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Reducing Unintended Pregnancies Through Web-Based Reproductive Life Planning and Contraceptive Action Planning among Privately Insured Women: Study Protocol for the MyNewOptions Randomized, Controlled Trial

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A B S T R A C T

Background: The Affordable Care Act mandates that most women of reproductive age with private health insurance have full contraceptive coverage with no out-of-pocket costs, creating an actionable time for women to evaluate their contraceptive choices without cost considerations. The MyNewOptions study is a three-arm, randomized, controlled trial testing web-based interventions aimed at assisting privately insured women with making contraceptive choices that are consistent with their reproductive goals.

Methods: Privately insured women between the ages of 18 and 40 not intending pregnancy were randomly assigned to one of three groups: 1) a reproductive life planning (RLP) intervention, 2) a reproductive life planning enriched with contraceptive action planning (RLP+) intervention, or 3) an information only control group. Both the RLP and RLP+ guide women to identify their individualized reproductive goals and contraceptive method requirements. The RLP+ additionally includes a contraceptive action planning component, which uses if–then scenarios that allow the user to problem solve situations that make it difficult to be adherent to their contraceptive method. All three groups have access to a reproductive options library containing information about their contraceptive coverage and the attributes of alternative contraceptive methods. Women completed a baseline survey with follow-up surveys every 6 months for 2 years concurrent with intervention boosters. Study outcomes include contraceptive use and adherence. ClinicalTrials.gov identifier: NCT02100124.

Discussion: Results from the MyNewOptions study will demonstrate whether web-based reproductive life planning, with or without contraceptive action planning, helps insured women make patient-centered contraceptive choices compared with an information-only control condition.

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In 2008, more than one-half of all pregnancies in the United States were unintended, representing an increasing incidence over the prior decade (Finer & Zolna, 2014). Prior research has shown that, when contraception is provided at no cost and accompanied by contraceptive information or dedicated contraceptive counseling, women are more likely to use prescription contraception and to choose more effective and more expensive methods over less effective, less expensive methods (Gariepy, Simon, Patel, Creinin, & Schwarz, 2011; Pace, Dusetzina, Fendrick, Keating, & Dalton, 2013; Peipert, Madden, Allsworth, & Secura, 2012; Postlethwaite, Trussell, Zoolakis, Shabear, & Petitti, 2007; Secura et al., 2014). The Patient Protection and Affordable Care Act (ACA) requires private insurance plans provide all U.S. Food and Drug Administration (FDA)-approved contraceptive methods (including sterilization) and contraceptive counseling as a covered benefit without copays or deductibles (The Henry J. Kaiser Family Foundation, 2014), thereby removing the cost barrier to contraception for most privately insured women. However, removing the cost barrier to contraception will not necessarily improve contraceptive adherence or reduce unintended pregnancies, unless women are also made aware of their covered benefits and given tools to help them optimize their contraceptive decision making.

The MyNewOptions study was designed to test the hypothesis that reproductive life planning and contraceptive action planning are tools that can help insured women to 1) choose contraception that is compatible with their reproductive goals and 2) use contraception correctly. The MyNewOptions study is a randomized, controlled trial targeting insured women, a group who may benefit from interventions aimed at improving contraceptive adherence and reducing unintended pregnancies in the context of the ACA's contraceptive mandate.

Theoretical Framework for the MyNewOptions Interventions

The MyNewOptions interventions are based on principles of self-regulation from social cognitive theory (Bandura, 1991; Glanz, Rimer, & Wiswanath, 2008). Social cognitive theory has guided the design of many health behavior change interventions. This approach assumes that behavior is goal-directed and that both self-efficacy (belief in one's ability to attain a goal) and motivation for behavior change determine behavior. Through self-regulation, individuals can perform short-term behaviors to achieve a positive long-term goal. Self-regulation involves controlling one's behaviors through self-monitoring, goal setting, feedback, self-reward, self-instruction, and enlistment of social support (Glanz et al., 2008).

In the present context, when a woman chooses a contraceptive method, she is deciding which short-term behaviors she is willing to accept (i.e., taking a pill daily, getting an intrauterine device, negotiating with her partner to use a condom) to achieve the goal of avoiding unintended pregnancy. The proposed interventions will engage women through goal setting (through reproductive life planning), self-instruction (through action planning), and feedback (by providing feedback on one's contraceptive behavior and adherence).

Intervention Components

Reproductive Life Plan

A reproductive life plan articulates an individual's goals for having or not having children, as well as a plan for how to achieve those goals. Reproductive life planning may be a useful tool for several reasons. First, it may help women to clarify their intentions and reduce feelings of ambivalence about whether or not to have a child at a given time. This is important because ambivalence toward pregnancy has been shown to be associated with contraceptive nonuse, ineffective use, and risk for unintended pregnancy (Schwarz, Lohr, Gold, & Gerbert, 2007). Second, reproductive life planning encourages women and men to think about when the ideal time is to have a baby, factoring in other important considerations, including health, job/career, school, finances, pregnancy spacing, partner preferences, and age. Third, it encourages women to think about what contraception method(s) will best help to attain their reproductive goals at the same time as meeting their personal requirements for a contraceptive method. In 2009, the Centers for Disease Control and Prevention (CDC)'s *Recommendations to Improve Preconception Health and Health Care* recommended that each woman, man, and couple be encouraged to have a reproductive life plan (Johnson et al., 2006). Since then, several other organizations have made similar recommendations, including the Title X Family Planning Programs (U.S. Department of Health & Human Services Office of Population Affairs, 2014), and various reproductive life plan tools are now available online. However, whether reproductive life planning decreases ambivalence about future pregnancy, improves contraceptive decision making or decreases the risk of unintended pregnancy has not been evaluated formally.

Action Planning

Contraceptive discontinuation and ineffective use occur commonly—a decision analysis estimated that 20% of the 3.5 million unintended pregnancies that occur each year in the United States are attributable to poor adherence or discontinuation of oral contraceptives (Rosenberg, Waugh, & Long, 1995). Poor adherence occurs when women use contraceptives that are not suited to their lifestyle (e.g., because the contraceptive requires frequent, ongoing action) or when they have poor self-regulation skills needed to achieve better adherence. Action planning interventions (also known as "if–then planning," "implementation intentions," or "contingency planning") are based on self-regulation and seek to help individuals overcome obstacles to poor adherence.

Action planning interventions present participants with common situations that make it difficult to perform a desired behavior. Next, they ask participants to make a specific plan for what they will do when faced with the specific situational barrier (i.e., "if situation *X* is encountered, then I will initiate goal-directed behavior *Y*"). By specifying when, where, and how one will act, action planning passes control of behavior to future environmental cues, reducing the need for cognitive control and effort (Achtziger, Gollwitzer, & Sheeran, 2008; Gollwitzer & Sheeran, 2006). These interventions have been shown to be highly effective at improving many behaviors, including weight