

# Disparities in Care Potential Financial Impact



Maryland Hospital Association

# Review

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- At the February Equity of Care meeting, statewide data were presented on various measures of health equity
  - The presentation built on hospital-specific reports that were released in January
  - For next steps, participants wanted to see an example of the financial impact of disparities
    - Participants agreed that this example would be helpful in explaining why addressing inequities in care can improve financial performance

# Quality Programs in Maryland

- Maryland hospitals are subject to a variety of quality-based reimbursement policies, which collectively can change inpatient revenue by up to 9 percent depending on performance

**Quality Programs in Maryland and Weights**

<b>Program</b>	<b>Penalty to Reward Range Depending on Performance</b>
Readmissions Reduction Policy	-2% to +1%
Maryland Hospital Acquired Conditions	-2% to +1%
Quality Based Reimbursement	-2% to +1%
<b>Total</b>	<b>-6% to +3%</b>

- There are other factors affecting inpatient revenue that health disparities can impact, including admissions volume, performance on the Potentially Avoidable Utilization Shared Savings Program, and performance on the Medicare Performance Adjustment program

# Statewide Admissions

- Statewide admissions data depicted below by race for 2016 (the most recent complete calendar year for which we have data)
- Race was the factor chosen for this sensitivity analysis due to its emphasis in previous Equity of Care meeting discussions
- Using other dimensions of health equity (e.g. ethnicity, gender, age, etc...) in a sensitivity analysis will result in different financial impacts

**Statewide Admissions by Race**

Race Categories	2016
White	350,471
African American or Black	203,892
Other	34,232
Asian	16,390
Native Hawaiian or Other Pacific Islander	3,095
Unknown	2,892
American Indian or Alaska Native	2,415
Two or More Races	2,349
Declined to Answer	2,162

# Readmissions Rate Reduction

- In 2016, there were wide disparities in readmissions rates by racial groups within the state

Statewide All-Payer, Readmissions Rate by Race, 2016<sup>1</sup>

Race Categories	Number of Eligible Discharges	Number of Readmissions	Readmission Rate
Native Hawaiian or Other Pacific Islander	2,243	172	7.7%
Asian	11,393	882	7.7%
Unknown	1,928	156	8.1%
Other	23,231	1,880	8.1%
American Indian or Alaska Native	1,810	172	9.5%
Declined to Answer	1,622	165	10.2%
Two or More Races	1,821	196	10.8%
White	287,586	34,828	12.1%
African American or Black	165,768	23,771	14.3%

← Lowest Statistically Significant Rate

1. Source: MHA analysis of HSCRC inpatient case-mix data

# Financial Impact of Readmissions Rate Reductions

- If we assign the statewide performance data to a hypothetical hospital, and all racial groups match the all-payer, risk-adjusted readmissions rate of the best performing group in the state in 2016 (7.7 percent), then that hospital would meet the achievement benchmark (10.2 percent) and would receive the full 1 percent reward for RY 2020.
  - If that same hospital had \$200 million in inpatient regulated revenue, then the reward for correcting these disparities would be \$2 million.
  - If the hospital didn't improve to 7.7 percent, and performed like the rest of the state, then it would lose 0.5 percent of inpatient revenue, or \$1 million.
  - **The swing in performance on readmissions would be worth \$3 million in this scenario.**

**Attainment Reward & Penalty Scale for the Readmissions  
Reduction Incentive Program (RRIP), CY 2018 Performance Year**

<b>All Payer Readmission Rate CY18</b>	<b>RRIP % Inpatient Revenue Payment Adjustment</b>
<b>A</b>	<b>B</b>
<b>Lower Absolute Readmission Rate</b>	<b>1.0%</b>
<b>10.20% (Benchmark)</b>	1.0%
<b>10.45%</b>	0.5%
<b>10.70% (Threshold)</b>	<b>0.0%</b>
<b>10.95%</b>	-0.5%
<b>11.20%</b>	-1.0%
<b>11.45%</b>	-1.5%
<b>11.70%</b>	-2.0%
<b>Higher Absolute Readmission Rate</b>	<b>-2.0%</b>

# Maryland Hospital Acquired Conditions

- The Maryland Hospital Acquired Conditions program will likely be changing beginning in CY 2019
- The most likely scenario is that this program continues to use Potentially Preventable Conditions (PPCs) but focuses on a more narrow list to include only those PPCs that are clinically relevant, have room for improvement and are impactful in terms of cost
- To model the impact of disparities on all PPCs would be misleading
- MHA, with feedback from hospital leaders via the Council on Clinical Quality Issues and the Technical Workgroup, is evaluating a subset of PPCs to propose including in CY 2019 (see next slide)
  - For this analysis, we limited the sensitivity analysis to the impact of disparities on the subset of PPCs listed on the next slide only

# PPCs for Analysis

PPCs MHA is currently evaluating to potentially recommend for inclusion in CY 2019 payment policy

PPC Number	PPC Name	Number of PPCs in 2016
1	Stroke & Intracranial Hemorrhage	363
3	Acute Pulmonary Edema and Respiratory Failure without Ventilation	742
4	Acute Pulmonary Edema and Respiratory Failure with Ventilation	484
5	Pneumonia & Other Lung Infections	505
7	Pulmonary Embolism	264
8	Other Pulmonary Complications	206
9	Shock	478
11	Acute Myocardial Infarction	299
16	Venous Thrombosis	228
35	Septicemia & Severe Infections	410
40	Post-Operative Hemorrhage & Hematoma without Hemorrhage Control Procedure or I&D Proc	680
30	Poisonings due to Anesthesia	0
31	Decubitus Ulcer	62
32	Transfusion Incompatibility Reaction	0
45	Post-procedure Foreign Bodies	12
46	Post-Operative Substance Reaction & Non-O.R. Procedure for Foreign Body	1



# PPCs Rates by Race

PPC Rates by Race for Selected PPCs, 2016<sup>1</sup>

Race Category	Number of Eligible	Number of PPCs in 2016	PPC Rate in 2016
White	293,171	2,936	1.00%
African American or Black	163,790	1,569	0.96%
Other (Unidentified)	24,001	152	0.63%
Asian	112,500	78	0.07%

← Lowest Statistically Significant Rate

- In 2016, there were 4,734 occurrences of the previously identified subset of PPCs
- If the PPC rate was lowered to 0.63 percent for all eligible patients, there would have been 3,739 occurrences (a reduction of 995 PPCs, or 21 percent)

# Disparities' Impact on Potentially Preventable Complications

## Impact on Score

2016 Statewide Score for Subset of PPCs	.58
PPC score if all hospitals had a 0.63 percent PPC rate	.64
<b>Score Difference</b>	<b>.06</b>
<b>Financial impact in RY 2020 on a hospital with \$200 million in regulated inpatient revenue</b>	<b>\$266,667</b>

- This analysis presumes equal casemix (equal expected values) among different racial groups

# Difficulties in Performing a Sensitivity Analysis on Readmissions

- Making assumptions for a one-size-fits-all model that can be presented to senior leaders regarding the dollar impact of disparities on readmissions is very difficult for two reasons:
  - 1) Individual hospital readmissions rates by race and other dimensions of equality vary widely from one another
    - There is no single set of assumptions that will work for all hospitals
  - 2) Though most hospitals have at least one racial group that is performing better than the attainment benchmark (the point at which a hospital receives the full reward, 10.2 percent in CY 2018), achieving this result across all groups is highly unrealistic
    - The statewide all-payer, risk-adjusted readmissions rate was 11.59 percent in CY 2017 through August
    - Since 2013, the rate has dropped 9.0 percent (from 12.74 percent), meaning a further drop to 7.7 percent in the near-term is unlikely
    - A better approach is to make **achievable, hospital-specific assumptions of improvement** by various groups and model the financial impact that way
      - Under the current readmissions reduction program, hospitals can positively affect scores for reward & penalty determinations through improvement as well as attainment

# Difficulties in Performing a Sensitivity Analysis on PPCs

- As is the case with readmissions, hospital PPCs rates vary widely and creating a one-size-fits-all model that can be presented to senior leaders regarding the dollar impact of disparities on readmissions is very difficult
- Presuming that all eligible admissions can have the same PPC rates as the best performing group is probably not feasible
- The PPC payment policy will be changing in CY 2019 and depending on which PPCs are included, this can make a difference in impacts
- PPC scores are ratios of observed cases to expected cases (O/E ratios). The number of expected PPCs increases as the casemix intensifies, and the casemix likely varies by race and other dimensions of equity of care. This means that changes in the occurrences in PPCs alone cannot precisely predict final impacts.

# Next Steps?

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- MHA can make a workbook that allows hospitals to input assumptions on improvement on clinical measures along various dimensions of equity of care (race, ethnicity, gender, age and language)
- This workbook can financially quantify the impact of disparities on hospitals and the savings that can be accrued if the disparities are corrected