**2016 WOMEN’S HEALTH RESEARCH DAY**

**Title of Poster:** Preliminary findings of a cluster randomized trial of MyFamilyPlan: A novel web-based preconception health education tool
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**Thematic Poster Category:**  iGIANT: Technology improving women's health, safety or wellbeing

**Abstract**

Objectives: Preconception care – the optimization of health prior to pregnancy – can improve birth outcomes and women’s health. Preconception health counseling covers: pregnancy plans, nutrition, vaccinations, sexual health, chronic disease, substance use, mental health and contraception. Improving preconception health involves health behavior changes; thus, patient engagement and education must be a primary focus. This study tested MyFamilyPlan – a novel, web-based, patient-centered, and interactive preconception health education tool for women of reproductive age.

Methods: The study included non-pregnant women 18-45 ages years scheduled for well-woman visits at UCLA Health System Internal Medcine or Obstetrics and Gynecology ambulatory sites. Participants identified as English-speaking, had valid email addresses, and were capable of pregnancy. The study was a cluster randomized controlled trial, with 34 physicians randomized as clusters. Patients of these participating physicians were recruited via email or phone 7-10 days before a scheduled well-woman visit. All participants completed pre- and post-visit online surveys. The intervention arm also reviewed the MyFamilyPlan education tool, while control participants received standard UCLA preconception education material to review online. All online study materials were administered using the Qualtrics® Web platform. The primary study outcome was a preconception health discussion with the provider. Secondary outcomes included changes in folate use, changes in birth control method, and self efficacy with respect to pregnancy planning. All outcomes were patient-reported. 170 subjects were needed per arm to detect a 20% difference in the primary outcome, assuming 80% power, an alpha of 0.05, intracluster coefficient of 0.05, and 30% attrition. Univariate/bivariate analyses and multilevel logistic regression (intent to treat) were performed.

Results: To date, 254 participants have been enrolled (128 control, and 126 intervention). The two arms did not significantly differ by age, race, type of insurance, pregnancy desires, parity, diabetes/hypertension, baseline self-efficacy, and type of provider seen. In an unadjusted logistic regression model, participants exposed to MyFamilyPlan were significantly more likely to discuss preconception care with their providers (OR=1.69, p=0.046). Seeing an Obstetrician/Gynecologist was also significantly associated with the primary outcome (OR=2.17, p=0.019). There was no interaction between trial arm and provider type (p=0.840). In a multilevel model adjusted for clustering (providers, n=34), the intervention was no longer significantly associated with discussing preconception health at the well-woman visit (p=0.089). Provider type remained a significant predictor after adjustment. There were no significant changes in secondary outcomes (folic acid supplementation, birth control method change, or mean self-efficacy score).

Conclusions: In preliminary unadjusted analyses, patients reviewing the MyFamilyPlan preconception web-based health education tool were significantly more likely to report discussing pregnancy-related health concerns with their providers. These results were not robust to clustering, suggesting that provider behaviors and practices also have strong effects. The intervention improved the discussion of preconception health across both provider specialties, though Obstetrician/Gynecologists were more likely to engage with patients in this area. Web-based education tools may hold promise in increasing the proportion of women receiving preconception counseling.