

Michigan Value Collaborative / MHA Keystone Center Statewide Childbirth Episodes Report

This statewide childbirth episodes report from the Michigan Value Collaborative (MVC) Coordinating Center provides information on episode payments, mode of delivery, patient characteristics, and rates of hemorrhage, hypertension, and severe maternal morbidity (SMM) for 90-day claims-based episodes of care for vaginal and cesarean delivery. Measures in this report are based on Blue Cross Blue Shield of Michigan (BCBSM) PPO Commercial episodes for childbirth index admissions that occurred at MVC-participating hospitals between 1/1/19 and 12/31/21. Hospitals in this report are unidentified and each was required to have a minimum of 20 childbirth episodes across the reporting period to be included. This report shows several metrics by index hospital region of Michigan as follows: Region 1 (Northern Michigan), Region 2 (Western Michigan), Region 3 (Mid-Michigan), and Region 4 (Southeast Michigan); <https://michiganvalue.org/resources>.

Table 1. Average Price-Standardized Facility Index Payment and Length of Stay, by Type of Hospitalization

Type of Hospitalization	Average Facility Index Payment (Price-Standardized)	Average Index Length of Stay
All childbirth hospitalizations	\$6,269	3.4
Vaginal delivery	\$5,594	3.1
Cesarean delivery	\$7,770	4.0
Birth with hypertension diagnosis	\$7,634	5.7
Birth with hemorrhage diagnosis	\$7,425	4.1
Birth with severe maternal morbidity diagnosis	\$8,365	5.0

Figure 1. Average Price-Standardized & Risk-Adjusted 90-Day Total Episode Payments by Mode of Delivery, Overall and by Hospital*

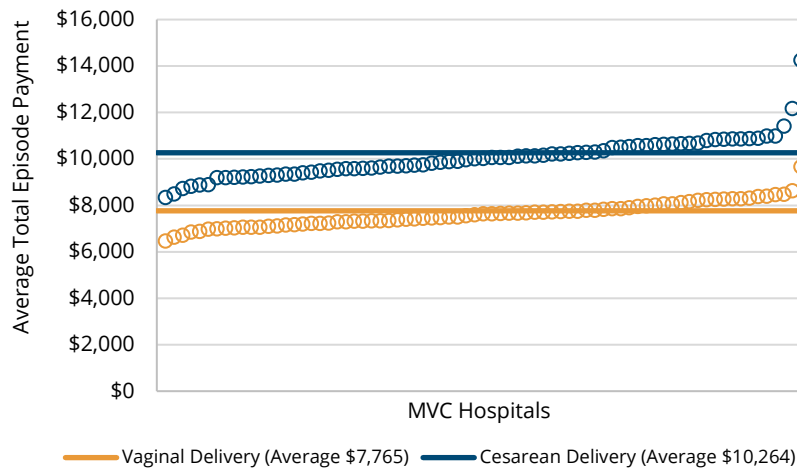
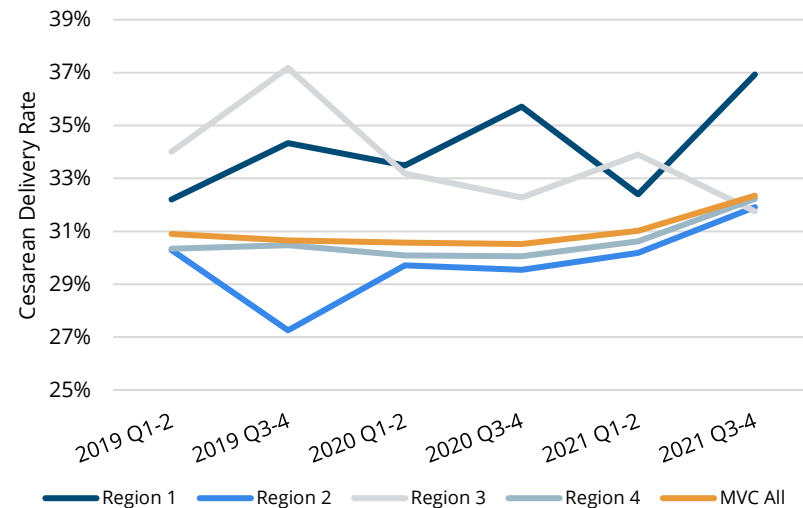


Figure 2. Rates of Cesarean Delivery, Overall and by Region of Michigan



Data Source & Reporting Period: MVC 90-day vaginal and cesarean delivery claims-based episodes of care for BCBSM PPO Commercial with index events 1/1/2019-12/31/2021

*Caterpillar plots display hospitals ordered from lowest to highest rate/average for each measure

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Table 2 presents patient characteristics by region, including the percentage of patients living in a zip code considered “distressed” or “at-risk” according to the Economic Innovation Group’s Distressed Communities Index (<https://eig.org/distressed-communities/>) which categorizes zip codes from distressed to prosperous using community-level economic indicators. The percentage of patients with at least one of 79 hierarchical condition categories is also shown, along with patient race. Due to data constraints, metrics displaying patient race in this report are based only on episodes with index admissions through September 2020.

Table 2. Characteristics of Patients with Childbirth Episodes, Overall and by Region of Michigan

	Region 1	Region 2	Region 3	Region 4	MVC All
Age, mean	29.4	29.9	29.0	30.9	30.3
Patients living in at-risk or distressed zip code, %	32.5%	59.2%	38.7%	66.7%	59.2%
Patients with one or more hierarchical condition comorbidities, %	14.8%	18.9%	18.1%	18.8%	18.5%
Race**					
White	80.4%	77.1%	80.5%	67.1%	72.2%
Black	0.2%	4.1%	4.8%	13.2%	9.0%
Asian or Pacific Islander	1.1%	1.9%	0.8%	4.8%	3.3%
Other Race Categories	5.7%	4.6%	3.1%	4.5%	4.4%
Unknown	12.6%	12.3%	10.8%	10.4%	11.1%

Figure 3. Rates of Hypertension, Hemorrhage, and SMM During Index Hospitalization, Overall and by Hospital*

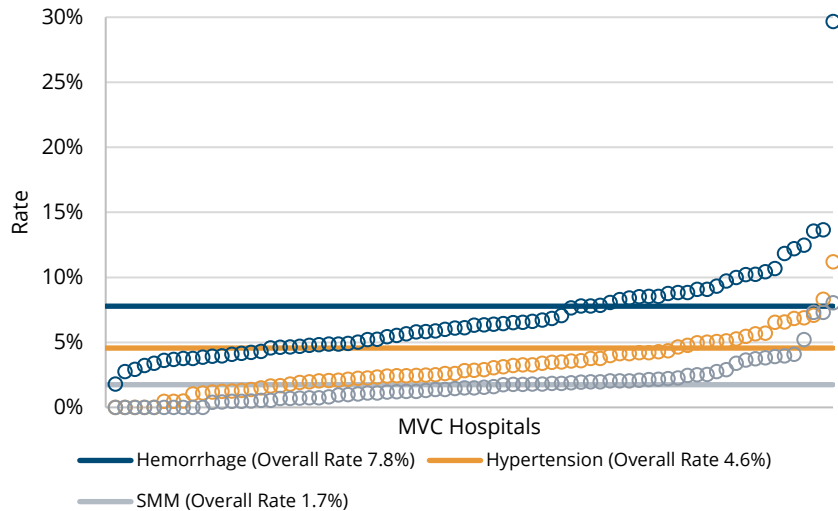
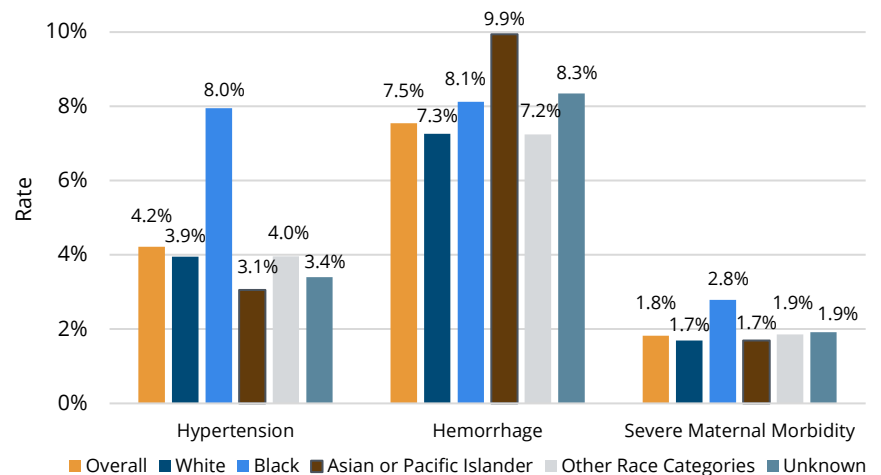


Figure 4. Rates of Hypertension, Hemorrhage, and SMM, Overall and by Race**



Data Source & Reporting Period: MVC 90-day vaginal and cesarean delivery claims-based episodes of care for BCBSM PPO Commercial with index events 1/1/2019-12/31/2021

*Caterpillar plots display hospitals ordered from lowest to highest rate/average for each measure

**Denominator for measures involving race is limited to episodes through September 2020

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