There are marked disparities in reproductive health outcomes in the United States. We have limited understanding about how methods of long-acting reversible contraception (LARC) vary based on sociodemographic characteristics.

Our study examined the association between sociodemographic characteristics and type of LARC received during the postpartum period.

We conducted a retrospective cohort study of mothers of liveborn infants delivered at the North Carolina Women’s Hospital between July 1, 2014 and June 30, 2016. We used data from the electronic health record to review encounters between birth and 90 days postpartum. We ascertained tubal ligation and placement of LARC device from billing codes, with verification by chart review. Among women who did not undergo tubal ligation, we used multinomial logistic regression to quantify the association between sociodemographic characteristics and receipt of either etonogestrel (ENG) implant or intrauterine device (IUD) vs. not receiving LARC. Adjusted models included race/ethnicity, age, insurance, mode of delivery, maternal body mass index (BMI), and neighborhood income.

SAS 9.4 (Cary, NC) was used for all analyses, and p < 0.05 was considered statistically significant.

### Results

**Background**

- During the study period, 6849 women had a live birth and 4030 had a postpartum visit within our institution, of whom 226 underwent tubal ligation, 369 were missing census tract data and 189 were missing BMI.
- Among the 3245 included in our analyses, 214 (6.6%) received an ENG implant and 670 (20.7%) received an IUD.
- Race/ethnicity, age, BMI category, insurance status and neighborhood income were each associated with type of LARC received.

**Methods**

- We used data from the electronic health record to review encounters between birth and 90 days postpartum.
- We ascertained tubal ligation and placement of LARC device from billing codes, with verification by chart review.
- Among women who did not undergo tubal ligation, we used multinomial logistic regression to quantify the association between sociodemographic characteristics and receipt of either etonogestrel (ENG) implant or intrauterine device (IUD) vs. not receiving LARC.
- Adjusted models included race/ethnicity, age, insurance, mode of delivery, maternal body mass index (BMI), and neighborhood income.
- SAS 9.4 (Cary, NC) was used for all analyses, and p < 0.05 was considered statistically significant.

**Results**

In bivariate analyses, we found that women who were younger, Black or Hispanic, or publicly insured were more likely to receive any LARC and more likely to receive an implant than an IUD.

**Conclusions**

- We found that sociodemographic characteristics were associated with type of LARC received.
- Further research is needed to determine the extent to which biases in provider counseling and patient preference affect decision-making about LARC.