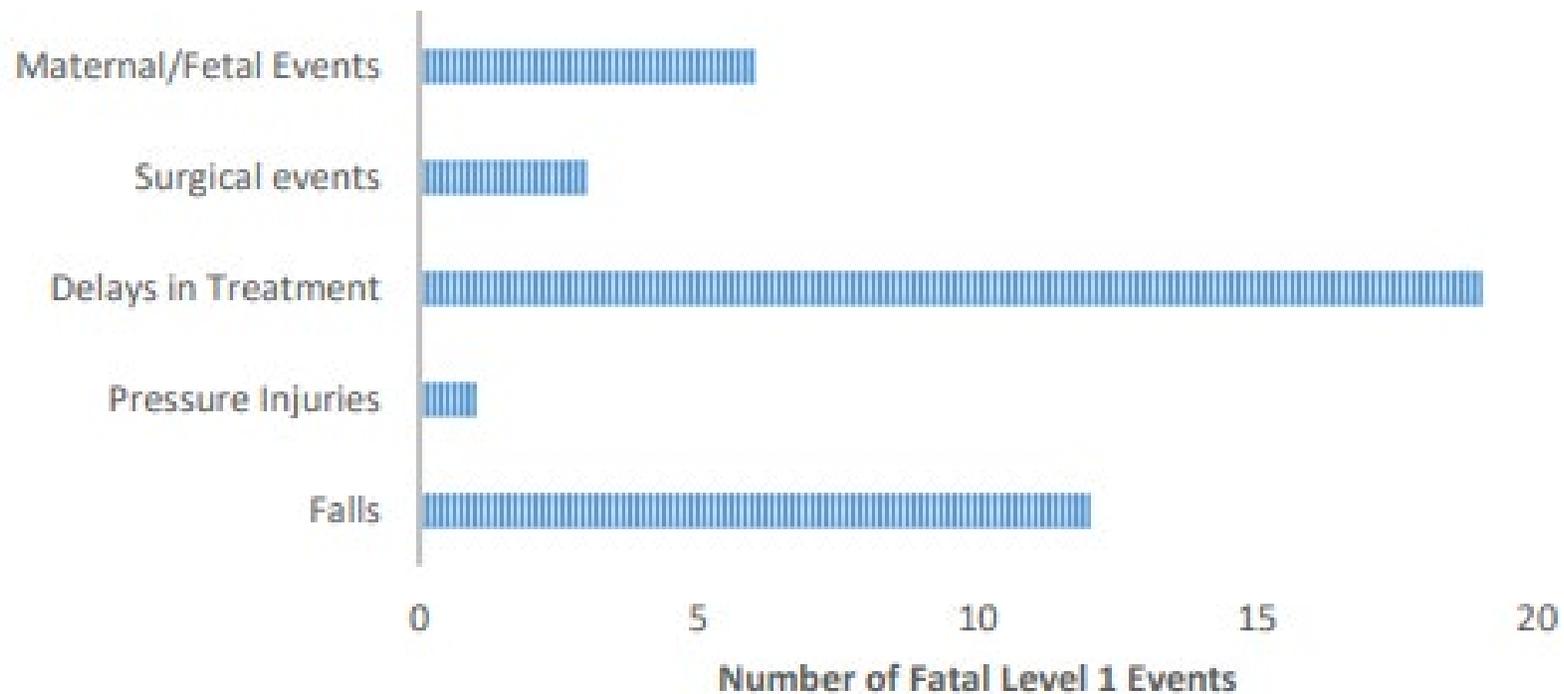
Monitoring PPC Analysis

- Greater than 50% increase in O/E ratio comparing 2021 to 2018
- Clinical considerations
- Observed counts
- 3M v38 cost weight
- Percent of hospitals with O/E ratios less than .85 or greater than 1.15 (variation)
- Rate per 1000 at risk
- Predictive validity: Cross-period correlation
- Reliability: Signal-to-noise framework
- 3M Group: Clinical Categories
- 3M Level: Clinical Severity

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3M PPC Groups and Levels

- **PPC Group**

  1. Extreme Complications
  2. Cardiovascular-Respiratory Complications
  3. Gastrointestinal Complications
  4. Perioperative Complications

  5. Infectious Complications
  6. Malfunctions, Reactions, etc.
  7. Obstetrical Complications
  8. Other Medical and Surgical Complications

- **PPC Level**

1. **Other:** Potentially serious complications that do not rise to the same level of clinical significance as major complications because they are not as consistently likely to pose a serious or sustained threat to health or to result in as great an increase in hospital resource use.

2. **Major:** Those complications that have the most consistent and significant impact on acute and chronic health and cause the largest increase in hospital resource use.

3. **Monitor:** Complications that can vary in their association with problems in quality of care, due to inconsistency in the application and interpretation of coding criteria from one hospital to another. This level contains just two PPCs - Renal failure without dialysis and Clostridium Difficile Colitis.

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Payment and Monitoring PPC Recommendations

- Strongly Consider
  - 31: Decubitus Ulcer
  - 51: Gastrointestinal Ostomy Complications
  - 47: Encephalopathy
  - 26: Diabetic Ketoacidosis & Coma
  - 50: Mechanical Complication of Device, Implant & Graft
  - 45: Post Procedure Foreign Body
- Consider
  - 15: Peripheral Vascular Complication except Venous Thrombosis
  - 23: Genitourinary Complications except UTI
  - 34: Moderate Infections
  - 18: Major GI Complications w/ Transfusion or Significant Bleeding
  - 13: Other Cardiac Complications
  - 17: Major GI Complications w/o Transfusion or Significant Bleeding (Possibly combine with PPC #18)

- Payment
  - 3: Acute Pulmonary Edema and Respiratory Failure w/o Ventilation
  - 4: Acute Pulmonary Edema and Respiratory Failure with Ventilation
  - 7: Pulmonary Embolism
  - 9: Shock
  - 16: Venous Thrombosis
  - 28: In-Hospital Trauma and Fractures
  - 35: Septicemia & Severe Infections
  - 37: Post-Operative Infection & Deep Wound Disruption w/o Procedure
  - 41: Post-Operative Hemorrhage & Hematoma with Hemorrhage Control Procedure or I&D Proc
  - 42: Accidental Puncture/Laceration During Invasive Procedure
  - 49: Iatrogenic Pneumothorax
  - 60: Major Puerperal Infection and Other Major Obstetric Complications
  - 61: Other Complications of Obstetrical Surgical & Perineal Wounds
  - 67: Combined Pneumonia (PPC 5 and 6)

Tier 1: Strongly Consider

PPC #	PPC Desc	CY21/18 % Change	CY21 Rate per 1000 at risk	Observed Counts CY19& CY20	3M Cost Weights	CY16-17 Reliability	CY16-17 Predictive Validity	Qualifying Hospitals CY18-19	Variation Among Hospitals	3M Group	3M Level
31*	Decubitus Ulcer	177.75%	1.199	159	2.733	Moderate	Low	46	82.61%	8	2
51	GI Ostomy Complications	143.68%	0.739	363	1.536	Fair	Low	40	80%	6	1
47	Encephalopathy	95.30%	1.088	428	0.735	Substantial	Adequate	39	86.62%	8	2
26	Diabetic Ketoacidosis & Coma	90.48%	0.158	71	0.530	Substantial	Adequate	19	94.74%	8	1
50*	Mechanical Complication of Device, Implant & Graft	83.29%	1.083	669	1.162	Moderate	Low	40	72.5%	6	1
45*	Post Procedure Foreign Body	68.36%	0.029	22	0.599	Slight	Low	46	95.65%	4	2

*Indicates similar SRE reported to OHCQ.

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Tier 2: Consider

PPC #	PPC Desc	CY21/18 % Change	CY21 Rate per 1000 at risk	Observed Counts CY19& CY20	3M Cost Weights	CY16-17 Reliability	CY 16-17 Predictive Validity	Qualifying Hospitals CY18-19	Variation Among Hospitals	3M Group	3M Level
15	Peripheral Vascular Complications except Venous Thrombosis	104.91%	0.549	261	1.509	Moderate	Low	29	68.97%	2	2
23	GU Complications Except UTI	85.21%	0.417	241	0.593	Moderate	Low	33	81.82%	8	1
34	Moderate Infectious	77.22%	1.339	233	1.320	Substantial	Low	33	78.79%	5	1
18	Major GI Complications w/ Transfusion	70.32%	0.606	340	1.532	Substantial	Adequate	38	78.95%	3	2
13	Other Cardiac Complications	51.50%	0.397	252	0.371	Substantial	Low	35	88.57%	2	1
17	Major GI Complications w/o Transfusion	48.50%	0.674	397	1.244	Substantial	Adequate	39	89.74%	3	2

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Palliative Care Updates and Implications for MHACs

- A definition of Palliative Care: relief of pain and uncomfortable symptoms

- The Z515 Palliative care coding mandates have changed substantially:
  - Removed from Medicare acceptable PDx list in 2018, only coded as secondary dx
  - Previously on exempt list for POA, removed from exempt list in 2016, and exempt effective Oct 2021.
  - 3M considerations/next steps for PPC grouper v.40
    - For some PPCs, quality of care should be provided no matter the PC POA status
    - Consistency of coding palliative care and the POA indicator is still in question
    - Will keep HSCRC updated on related PPC grouper assignment changes

- HSCRC considerations in light of coding changes and 3M concerns
  - Globally exclude PC cases from MHAC program beginning Oct-Dec 21 and for CY 22
  - Re-evaluate PC coding clinic updates, PPC trend results with/without PC for RY 2025 policy, and clinical updates to the PPC grouper v.40

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RY 2024 Draft MHAC Recommendations

1. Continue to use 3M Potentially Preventable Complications (PPCs) to assess hospital acquired complications.
   a. Monitor all PPCs and provide reports for hospitals and other stakeholders.
   b. Update PPC measures for inclusion in the payment program based on clinical recommendations, statistical characteristics, and recent trends.
2. Use more than one year of performance data for small hospitals (i.e., less than 20,000 at-risk discharges and/or 20 expected PPCs). The performance period for small hospitals will be CY 2021 and 2022.
3. Continue to assess hospital performance on attainment only.
4. Continue to weigh the PPCs in the payment program by 3M cost weights as a proxy for patient harm.
5. Maintain a prospective revenue adjustment scale with a maximum penalty at 2 percent and maximum reward at 2 percent and continuous linear scaling with a hold harmless zone between 60 and 70 percent.
6. Adjust retrospectively the RY 2024 MHAC pay-for-performance program methodology as needed due to COVID-19 Public Health Emergency and report any changes to Commissioners.

RRIP RY 2024: Program, Design Considerations

Readmissions Reduction Incentive Program (RRIP)

Purpose

To incentivize hospitals to reduce avoidable readmissions by linking payment to (1) improvements in readmissions rates, (2) attainment of relatively low readmission rates, and (3) reduce disparities.

- **What is a readmission?** A readmission occurs when a patient is discharged from a hospital and is subsequently re-admitted to any hospital within 30 days of the discharge.
- **Why focus on readmissions?** Preventable hospitals readmissions may result from index admission quality of care or inadequate care coordination following discharge and can result in substandard care quality for patients and unnecessary costs.

How it Works: Revenue-at-Risk

The program puts **2 percent** of inpatient hospital revenue at risk (maximum penalty/reward) + 0.5 percent max disparity gap reward

Methodology

The RRIP is **similar to the Medicare Hospital Readmissions Reduction Program (HRRP)**, but has an all-payer focus. The RRIP is also the only statewide program with an incentive for reducing disparities in all-payer readmission rates.

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Readmission Reduction Incentive Program (RRIP)

Hospital Readmissions Reduction Program (HRRP)

Measures

RRIP:
- Measures performance in **all-payer, all-cause** unplanned 30-day readmissions
- **Predetermined base and performance period** to calculate improvement rates
- Readmission rates are **adjusted for severity of illness and out-of-state ratios**
- Measures readmissions **across hospitals** in Maryland
- Exclusion logic includes planned readmissions **Maryland-specific adjustments**

HRRP:
- Measures performance on **6 condition or procedure-specific** unplanned 30-day readmissions
- Hospitals are assessed **relative to the peer group median Excess Readmission Ratio**
- **Rolling 3-year Performance Period** that is updated annually
- Excludes planned readmissions

Revenue Adjustment

RRIP:
- Adjusts **hospitals' global budgets** based on performance
- Maximum **reward** and penalty is **2%**
- Reduces and rewards hospitals' global budgets **based on preset scale**
- Hospitals are assessed on the **better of improvement or attainment**

HRRP:
- Adjusts all **Medicare FFS MS-DRG payments** based on performance
- Penalty-only program; maximum penalty is **3%**
- Sliding scale payment adjustment based on **payment adjustment factor**

Reporting Timelines

RRIP:
- Provides hospitals with **monthly,** and annual reports
- Allows hospitals to submit questions and request corrections to measure logic **prior to implementation of revenue adjustments**

HRRP:
- Provides hospitals with **annual** reports; rolling 12-month measure performance updated **quarterly**
- Allows hospitals to submit questions and request corrections during **30-day Review and Correction Period**

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CMMI Readmission Rates - Data current through June 2021

Readmissions - Rolling 12M through Jun 2021

	CY 2012	CY 2013	CY 2014	CY 2015	CY 2016	CY 2017	CY 2018	CY 2019	CY 2020	Rolling 12M 2021
National	15.76%	15.38%	15.50%	15.46%	15.40%	15.43%	15.45%	15.52%	15.07%	15.22%
Maryland	17.41%	16.60%	16.48%	15.97%	15.65%	15.24%	15.40%	14.94%	14.73%	15.39%
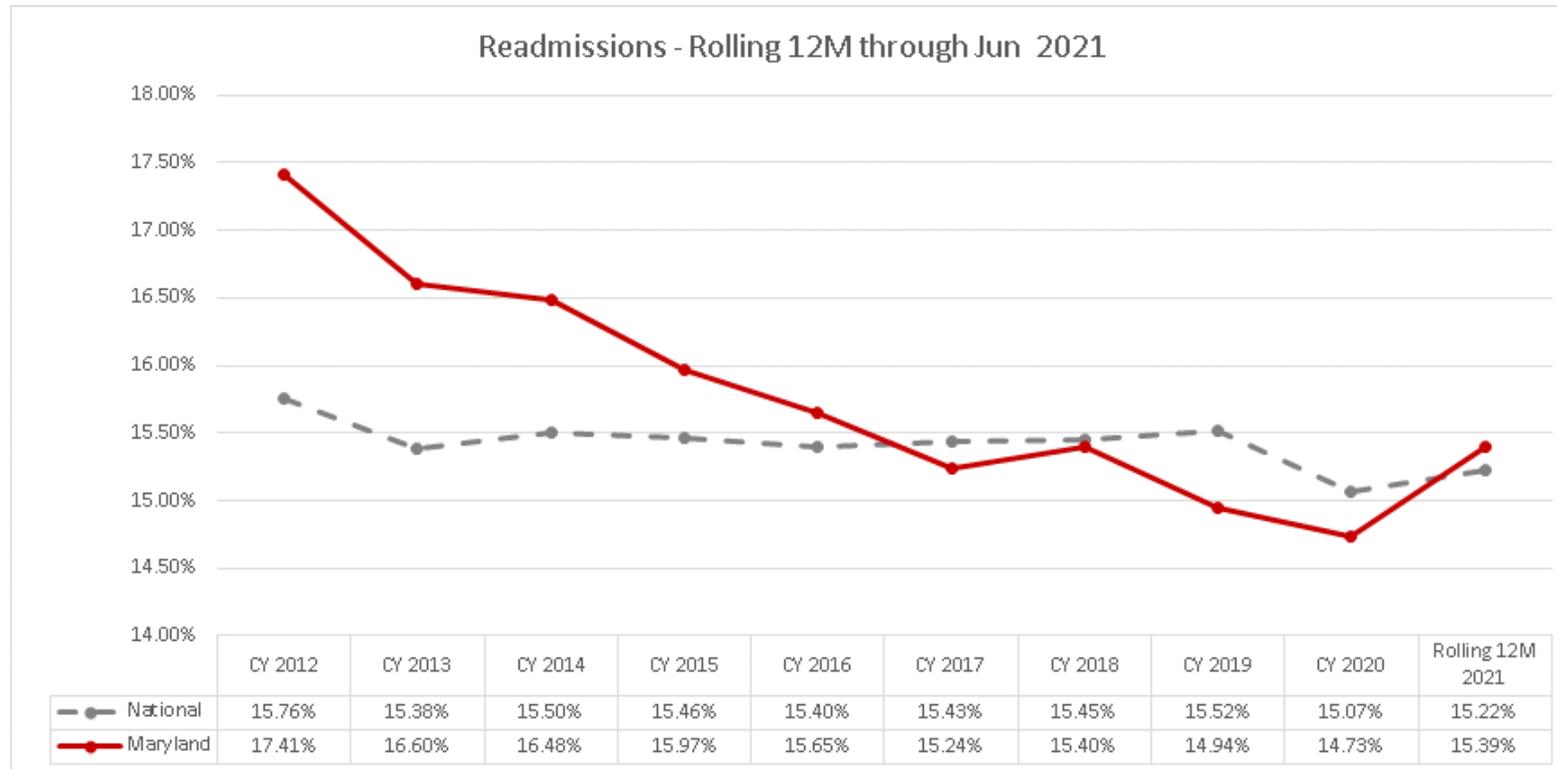
A few notes regarding the current (shown) unfavorable trend:
- COVID has impacted national hospital utilization: Nationally FY 21 saw a 22% decline in Monthly Admissions and 23% decline in Readmissions; within Maryland, those trends are divergent at 19% decline in admissions with 16% decline in readmissions
- As this measure of readmissions is unadjusted, HSCRC has anticipated that our Model's success in moving patients to the correct care setting might have outsize impact on an unadjusted measure; i.e. case-mix adjustment may be more germane given MD Model incentives and successes
- Next Steps: Maryland will continue to monitor these trends and to communicate with CMMI

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Readmissions by-Payer YTD CY 2021
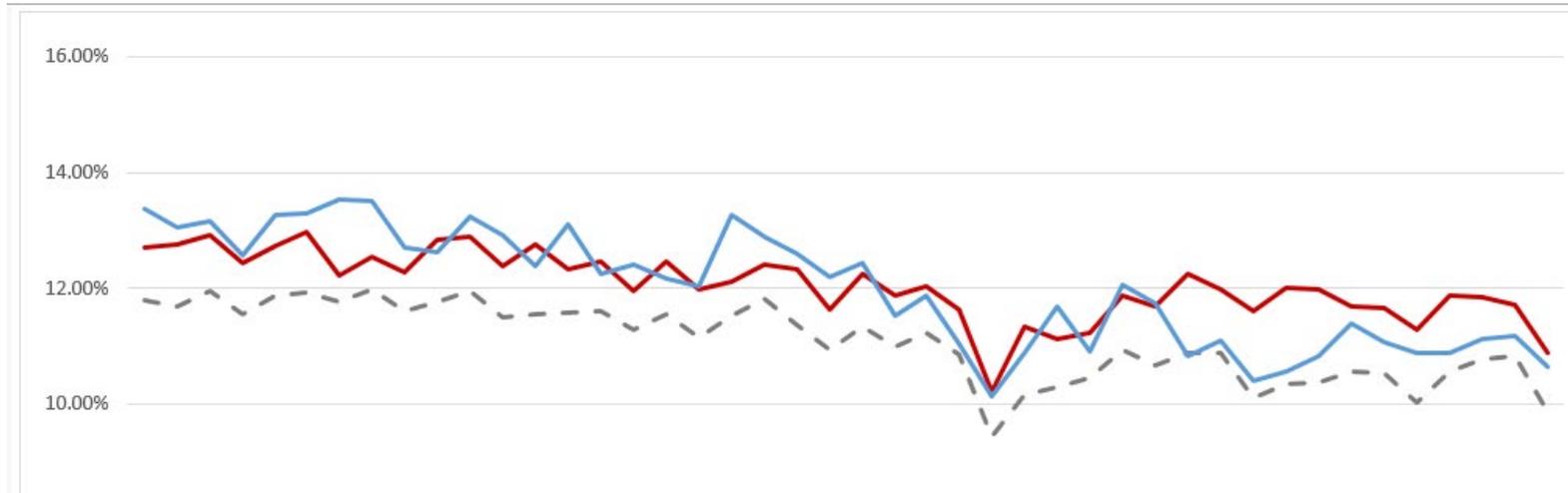
Case-Mix Adjusted Readmissions	All-Payer	Medicare FFS	Medicaid (All)	Commercial
CY 2018 YTD Aug	11.81%	12.66%	13.22%	9.00%
CY 2021 YTD Aug (Prelim)	10.44%	11.62%	10.99%	7.81%
CY 18-21 YTD Improvement	-11.65%	-8.22%	-16.83%	-13.19%
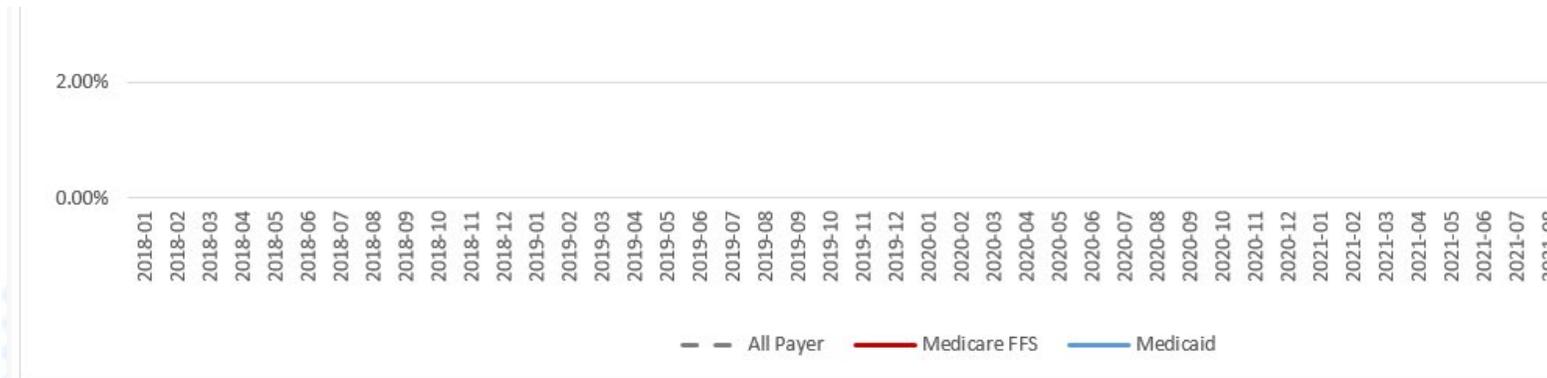
Readmissions in the RRIP/Case-mix

RY 2023 RRIP Improvement, YTD '21 over YTD '18 (through Aug)
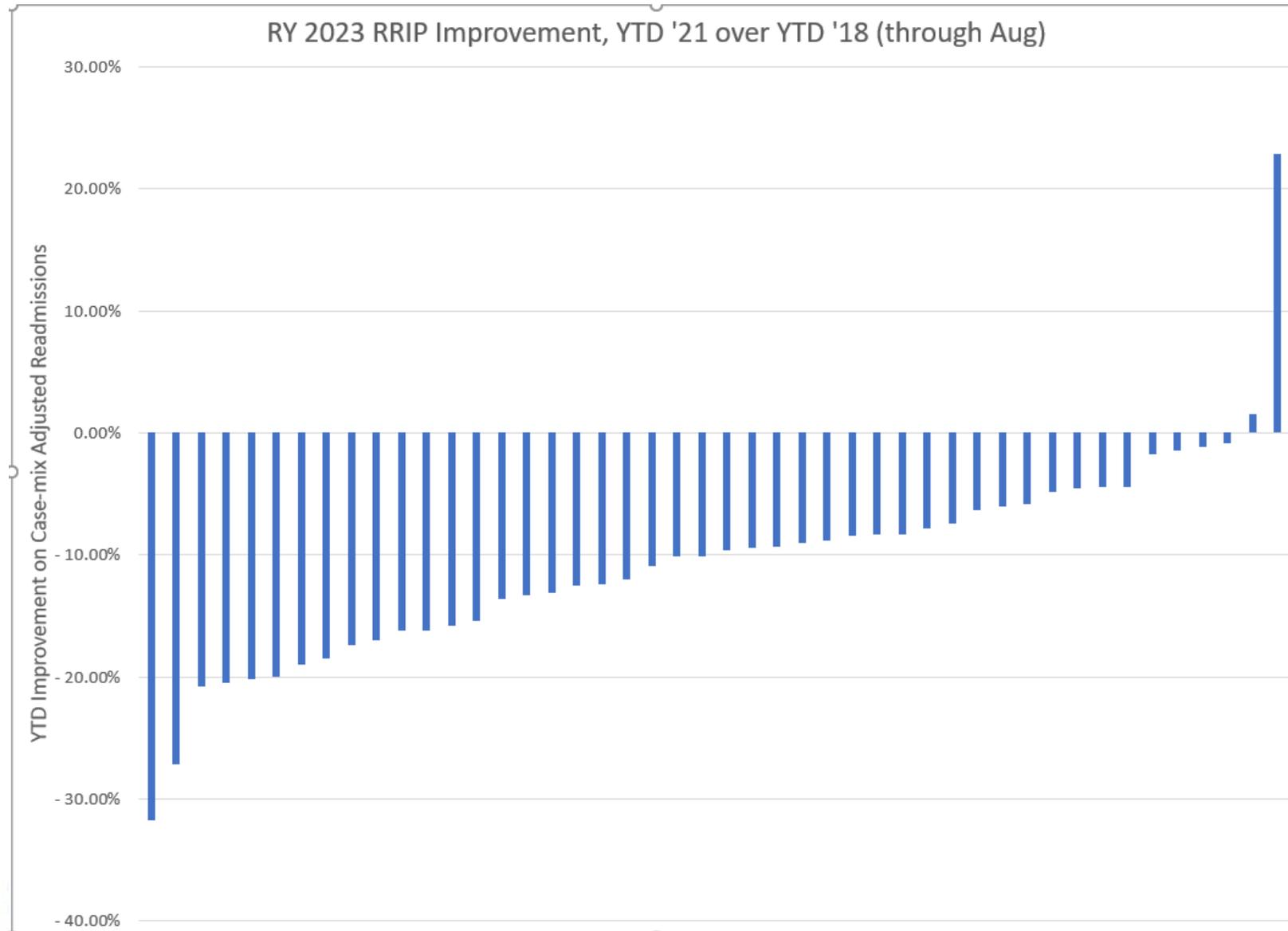
CMS Excess Days in Acute Care Measures

Background: CMS has 3 condition-specific measures of **Excess Days of Acute Care (EDAC)**: AMI, Heart Failure, and Pneumonia

- EDAC defined as: sum of **Readmissions** (length of stay of readmissions); **Observation Stays**; and **Emergency Department Visits**
- Conceptually this will provide a **more comprehensive/nuanced view of post-discharge hospital utilization** than binary readmission (yes/no)
- Excess days are sum of:
  - LOS for IP Readmission
  - Sum of Observation Stay half-days
  - 0.5x ED visits

EDAC measure offers two advantages over a dichotomous readmission measure: 1) it accounts for more forms of post-discharge care, and 2) it accounts for the intensity of post-discharge care.

EDAC Results: Heart Attack (7/1/17-12/1/19)

National weighted average: 6.58 excess days per 100 discharges*

Maryland weighted average: 8.68 excess days per 100 discharges*
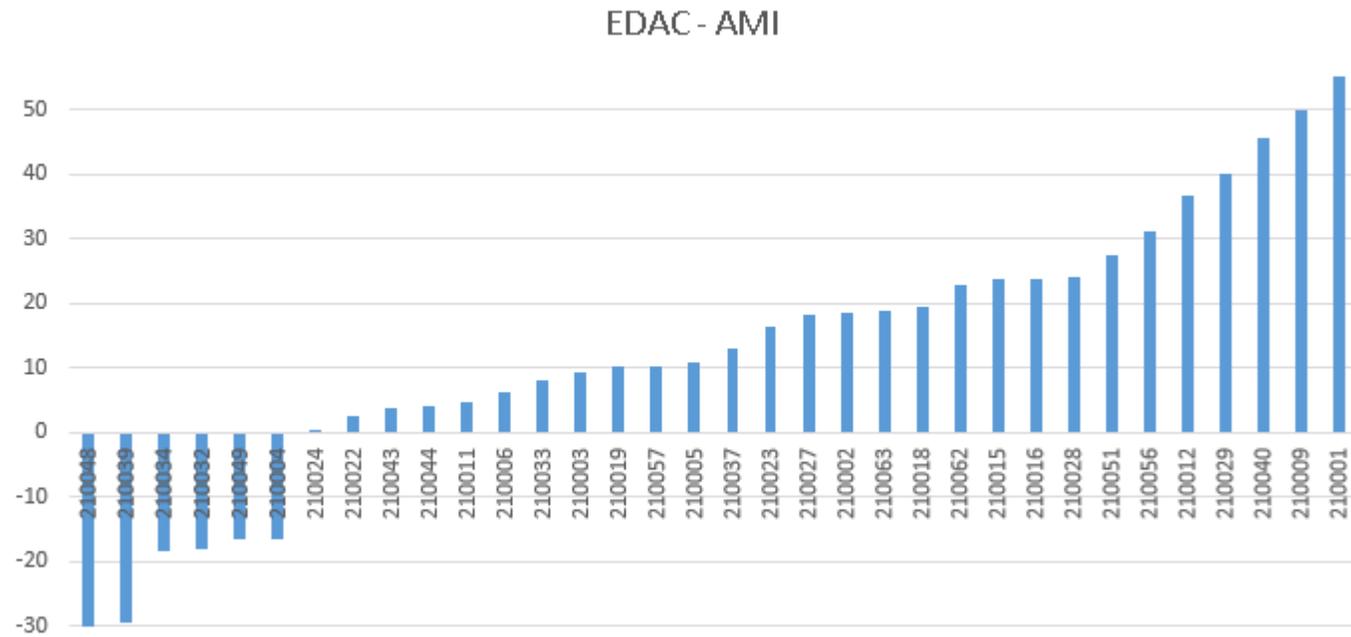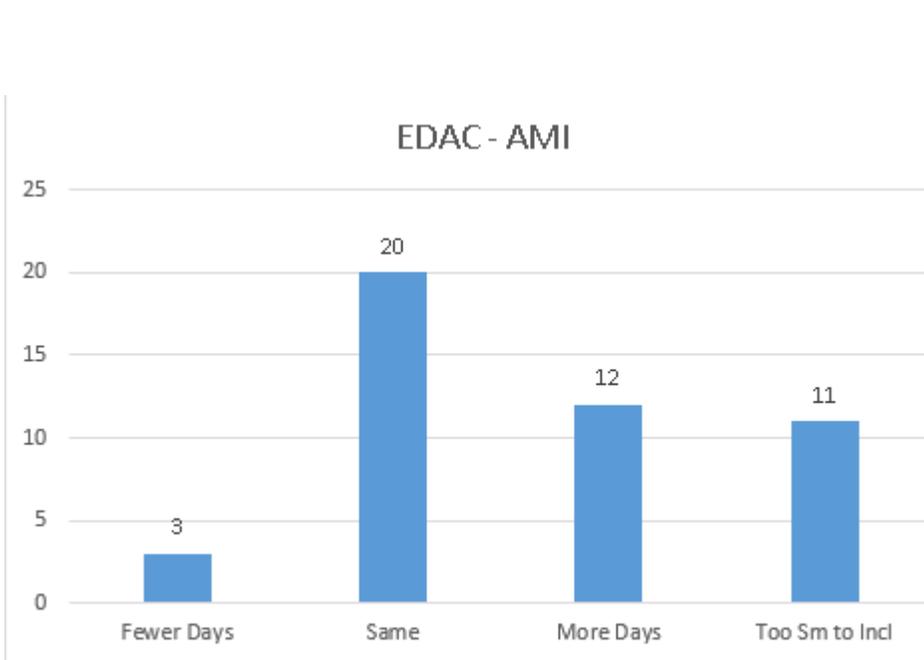
* Weighted averages are calculated using Jul 2014 - Jun 2017 data

EDAC Results: Heart Failure (7/1/17-12/1/19)

National weighted average: 10.17 excess days per 100 discharges*

Maryland weighted average: 13.31 excess days per 100 discharges*

* Weighted averages are calculated using Jul 2014 - Jun 2017 data

EDAC Results: Pneumonia (7/1/17-12/1/19)

National weighted average: 11.43 excess days per 100 discharges*

Maryland weighted average: 15.61 excess days per 100 discharges*

* Weighted averages are calculated using Jul 2014 - Jun 2017 data
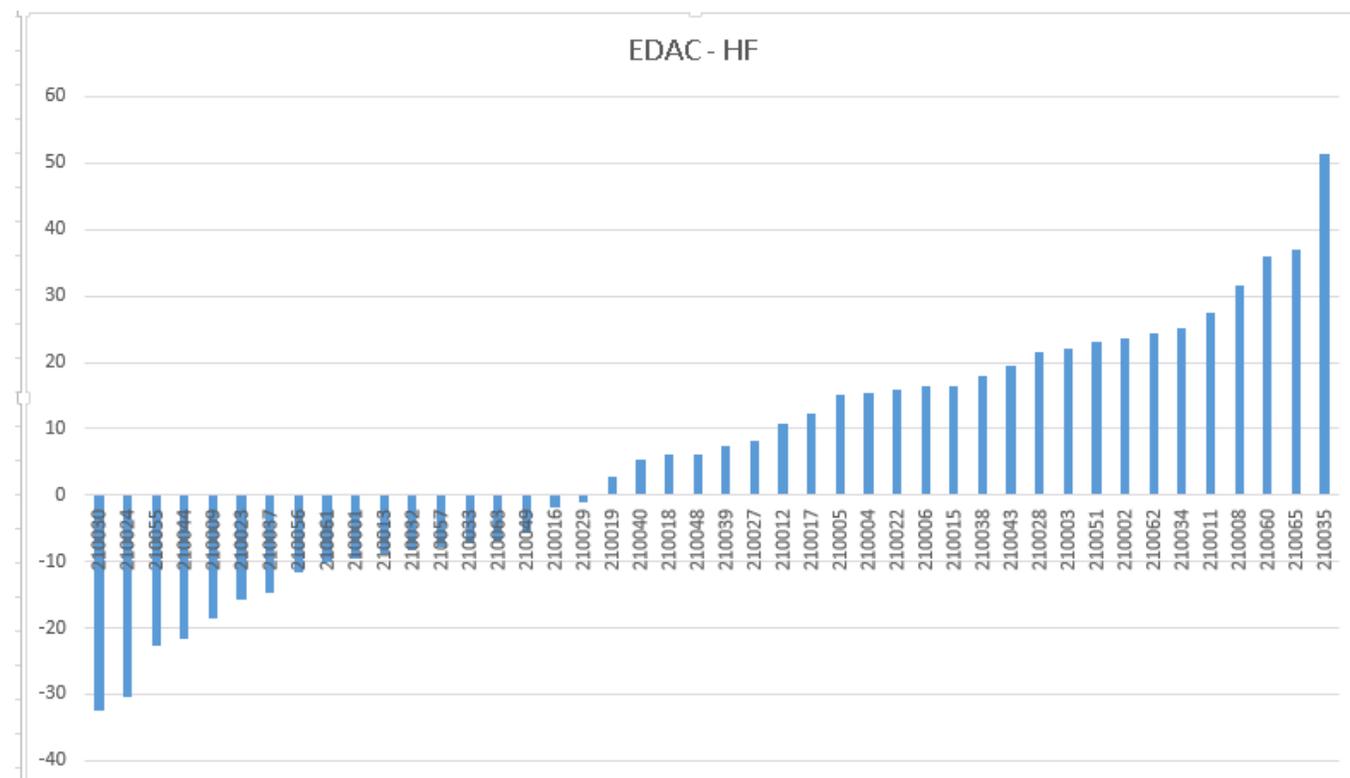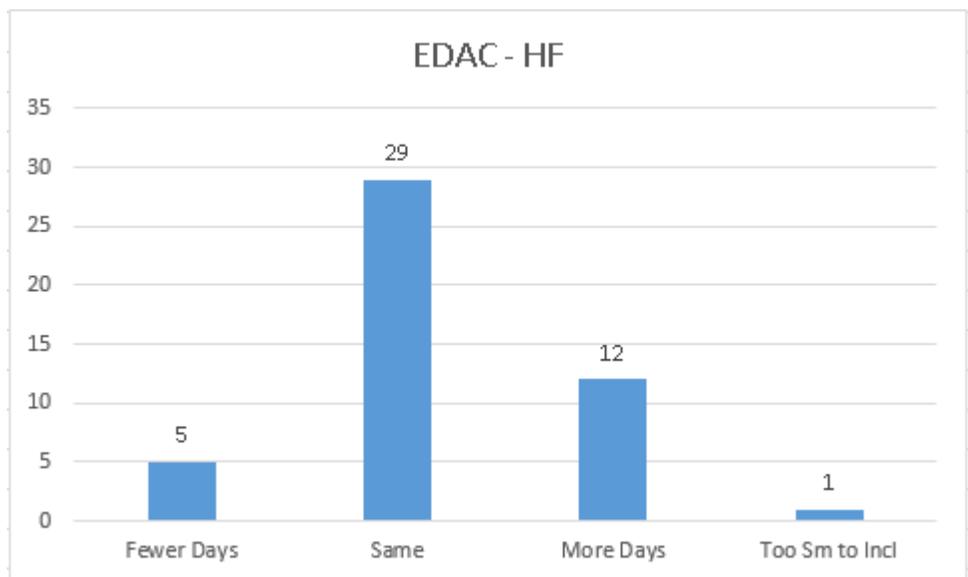
EDAC Risk Adjustment and Statistical Models

- Condition-specific EDAC measures use similar risk factors to readmissions
    - CMS uses diagnosis-based risk factors from the index visit, as well as a 12-month lookback
    - CMS generates expected values for EDAC using a hurdle model
        - Level 1: Risk of occurrence of any post-acute care
        - Level 2: # of days of post-acute care, via zero-truncated Poisson Model
    - Mathematica reviewed four models of risk-adjustment for an all-cause EDAC model, including the hurdle model, concluding that the hurdle model and linear models were viable
- Since HSCRC is considering an **all-cause** EDAC measurement, and using APR-DRG SOI norms, the indirect standardization method of case-mix adjustment used in readmissions could be adopted for consistency and simplicity

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EDAC Specifications: CMS vs. HSCRC

	CMS	HSCRC-MPR
Cohort	- Condition-specific index admissions - Enrolled in Medicare FFS Part A and Part B for 12 months prior to admission 65+ - Discharged alive, not transferred	Same criteria as HSCRC readmission measure All-cause, all-payer admissions
Outcome	Number of days patient spends in acute care after discharge; acute care defined as ED visits (0.5 days), observation stays rounded to ½ day, and unplanned inpatient days	Same
Risk-Adjustment Variables	Same as CMS readmission model; uses all claims going back 12 months.	APR-DRG and SOI at discharge
Model Type	Random effects hurdle model* (adjusts for days to death in 2nd model)	Tested non-zero hurdle model and linear/ current indirect standardization; does not adjust for days to death

*The hurdle model is comprised of two parts: The occurrence of any post-acute care is modeled using logistic regression. The number of days of post-acute care is modeled using a zero-truncated Poisson regression. Zero-truncation means that the count of days must be greater than 0.

Measure Development

- MPR tested the HSCRC EDAC measure and the different modeling options using the following metrics:
  - Mean rates compared to Medicare
  - Properties of predicted values
  - Goodness of fit
 - Calibration
  - Reliability

Table 1. Mean EDAC rates

Condition	CMS	HSCRC
AMI	0.997	0.897
Heart Failure	1.341	1.221
Pneumonia	1.016	0.865

HSCRC measure does not account for post-hospital death and uses APR-DRGs to identify conditions

Comparative analysis of Readmission-EDAC Trends, FY 2019

Readmission rate
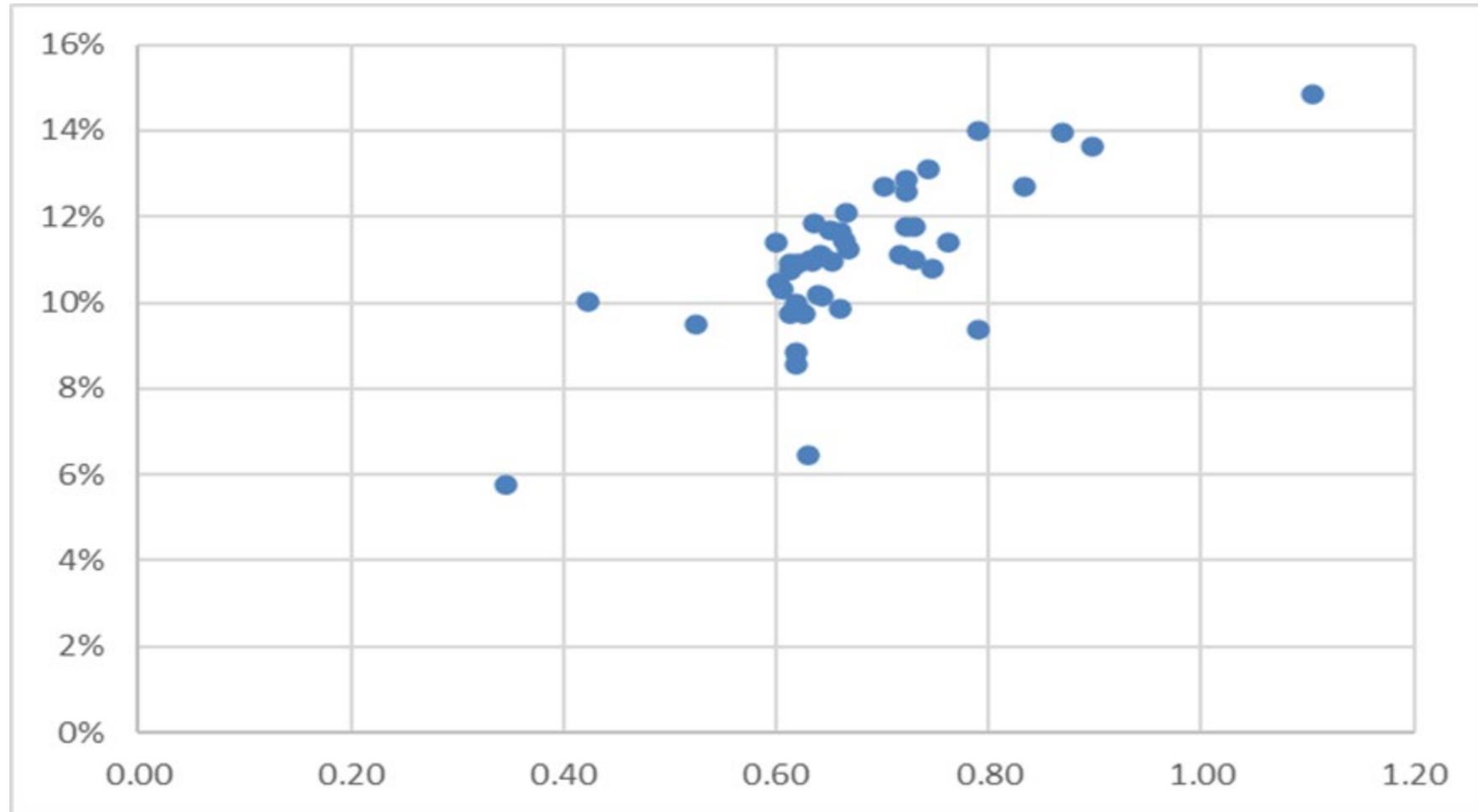
Days of acute care
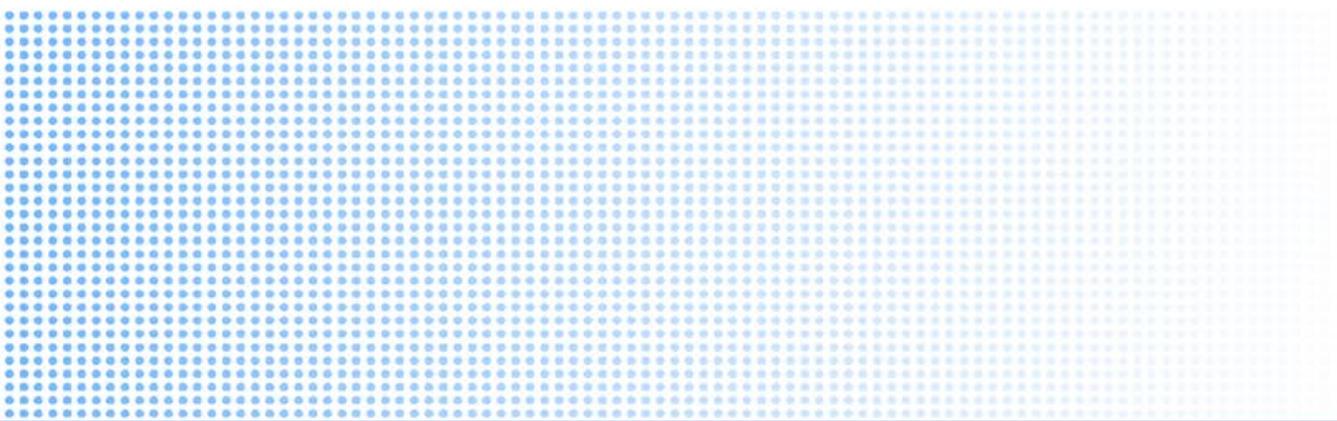
PAI and SIHIS

Road Map

- Health disparities refresher

- ADI update

- Current performance

- SIHIS goal

- Next steps

# Key Components of Disparity Methodology

- Measure patient-level social exposures

  - Patient Adversity Index (PAI) = race, Medicaid coverage, ADI

- Estimate association between social exposures and readmission risk at hospital level for baseline (2018)

  - Adjust for patient acuity and hospital average of social exposures

- Estimate the association for each performance year

- Difference between performance and baseline is disparity improvement

- Scale improvement to calculate reward

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Calculating the Patient Adversity Index (PAI)

- Estimate the association of readmission with ADI, Medicaid, Black race

  - Using 2018 inpatient case mix data

- Model includes interactions (e.g., combined effect of race, Medicaid)

- PAI = Predicted readmission risk from social factors

  - Estimate of the joint effect of ADI/Medicaid/race

  - Larger value = higher adversity

- PAI Score is then normalized so that statewide mean is 0. Each 1-point change in the scale represents a change of one standard deviation.

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Understanding the Disparity Measure
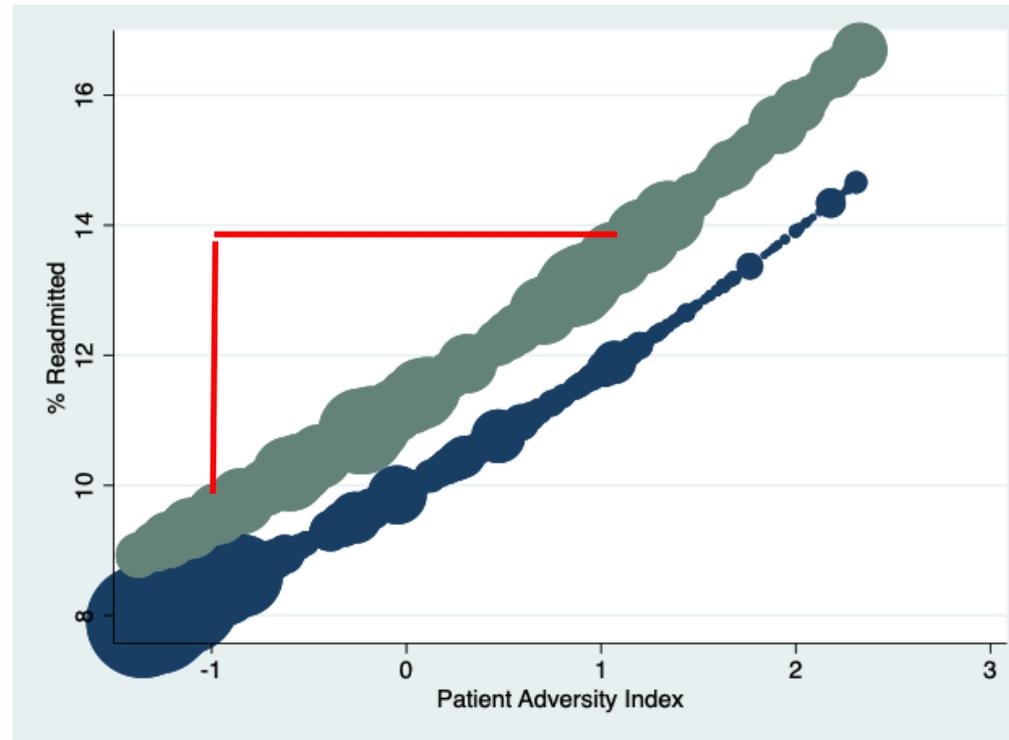
The multilevel model estimates the slope of the line connecting readmission rates at various levels of PAI within a hospital. A steeper slope means there is a larger disparity between rates for higher-PAI patients and rates for lower-PAI patients.

Pay for Performance

- Reward only

- Requires RRIP improvement for eligibility

- Scaling of rewards

  - Scale begins at 0.25% IP revenue for hospitals on track for 50 percent reduction in disparity gap measure over 8 years (>=15.91 percent

  - Capped at 0.50% of IP revenue for hospitals on pace for 75 percent or larger reduction in disparity gap measure over 8 years (>=29.29 percent

- RY 2022 improvement rewards suspended due to the COVID-19 public health emergency

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ADI Update

- Initial measure created with 2015 ADI

- Subsequent ADI updates raised the question of whether to update PAI similarly

  - Creates challenges in separating out changes in hospital performance and changes in PAI/ADI

- Staff recently updated reporting using national percentiles from 2019 ADI, and plan to use this version of ADI for the remainder of the model contract

- Switched to Census block group linkage to avoid issues with changing zip code geography; use zip code linked ADI and imputation for missing CBG-ADI match

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Annual Variation in Mean Hospital PAI
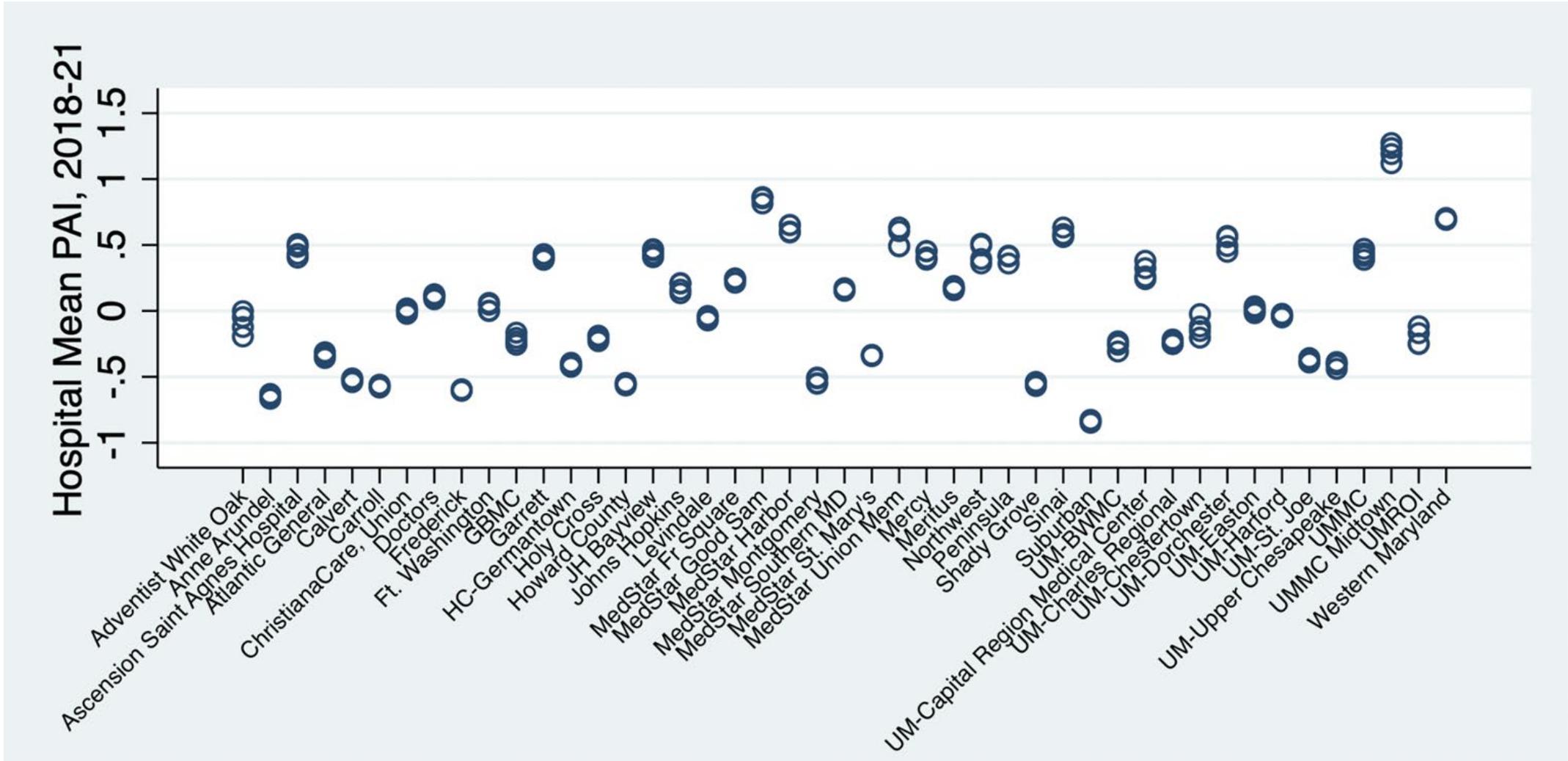
Annual Variation in Mean Hospital PAI
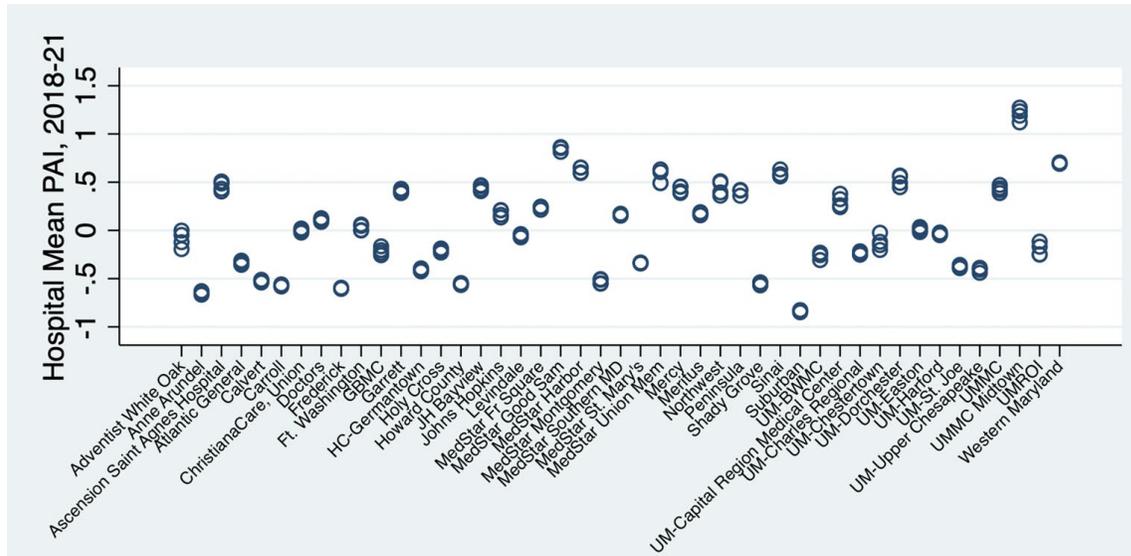
- Year over year change is negligible
- Fixing ADI at 2019 could result in mismeasurement of ADI if areas undergo rapid demographic change
- Changes over course of model are likely small
- Staff will monitor changes in new ADI releases

Annual Performance
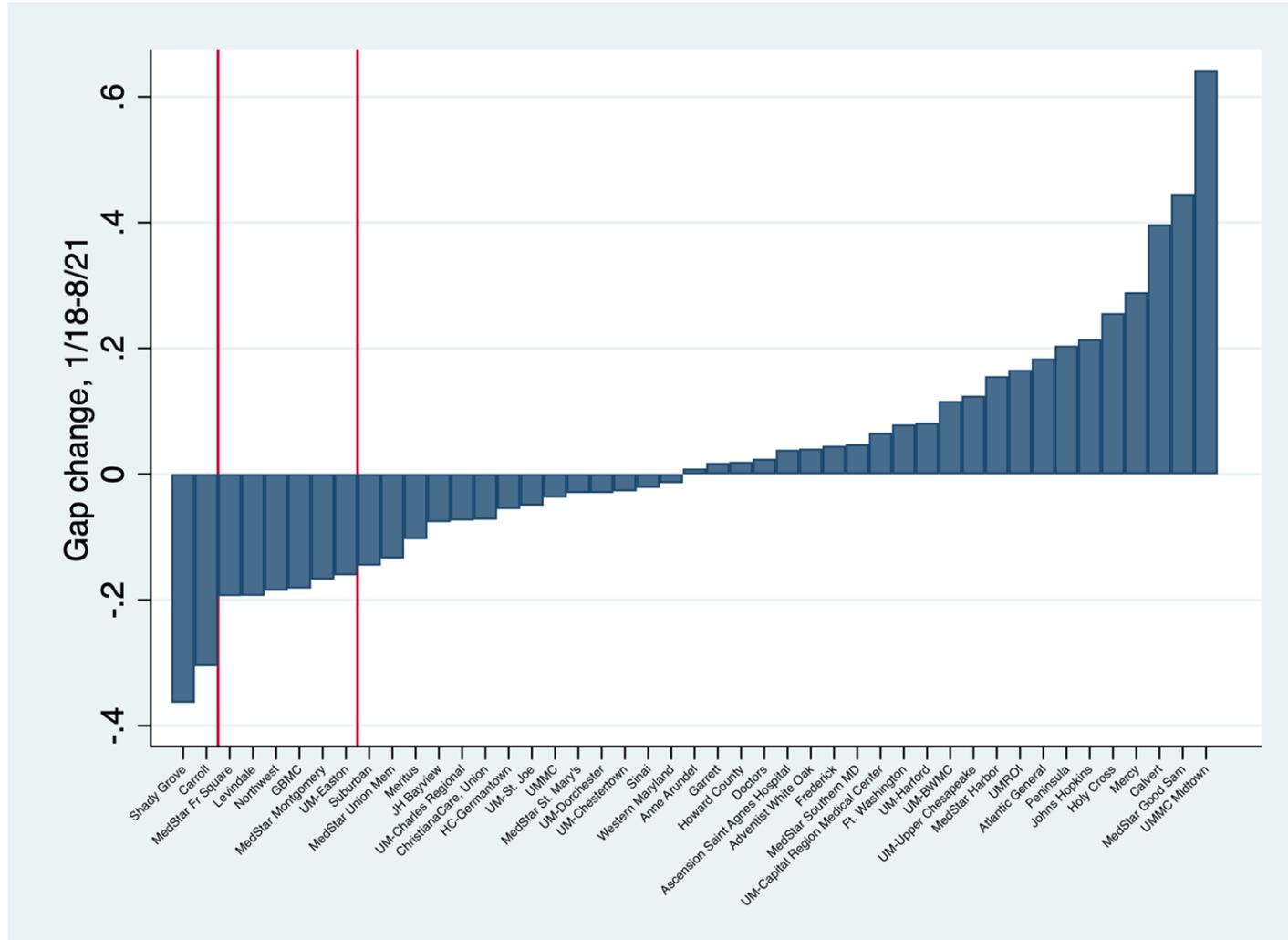
Annual Performance
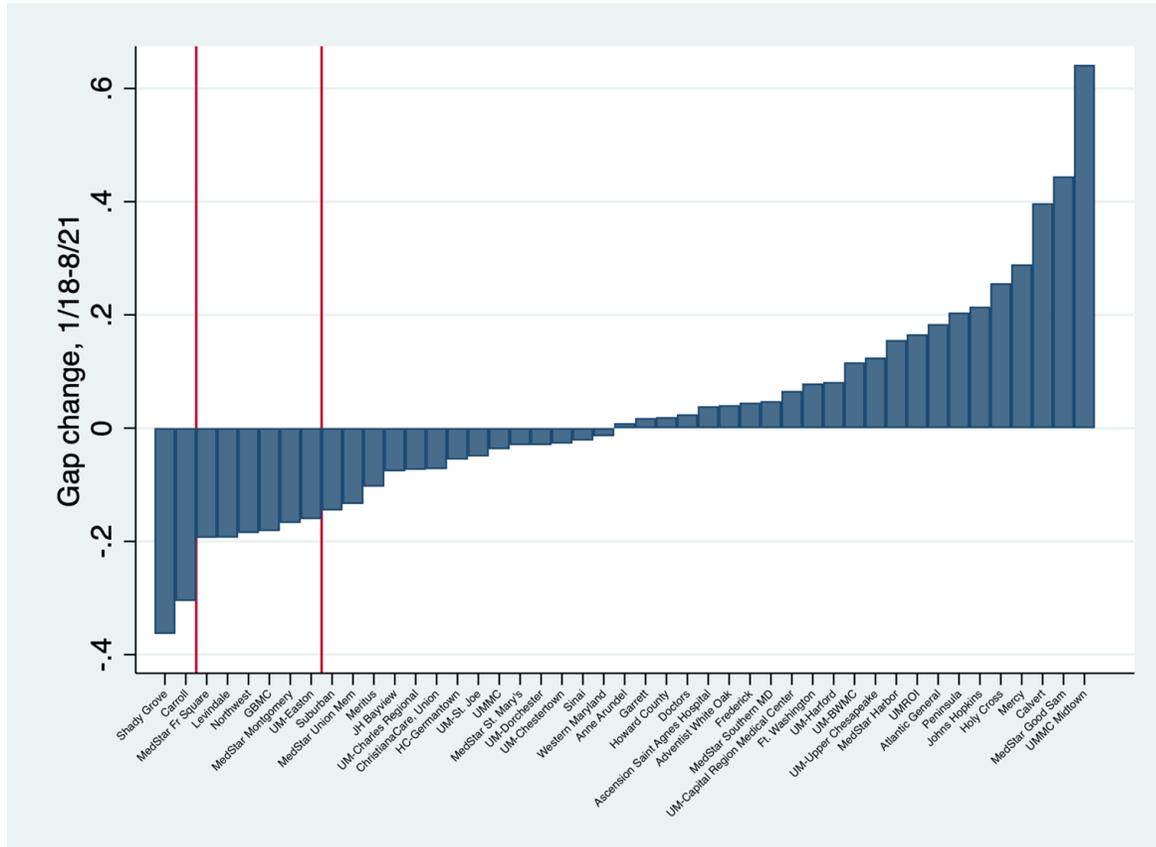
- Rate of improvement has flattened after initial gains

- Fewer hospitals are on track to meet the CY 2021 improvement target

- Staff will evaluate impact of COVID-19 on improvement

SIHIS Target

- The state is required to develop a target for disparity reduction as part of the Statewide Integrated Health Improvement Plan
- Prior to COVID, majority of hospitals were on track for 50-75% improvement
- Half of hospitals have improved over 2018 baseline
- Staff recommends setting provisional target at 50% improvement over model term
  - Subject to revision based on COVID findings, etc.

Next Steps

- Updated CRISP reporting
- Provide stakeholders with updated PAI coefficients and memo to assist in calculating patient PAI
- Evaluate impact of COVID
- Schedule stakeholder webinar
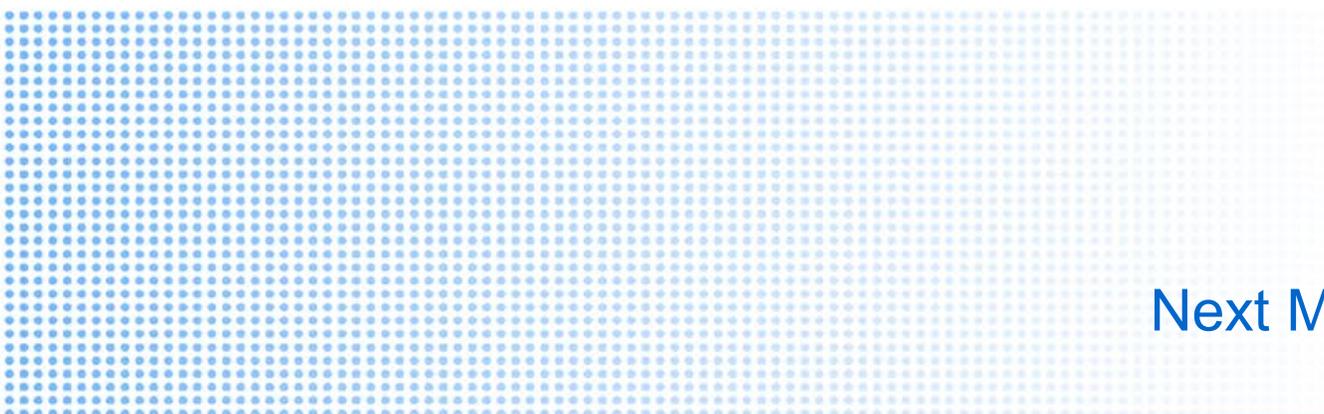
THANK YOU!

Next Meeting: Wednesday, December 15, 2021

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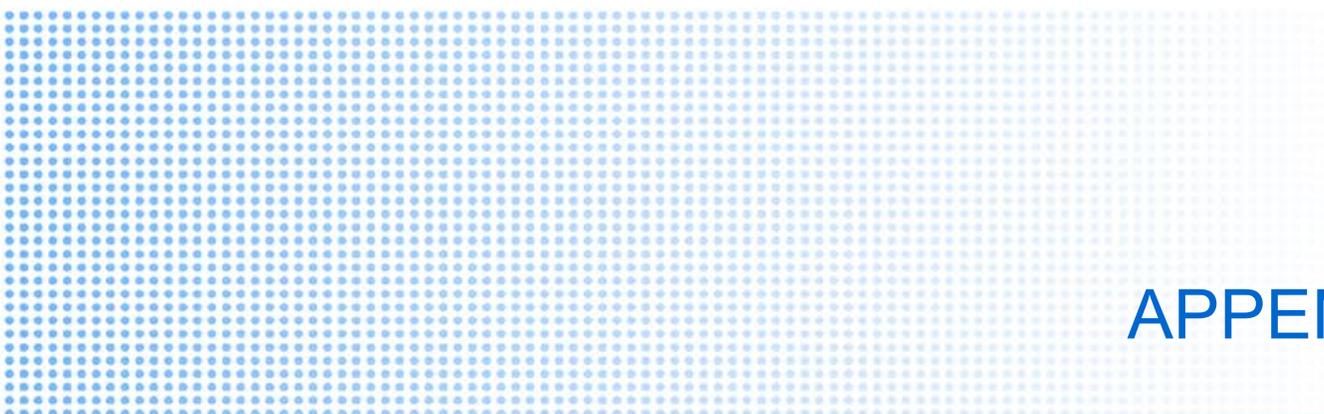
APPENDIX

NQF Serious Reportable Events

1. SURGICAL OR INVASIVE PROCEDURE EVENTS
    1A. Surgery or other invasive procedure performed on the wrong site (updated)
    1B. Surgery or other invasive procedure performed on the wrong patient (updated)
    1C. Wrong surgical or other invasive procedure performed on a patient (updated)
    1D. Unintended retention of a foreign object in a patient after surgery or other invasive procedure (updated)
    rative or immediately postoperative/postprocedure death in an ASA Class 1 patient (updated)
2. PRODUCT OR DEVICE EVENTS
    2A. Patient death or serious injury associated with the use of contaminated drugs, devices, or biologics provided by the healthcare setting (updated)
    2B. Patient death or serious injury associated with the use or function of a device in patient care, in which the device is used or functions other than as intended (updated)
    2C. Patient death or serious injury associated with intravascular air embolism that occurs while being cared for in a healthcare setting (updated)
3. PATIENT PROTECTION EVENTS
    3A. Discharge or release of a patient/resident of any age, who is unable to make decisions, to other than an authorized person (updated)
    3B. Patient death or serious injury associated with patient elopement (disappearance) (updated)
    3C. Patient suicide, attempted suicide, or self-harm that results in serious injury, while being cared for in a healthcare setting (updated)

*SOURCE: https://www.qualityforum.org/Topics/SREs/List_of_SREs.aspx

NQF Serious Reportable Events

4. CARE MANAGEMENT EVENTS

4A. Patient death or serious injury associated with a medication error (e.g., errors involving the wrong drug, wrong dose, wrong patient, wrong time, wrong rate, wrong preparation, or wrong route of administration) (updated)

4B. Patient death or serious injury associated with unsafe administration of blood products (updated)

4C. Maternal death or serious injury associated with labor or delivery in a low-risk pregnancy while being cared for in a healthcare setting (updated)

4D. Death or serious injury of a neonate associated with labor or delivery in a low-risk pregnancy (new)

4E. Patient death or serious injury associated with a fall while being cared for in a healthcare setting (updated)

4F. Any Stage 3, Stage 4, and unstageable pressure ulcers acquired after admission/presentation to a healthcare setting (updated)

4G. Artificial insemination with the wrong donor sperm or wrong egg (updated)

4H. Patient death or serious injury resulting from the irretrievable loss of an irreplaceable biological specimen (new)

4I. Patient death or serious injury resulting from failure to follow up or communicate laboratory, pathology, or radiology test results (new)

NQF Serious Reportable Events

5. ENVIRONMENTAL EVENTS
  5A. Patient or staff death or serious injury associated with an electric shock in the course of a patient care process in a healthcare setting (updated)
  5B. Any incident in which systems designated for oxygen or other gas to be delivered to a patient contains no gas, the wrong gas, or are contaminated by toxic substances (updated)
  5C. Patient or staff death or serious injury associated with a burn incurred from any source in the course of a patient care process in a healthcare setting (updated)
  5D. Patient death or serious injury associated with the use of physical restraints or bedrails while being cared for in a healthcare setting (updated)

6. RADIOLOGIC EVENTS
  6A. Death or serious injury of a patient or staff associated with the introduction of a metallic object into the MRI area (new)

7. POTENTIAL CRIMINAL EVENTS
  7A. Any instance of care ordered by or provided by someone impersonating a physician, nurse, pharmacist, or other licensed healthcare provider (updated)
  7B. Abduction of a patient/resident of any age (updated)
  7C. Sexual abuse/assault on a patient or staff member within or on the grounds of a healthcare setting (updated)
  7D. Death or serious injury of a patient or staff member resulting from a physical assault (i.e., battery) that occurs within or on the grounds of a healthcare setting (updated)

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