

#### Background/Synopsis:

Nationally, nearly half of pregnancies are unintentional, and this holds true in South Carolina. Pregnancies occurring a short interval after a previous pregnancy are largely unintentional and associated with poor maternal outcomes. Long-acting reversible contraception (LARC) devices immediately postpartum are highly effective in preventing unintentional pregnancies while also eliminating additional travel, temporal, and financial burdens of returning post-partum for contraception. New Morning Foundation's Chose Well Initiative has removed financial cost as a factor in patients' decisions to receive a LARC device if they desire.

#### Objectives/Purpose:

Understanding characteristics associated with LARC use and LARC continuation over time is essential to guide future efforts in preventing unintended pregnancy and promoting patients' right to choose and access contraception best for them. This research provides key insight to such remaining characteristics once financial burden has been eliminated as a potentially influential factor.

#### Design/Methods:

This retrospective cohort study analyzes characteristics and outcomes of 1495 participants who comprise the postpartum LARC insertions at Prisma Health Richland between January 1, 2018 and December 31, 2020 and are at least 16 years of age. Descriptive statistics outline characteristics of those opting for LARC insertion. Chi-square tests were used to compare characteristics of patients who continue original LARC usage  $\geq 12$  months and those who discontinue before that time. Statistically significant characteristic differences were analyzed for their independent associations with LARC continuation  $\geq 12$  months.

#### Results:

Investigation found patients who selected a hormonal implant were 96.8% more likely to still have their LARC in place 12 months or longer compared to patients who selected the hormonal IUD (OR=1.968, CI: 1.337 – 2.897). Additionally, patients ages 20-34 were 90.1% more likely to still have their device in place at 12 months' time compared to patients in the advanced maternal age cohort, 35 years or older. Other patient characteristics studied including socioeconomic status, parity, insurance type, material education level, and participation in group health model Centering Pregnancy did not demonstrate a statistically significant difference between continuations and non-continuations.

#### Conclusion:

Contraceptive device chosen and maternal age are significant factors in the continuation of LARC devices  $\geq 12$  months. Providers should be aware that advanced maternal age patients are more likely to have LARC removal prior to 1 year of use. Lack of significant difference in other patient characteristics among continuations and non-continuations signals the success of the healthcare system and provider team in limiting disparities to quality, autonomous reproductive care. Analyses should expand to time intervals beyond 12 months as this study continues.

This research is partially funded by the University of South Carolina School of Medicine Student Opportunities for Academic Achievement through Research (SOAR) program