OBJECTIVES: Compare pregnancy rates post-initiation of 84/7 (84 days levonorgestrel/ethinyl estradiol (EE) 0.15mg/0.03mg tablets plus EE 0.01mg or placebo for 7 days or 84 days levonorgestrel/ethinyl estradiol (EE) 0.1mg/0.02mg tablets plus EE 0.01mg for 7 days) to 21/7 (21 days combined EE/progestin plus 7 days placebo) or 24/4 (24 days EE/progestin plus 4 days placebo) oral contraceptive regimens over the course of 1 year. METHODS: Data for this study were obtained from the US i3 InVisionTM database from May 2009 through December 2011. Patients included if they received the medication of interest (first use–index date), were age 15-40 on index date, and had continuous insurance coverage from index date through 1 year post index date. Results: Of the 7397 women included for analysis, 67.8% were between 15-29 years old. Approximately 30.2% filled at least one prescription for a contraceptive in the year preceding the abortion; 82.9% of claims were oral contraceptives. In the year after abortion, the usage of contraceptives increased to 54.3%. Utilization of a long-acting reversible contraception (LARC) increased after abortion. RESULTS: The data showed that the utilization of contraception increased after an abortion. A valuable benefit of LARCs is that their effectiveness does not rely on continuous user compliance, which could help explain the increased utilization of these methods after an abortion. However, the utilization of LARCs remains low which may indicate an unmet need for a greater variety of LARC options.

CONCLUSIONS: Pregnancy rates were significantly lower in women using a 84/7 EE regimen compared with a 21/7 placebo (3.01% v 4.50%; P < 0.001). CONCLUSIONS: Pregnancy rates were significantly lower in women in the 84/7 cohort, and 169,871 individuals in the 24/4 cohort. Matching of the 84/7 cohort was matched to each of the alternative cohorts of interest based upon age, sex, region, business type of insurance, insurance product and year of index date. Differences in pregnancy rates in the 1 year post index date were compared using a chi-square statistic. RESULTS: There were 12,923 individuals in the 84/7 EE cohort and 1,276 individuals in the 24/4 EE cohort. Matching resulted in a final sample of 3,732 (1.48% in the 84/7 EE cohort and 1,244 in the 84/7 placebo cohort) for a successful match rate of 97.5%. Patients in the matched cohort had a mean age of 26.98 years (SD=7.56), resided predominantly in the South (55.5%) or Midwest (21.14%) and were most commonly insured with point of service insurance (80.47%) or an exclusive provider organization (12.94%). Pregnancy rates in the 1 year post-initiation on an OC were found to be statistically significantly lower for initiators of 84/7 EE compared with 84/7 placebo (3.01% v 4.50%; P < 0.001).