

**Submission Id:** 4109

**Title**

*Assessment of Obstetric Outcomes for New Mainers*

**Priority 1 (Research Category)**

Women's health

**Presenters**

Brendan Prast, MD

**Abstract**

Context: Maine Medical Center (MMC) cares for many newly arrived, non-English speaking residents in its provision of obstetric services (4% of Maine's population in 2018). These patients may be at-risk for health care disparities because of language barriers, low socioeconomic status and stressors from a history of trauma.

**Objective:**

There is an ongoing need to understand the impact of immigration status on labor and delivery. We hypothesized that obstetric patients who speak a language other than English will have a higher C-section rate compared to English-speaking patients.

**Study Design and Analysis**

Retrospective data collection and analysis with descriptive analysis of the demographics and clinical characteristics of patients. Final analysis was completed with Chi-square testing, t-tests and logistic regression.

**Setting:**

MMC, a large tertiary-care center in Portland, ME.

**Dataset/Population Studied:**

All patients who delivered a newborn at MMC from 1/1/2018-12/31/2019.

**Outcome Measures:**

Primary outcome was Cesarean section rate.

**Results:**

A total of 5,710 patients delivered at MMC in 2018 and 2019. 91.1% identified their primary language as English, 8.9% identified a non-English language preference (2.1% French, 1.2% Arabic, 1.0% Somali, 4.6%

other). 2058/5,710 were c-section deliveries. There was no statistically significant difference in Cesarean section rates between English speaking (36.3%) and non-English speaking (34.1%) patients during 2018-2019 ( $p=0.22$ ).

Among non-English speakers, we did identify higher Gravidity, Parity, higher percentage Medicaid coverage and older age at delivery (all  $p<0.0001$ ). Increasing Gravidity was associated with C-section, while increasing Parity was protective. Medicaid or Governmental insurance was found to be associated with C-section. Adjusting the crude OR for C-section for known confounders using logistic regression found OR= 0.82 (95% CI 0.66, 1.01) non-English speakers, compared to English speakers.

#### Conclusion:

Our study did not reveal increased odds of C-section by language spoken, despite adjusting for confounders. Future work with higher numbers of non-English speaking patients might reveal an adjusted rate of C-section to be significantly different than English speakers.