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between March and December 2019 (halted early due to COVID) and were then compared to individuals who were evaluated in the same pediatric clinic between January 2018 and February 2019 (Historical Group). Maternal blood pressure (BP) evaluations were performed at the time of newborn visits: 2 days after discharge from the hospital, at 2 weeks and 2 months of infant age. An algorithm was provided for management based on BP and symptomatology. Data were analyzed using the appropriate statistical tests.

**RESULTS:** Both groups had similar maternal characteristics (Table 1). An increase in readmission due to postpartum preeclampsia was noted in our intervention group 17/568 (3%) in comparison to 11/620 (1.8%) in the historical group (Table 2). In our quality intervention cohort, black women comprised 94% of those readmitted compared to 36% of those in the historical cohort. Of those readmitted from both groups, 12/28 (43%) did not have a hypertensive disorder of pregnancy diagnosis on initial discharge from hospital.

**CONCLUSION:** Our trial resulted in an increase in detection of severe preeclampsia postpartum after discharge from hospital. Also of those patients readmitted 43% had no previous hypertensive disorder diagnosis. Interestingly, we noted that of those readmitted due to the QI trial 94% were black which could lend to an intervention that may help in increasing access to postpartum care. The newborn visits in comparison to routine postpartum follow up appointments, possibly allow for increased adherence and earlier maternal BP evaluation.

Table 1. Maternal Characteristics

Characteristic N (%)	QI project	Historical Cohort	P- value
Age—yr Median Interquartile range	27 (23 - 31)	27 (22 - 32)	0.4
Age ≥ 35 yo	63 (11)	83 (13)	0.233
Race or Ethnic Group			
Black	303 (53)	305 (49)	0.296
White	61 (11)	58 (9)	
Asian	11 (2)	15 (2)	
Hispanic	139 (25)	164 (26)	
Other	53 (9)	77 (12)	
Gestational age at delivery	38.2 (37.1 - 39.2)	38.4 (37.2 - 39.2)	0.089
Nulliparity	171 (30)	181 (29)	0.715
Multifetal gestation	14 (2)	18 (3)	0.721
Cesarean delivery	201 (36)	215 (35)	0.670
Chronic HTN	56 (10)	61 (10)	1.00
Hypertensive disorder prior to discharge from delivery admission*	143 (25)	142 (23)	0.638
Pregestational DM / GDM	48 (8)	50 (8)	0.826
BMI at delivery	32.5 (28.2 - 38.0)	32.1 (27.6 - 36.9)	0.103
BMI >30	358 (64)	377 (62)	0.584
Prior pregnancy complicated by preeclampsia	43 (8)	42 (8)	0.736

\*antepartum, labor induction, or immediately postpartum during initial labor admission

Table 2. Description of all patients that were readmitted for preeclampsia

Characteristic N (%)	QI project	Historical Cohort	P- value
Number of patients	17	11	n/a
Age—yr Median Interquartile range	32 (27 - 38)	30 (29-36)	0.524
Age ≥ 35 yo	7 (41)	3 (27)	0.453
Race or Ethnic Group			
Black	16 (94)	4 (36)	0.003
White	0	1(9)	
Asian	0 (0)	0	
Hispanic	0 (0)	1 (9)	
Other	1 (6)	5 (46)	
Gestational age at delivery	37.35 (36.7 - 38.15)	37.4 (37.0 - 39.1)	0.323
Nulliparity	3 (18)	2 (18)	0.971
Multifetal gestation	0 (0)	2 (18)	0.146
Cesarean delivery	9 (56)	7 (64)	1.000
Chronic HTN	6 (35)	8 (73)	1.000
Hypertensive disorder prior to discharge from delivery admission*	9 (56)	7 (64)	1.000
Pregestational DM / GDM	1 (6)	0 (0)	1.000
BMI at delivery	36.2 (27.2 - 39.1)	34 (26.7 - 39.8)	0.869
BMI >30	10 (59)	7 (64)	1.000
Prior pregnancy complicated by preeclampsia	1 (6)	1 (11)	1.000

\*antepartum, labor induction, or immediately postpartum during initial labor admission

## 1161 Six month experience of universal COVID-19 screening of patients delivering at an urban academic center

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**OBJECTIVE:** During the first two weeks of the pandemic, we discovered that within our academic medical center in New York City more than 1 in 8 patients admitted for labor and delivery were COVID-19 positive without symptoms. We sought to describe rates of COVID-positivity rates among gravidas delivering over the subsequent months of the COVID-19 pandemic.

**STUDY DESIGN:** A retrospective review was conducted of SARS-COV2 PCR results among all gravidas who delivered from March 22 to Sept 12, 2020. A program of universal testing for COVID-19 began on March 22, 2020 with all patients being tested with PCR analysis for SARS-COV2 on nasopharyngeal swabs immediately before delivery admission. Electronic medical records were queried to determine date and result of all PCR tests, and symptomatology at the time of delivery swab. We created three non-mutually exclusive patient classifications. Patients with any positive PCR before or at delivery were considered 'COVID-positive'. Asymptomatic patients with no prior COVID diagnosis were considered 'Low suspicion positive'. Patients with 28 days elapsed between initial positive PCR and delivery were classified as 'COVID-recovered'. Within each week of the study period, delivery volume was tabulated as well as rates of overall positivity, low-suspicion positivity, and recovered positives were calculated.

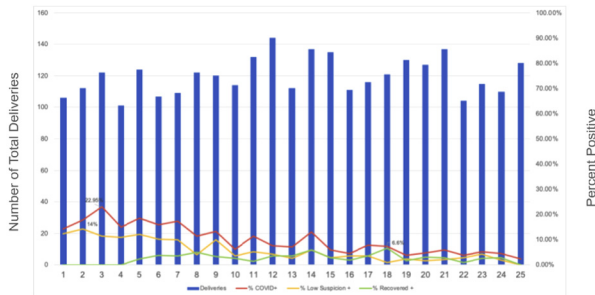
**RESULTS:** Over the 25 week study period, 2996 patients gave birth including 294 (9.81%) with any positive SARS-COV2 PCR. Weekly rates of PCR-positivity ranged from 2.34%-22.95% (Figure 1). Over half of positives (167/294; 56.8%) were low-suspicion positives detected based on routine testing at delivery admission. Of positives,



73.47% delivered within 28-days of their initial positive result, whereas 26.53% were COVID-recovered at delivery.

**CONCLUSION:** At the height of the pandemic at an urban academic medical center, rates of COVID-19 positivity was as high as 2 in 10. Given that half of all of our COVID-19 positive patients were asymptomatic, universal testing was vital for our obstetrical units.

Figure 1: Six Month Trends of Universal Screening



**1162 Relationship of maternal-fetal medicine specialist density with maternal mortality ratios between 2010 and 2018**



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**OBJECTIVE:** With the increase in maternal mortality and morbidity in the United States, it is imperative to understand what aspect Maternal-Fetal Medicine provider density has on this. Our study's objective was to determine the relationship between state-specific maternal mortality ratios and the density of Maternal-Fetal Medicine specialists.

**STUDY DESIGN:** State maternal mortality ratios from 2010 to 2018 were calculated from the Centers for Disease Control National Center for Health Statistics database (Maternal mortality defined as maternal deaths within a year following pregnancy). Practitioner distribution data were obtained from professional associations and national provider information. Demographic information regarding states was gathered from the yearly American Community Survey (ACS). Bivariable and multivariable analyses were conducted with the use of Spearman correlations and Poisson regression, respectively. Our primary outcome was a measure of maternal mortality ratios correlated with Maternal-Fetal Medicine physician density.

**RESULTS:** The median state maternal-mortality ratio was 17.4/100,000 live births (increased significantly from 7.5/100,000 live-births for years 1994-2001). Our study showed that an increase of 4 maternal-fetal specialists per 10,000 live births results in a 20% reduction in the risk of maternal death (relative risk [RR] =0.63, 95% CI = 0.31- 0.81, p = 0.04). This risk reduction was based on a multivariable Poisson regression model that included the following variables and their significant interactions: state-specific percentages of mothers in poverty, mothers without a high school diploma and minority mothers.

**CONCLUSION:** The maternal mortality rate has significantly increased over the last 10 years, even doubling when compared to a prior analysis done in 2001. The density of maternal-fetal medicine specialists is significantly and inversely associated with maternal mortality ratios, even after controlling for state-level measures of maternal poverty, education, race, age, and their significant interactions.

Fig 1. State maternal mortality ratios per 100,000 livebirths for the period of 2010 - 2018

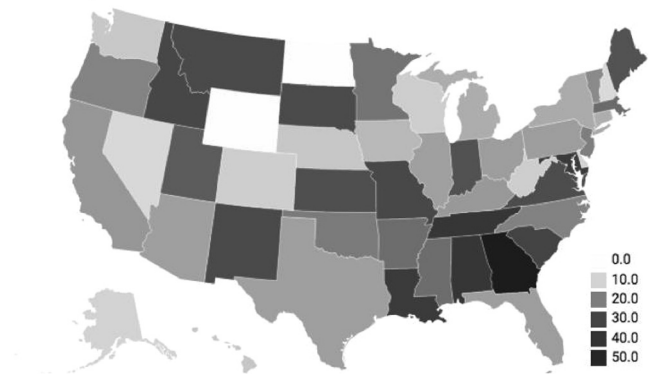
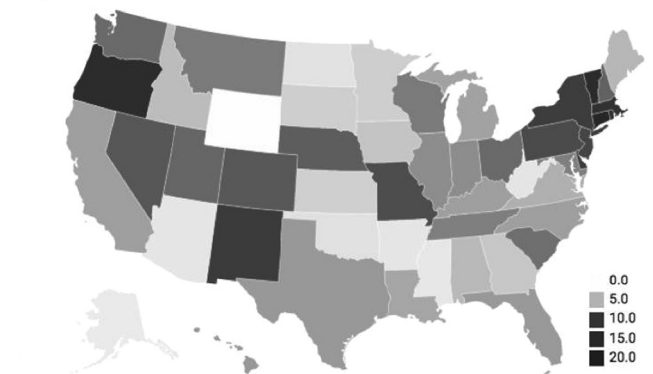


Fig 2. State maternal-fetal medicine specialist density per 10,000 live births in 2018



**1163 Development of a risk calculator for shoulder dystocia in patients with diabetes**



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**OBJECTIVE:** To develop a multivariable risk calculator for shoulder dystocia (SD) in patients with diabetes (DM) in pregnancy using information available prior to delivery, including the Fetal Abdominal Adiposity Score (FAAS), a novel ultrasound-based metric

**STUDY DESIGN:** 23,862 third trimester ultrasounds of singleton pregnancies delivered at a single center from 2007-2017 were used to develop normative data by gestational week for the FAAS, calculated as biparietal diameter minus abdominal diameter (abdominal circumference/pi). Vaginal deliveries of live, singleton, non-anomalous fetuses to patients with DM at the same center 2002-2013 were identified within an NIH-funded database of pregnancy and delivery information extracted by trained research nurses. The FAAS was calculated from the last ultrasound before delivery, and was used in a multivariable predictive model. Forward selection was employed, with internal validation via boot-strapping. The model was used to identify pregnancies within this cohort with SD risk of  $\geq 20\%$ .

**RESULTS:** SD occurred in 33 of 757 pregnancies (4.4%). 26 candidate predictors were analyzed and 7 included in the final model: FAAS,