



ACKOFF FELLOWSHIP APPLICATION FORM

Deadline: March 3, 2014 (midnight)

Name: Nora Becker

How did you learn about the Ackoff Fellowship?

Ad in DP Ad in Almanac E-mail Other (specify) _____

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Department/University of Pennsylvania: Department of Health Care Management

Faculty Advisor Name: Dan Polsky E-mail: polsky@wharton.upenn.edu

Faculty Department: Health Care Management

Project Title: The impact of state contraception coverage mandates on contraceptive utilization

Amount of Request: \$ 3,820

Other sources of support for your research:

Travel \$ 0

Grants \$ 500

Other (Specify) \$ 0

Advisor's signature:

Dan Polsky
2/27/14

Goals of the proposed research

The Affordable Care Act (ACA) mandates that prescription contraceptive methods be covered by health insurance with no cost-sharing for consumers. This mandate has drawn political and legal attention, but little empirical work has examined the potential impact of this law on women's birth control utilization. While data from the ACA's mandate will not be available for several years, about half of states have passed state-level contraception coverage mandates very similar to the mandate in the ACA. A study of the impact of these mandates could therefore generate useful estimates of the potential impact of the national mandate under the ACA.

Between 1999 and 2010, twenty-eight states passed laws that required private health insurance plans to include coverage for contraception. The geographic and temporal variation in implementation of these mandates provides me with an opportunity to identify within-state changes over time between the pre- and post-mandate periods. I am interested in examining both whether these coverage mandates affect the overall rates of birth control utilization among women in private health insurance, and whether the distribution of birth control methods chosen changes as the out-of-pocket price decreases.

Economic theory predicts that decreasing the out-of-pocket costs of health care to consumers will result in increased utilization of health services. However, an estimate of the magnitude of the impact of a law like the ACA on birth control utilization does not currently exist and would be of interest both to economists and policymakers. In addition, the market for contraceptives is one characterized by highly differentiated products that vary widely in both their effectiveness at preventing pregnancy and their fixed and marginal costs. A change in the out-of-pocket cost of contraception therefore has the potential to affect not only the overall margin of use, but the distribution of products chosen. Both of these changes, in turn, may affect the overall fertility of women with private health coverage, and changes in the fertility rate have been shown to have a longstanding economic impact on the labor market. The magnitude of a change in contraceptive behavior therefore has the potential to have a large indirect impact upon the economy at large.

Planned methodology

To answer this question, I plan to use data from the National Survey of Family Growth (NSFG) to study the change in birth control utilization by state and over time. The NSFG contains detailed questions about contraceptive utilization, plus detailed information about current and prior relationships, sexual history, education and work histories, and other demographic information. The NSFG is available from the National Center for Health Statistics (NCHS) in three waves during my study period: 1995, 2002, and 2006-2010. I plan to combine responses from all three waves to create one large longitudinal dataset for my planned analysis.

With this constructed dataset, I plan to use a difference-in-differences empirical strategy to obtain a plausibly causal estimate of the impact of these mandates on contraceptive utilization. I plan to merge the NSFG with a dataset from the Alan Guttmacher Institute (AGI) of the year and month that each state-level mandate went into effect. My primary outcome of interest will be whether a woman is using a method of prescription birth control, with secondary outcomes examining the type of method chosen. I will include state and year fixed effects in my regressions, along with a large set of demographic and sexual history control variables available in the NSFG.

This study will contribute to several types of research. Several papers have studied the impact of geographic variation in the legalization of the contraceptive pill on subsequent fertility rates, family sizes, women's wages, and outcomes for the first generation of children born to women with access to the birth control pill (Bailey 2010; Bailey, Hershbein, and Miller 2012; Bailey 2013; Ananat and Hungerman 2007). Similarly, Goldin and F. Katz (2002) use variation in the diffusion of the birth control pill among unmarried women to examine the impact of access to birth control on subsequent entry into professional school and age at first marriage. This study will update these papers by studying a more recent expansion in access to birth control—one of increased access via coverage, rather than legal access.

To the best of my knowledge, only one previous paper has surveyed the state-level contraception mandates that I plan to examine (Magnusson et al. 2012). This study, which uses data from the 2006-2008 wave of the NSFG, examined cross-sectional variation in birth control utilization in states with and without mandates. They find that privately-insured women are more likely to use birth control consistently in states with contraception coverage mandates. These findings, while suggestive, are not robust to unmeasured variable bias. In contrast, my proposed analysis is longitudinal and depends on identifying within-state changes over time in birth control utilization after mandate implementation. My analysis will therefore be robust to any time-invariant confounders, as well as national trends in birth control utilization over time. In addition, to my knowledge this study is the first that attempts to examine price-induced changes over time in the distribution of birth control methods chosen.

Lastly, this project will contribute to a larger body of literature that attempts to predict the potential impact of the Affordable Care Act by studying previous attempts to implement aspects of the ACA at the state level. Many studies have previously used prior state-level experiments to predict the potential impact of different provisions of the ACA (Finkelstein et al. 2012; Kolstad and Kowalski 2012; Miller 2012; Sommers, Baicker, and Epstein 2012; Duggan and Hayford 2013; Ericson and Starc 2012). However, none to date have attempted to predict the effect of the mandate for contraception coverage.

Explanation of why funding is being sought

While most of the variables from the NSFG are available for free download from the National Center for Health Statistics (NCHS), certain variables are restricted and can only be accessed at a secure location called a Restricted Data Center (RDC). The nearest RDC is in Hyattsville, Maryland. To gain access, a researcher must submit a proposed research project and gain approval from the RDC data managers that their project poses no risk of violating the privacy of the individuals in the survey.

I have already submitted my proposal to the RDC. The RDC's goal is to work with researchers to approve all submitted projects, so I fully expect to gain approval after I have addressed any additional questions they may have regarding my planned analysis.

I'm seeking funding from the Ackoff Fellowship because there are fees associated with using the RDC. There is both a flat fee and a daily fee for use, as well as associated travel costs. I expect that I will need to travel to use the RDC several times before my project is completed, so I have budgeted for three back-and-forth trips: an initial longer trip for 5 days of analysis, and two shorter two-day trips for subsequent sensitivity analyses once I've presented my work and gotten feedback and advice from my faculty mentors on the project.

References

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