fied,” “neither,” “somewhat unsatisfied” and “unsatisfied”; we combined “neither,” “somewhat unsatisfied,” “unsatisfied” and “don’t know” because of low frequencies. The question “How satisfied were you with the level of cleanliness at the facility?” used the same response options and categorization as the question on provider satisfaction. A dichotomous variable measured whether women had enough privacy at the clinic. The question “Where do you think you will go for your next family planning appointment?” measured women’s willingness to return to the clinic; responses mentioning the same facility were coded “yes,” and all others were coded “no.” Seven dichotomous variables assessed whether providers gave women specific method-related information, such as advantages or disadvantages, and possible side effects or problems. We asked women if the provider had asked if they had prior experience with contraceptives and what method they preferred. Two continuous variables measured (in minutes) women’s travel time to and their waiting time at the clinic at their most recent family planning visit; both variables were log-transformed to rescale to avoid overwhelming the factor analysis model. A single factor was retained with eight variables and interpreted to measure information about the family planning method given to women by their provider.

### Data Analysis

Analysis was conducted using SAS 9.2. Household income was omitted, because data were missing for more than 20% of participants in both districts. We used multiple imputation to handle missing data for independent variables using the Markov chain Monte Carlo method with a single chain to create five imputations. Unless otherwise noted, p<.05 was considered statistically significant.

We evaluated time to first discontinuation among women still in need of family planning by fitting pre- and postintervention data from both districts in a single Cox model with terms for treatment (or district), timing (pre- vs. postintervention), and the interaction between treatment and timing. We specified a linear contrast of the model parameters to test whether discontinuation rates differed between the districts when the model was adjusted for differences in preintervention discontinuation rates.

Factors associated with discontinuation were identified using Cox regression models fit separately for each district and period. We used the exact likelihood method to handle tied event times, which are expected in these data. To control for clustering expected at the clinic level, we used a sandwich estimator to obtain robust standard errors.

In bivariate analyses, we examined whether each independent variable was associated with discontinuation; these analyses were conducted separately for each district and period. Only independent variables found significant in either district (p<0.20) and those hypothesized to predict discontinuation (age, number of children, fertility intentions and change in marital status) were entered into the model to predict time to first discontinuation. Backward model reduction was then used to eliminate nonsignificant variables to arrive at a final model, a level of p<.10.