Out-of-pocket spending for oral contraceptives among women with private insurance coverage after the Affordable Care Act

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Abstract

Objectives: We aimed to identify which types and brands of oral contraceptive pills have the largest shares of oral contraceptive users in large employer plans with out-of-pocket spending and which oral contraceptives have the highest average annual out-of-pocket costs.

Study design: We analyzed a sample of medical claims obtained from the 2003–2015 IBM MarketScan Commercial Claims and Encounters Database (MarketScan), which is a database with claims information provided by large employer plans. We only included claims for women between the ages of 15 and 44 years who were enrolled in a plan for more than half a year as covered workers or dependents. To calculate out-of-pocket spending, we summed copayments, coinsurance and deductibles for the oral contraceptive prescriptions.

Results: We found that 10% of oral contraceptive users in large employer plans still had out-of-pocket costs in 2018. Oral contraceptives with the largest share of users with annual out-of-pocket spending are brand-name contraceptives with generic alternatives. The three contraceptives with the highest average annual out-of-pocket spending were brand-name contraceptives without generic alternatives. Three of the 10 contraceptives with the largest shares of users who have annual out-of-pocket spending and 3 of the 10 contraceptives with the highest average annual out-of-pocket spending contain iron.

Conclusions: Women with health insurance are still paying out of pocket for oral contraception, and future research should investigate which health plans have fewer fully covered contraceptives and effective modes of educating providers and patients about how to maximize the no-cost coverage benefit that has been extended to women.

Implications: The Affordable Care Act eliminated out-of-pockets costs for contraception for most insured women. However, some women still pay out of pocket for certain oral contraceptive brands and types that may have covered alternatives. Providers and patients could benefit from more education on how to maximize the no-cost coverage benefit extended to women.

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1. Introduction

Prior to the Affordable Care Act (ACA), coverage for prescription contraceptives was common among private and public health plans but was not required, varied by state and generally involved some cost-sharing. The ACA’s preventive services provision (Section 2713 of the Public Health Act) changed that for most women with private insurance. It requires nongrandfathered individual and group health insurers and group health plans to cover certain preventive services, including women’s preventive services defined by the Health Resources and Services Administration (HRSA), without cost-sharing [1]. In 2011, HRSA turned to the Institute of Medicine (IOM) to identify gaps in preventive services for women. Contraception was identified by the IOM and adopted into HRSA’s definition of women’s preventive services, which included all prescribed Food and Drug Administration (FDA)-approved contraceptives, sterilization procedures, and patient education and counseling for women of reproductive capacity [2]. Final preventive services rules issued by the Departments of Health and Human Services, Labor, and Treasury in 2012 (known as the contraceptive coverage requirement) required all new private plans to cover FDA-approved contraceptive methods for women, as prescribed, along with counseling and related services without cost-sharing. After reports of plans limiting coverage of contraceptives [3,4], in 2015, the Obama administration issued a clarification that plans must cover at least one of each of the 18 FDA-approved methods [3]. In the case of oral contraceptives, this

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means plans must extend coverage at no cost to at least one of each of the three different types of oral contraceptives: combination pill (21-day or 28-day packs of estrogen and progestin), progestin-only pill (28-day packs of progestin) and extended/continuous-use combined pill (91-day packs or 365-day packs of estrogen and progestin). Initially, religious institutions defined as “houses of worship” and grandfathered plans were exempt from the contraceptive requirement [1]. However, a recent Supreme Court decision ruled that other employers could apply for an exemption to the contraceptive coverage requirement [5]. While there are no estimates on the number of women who are enrolled in grandfathered plans, in 2019, 22% of firms offering health benefits offered at least one grandfathered health plan, and 13% of covered workers were enrolled in a grandfathered plan [6].

A significant body of research has documented the impact of the contraceptive coverage provision on women’s out-of-pocket spending for oral contraceptives [7–10]. Snyder et al. (2018) found that mean out-of-pocket costs per 28-day supply decreased substantially from 2006 (mean = $31, median = $18) to 2014 (mean = $5, median = $0) and the percentage of women ages 13–45 years using oral contraceptives increased from 24.8% in 2006 to 26.1% in 2014 after passage of the ACA's contraceptive requirement [8]. Law et al. (2016) found that total annual out-of-pocket costs for oral contraceptives decreased from $86 in 2011 to $26 in 2013. From 2011 to 2013, mean out-of-pocket expenses per contraceptive claim decreased 66.7% for oral contraceptives [9]. Pace et al. (2016) found that cost-sharing for oral contraceptives decreased markedly following implementation of the ACA’s requirement but more significantly for generic than for brand-name contraceptives [10].

Costs have been shown to be a key barrier to contraceptive access, influencing the methods women choose and use, as well as contraceptive adherence. Pace et al. (2016) found that higher copays were associated with greater discontinuation of contraception and nonadherence to generic pills than zero copayments [10]. Marshall et al. (2018) found that women with a copayment had a 9% increased risk of nonadherence compared to women with no copayment [11].

Contraceptive coverage under the ACA has increased affordability of the full range of contraceptive methods for millions of women. Among women aged 15–44 years using contraception, the pill remains one of the most widely used reversible contraceptive methods, with 22% of women using pills according to the 2015–2017 National Survey of Family Growth [12]. However, some women are still paying out of pocket for oral contraception [8–10]. Due to the expansive oral contraceptive marketplace, brand-name manufacturers have had to find a way to make their products stand out from the numerous generic pills, leading to pills that suppress monthly menstruation, treat acne and premenstrual dysphoric disorder, have low doses of estrogen and contain iron [13], and have marketed these oral contraceptives directly to consumers [14]. We were interested in identifying which types and brands of oral contraceptive pills had the largest shares of women with out-of-pocket spending and which oral contraceptives had the highest average annual out-of-pocket costs.

2. Material and methods

We analyzed a sample of medical claims obtained from the 2003–2018 IBM MarketScan Commercial Claims and Encounters Database (MarketScan), which is a database with claims information provided by large employer plans. We only included claims for women between the ages of 15 and 44 who were enrolled in a plan for more than half a year as covered workers or dependents. Weights were applied to match counts in the Current Population Survey for enrollees at firms of a thousand or more by sex, age, state and whether the enrollee was a policyholder or dependent. We used the National Drug Codes and product names for oral contraception from the National Quality Forum’s Contraceptive Care–Most and Moderately Effective Methods measure (#NQF 2903) to identify oral contraception claims. We also identified any additional oral contraception claims if claims had a therapeutic class description (THRCILDS) of Contraceptive, Oral Comb, Not Elsewhere Classified (NEC); Estrogens & Comb, NE; Progestins, NEC; an oral route of administration, and the product was confirmed to be oral contraception and not emergency contraception or hormone replacement therapy. This resulted in 1168 unique national drug code numbers (NDCs) being classified as oral contraceptives. We grouped these NDCs by product, for a total of 301 different oral contraceptive products. We used IBM’s Redbook to classify oral contraceptive users as brand-name oral contraceptive users if they used at least one single-source brand or multisource brand with no generic within the year; otherwise, they were considered generic oral contraceptive users.

To calculate out-of-pocket spending, we summed copayments, coinsurance and deductibles for the oral contraceptive prescriptions. We limited costs to the retail costs of the oral contraception prescriptions and did not include costs connected with any other diagnosis and procedure codes including office visits or counseling. Analysis of specific products is limited to oral contraceptives with at least 100 users. The MarketScan database does not have information about whether health plans were grandfathered plans or were issued by religious institutions exempt from the contraceptive requirement.

3. Results

The share of oral contraceptive users enrolled in large employer plans who had any out-of-pocket costs throughout the year decreased from 96% in 2010 to 28% in 2013 after the passage of the ACA’s contraceptive coverage requirement and continued to decrease until 2016 when it hit an all-time low of 10% and remained at 10% in 2018 (Fig. 1). Mean and median out-of-pocket costs decreased from $108.07 and $70.00 in 2010, to $30.30 and $0 in 2013, and $12.85 and $0 in 2018 (Fig. 2). There were not large differences in the percent of oral contraceptive users with out-of-pocket costs by age, rurality or census region. However, the share of contraceptive users with out-of-pocket spending for oral contraception differed between brand-name oral contraceptive users and generic oral contraceptive users starting in 2013 (Appendix Table 1). We also found that the percentage of oral contraceptive users using a brand name contraceptive decreased over time (25% in 2010 vs. 10% in 2018) (Fig. 3).

We were first interested in identifying which of the oral contraceptives had the largest share of users (Table 1). Lo Loestrin Fe, a brand-name biphasic combination pill with iron, had the largest share of total users (7.33%), followed by Sprintec (7.27%) and Junel Fe 1/20 (4.49%). The 10 most used oral contraceptives were combination pills, and 4 of the 10 contained an iron supplement: Lo Loestrin Jr, Junel Fe 1/20, Microgestin Fe 1/20 and Blisovi Fe 1/20. Two of the 10 most used oral contraceptives were also FDA-approved to treat acne: Tri-Sprintec 28 and TriNessa. The share of users with out-of-pocket costs ranged from 7.25% (Tri-Lo-Sprintec) to 20.29% (Lo Loestrin Fe) among these oral contraceptives with large shares of users. For these more widely used contraceptives, the average annual out-of-pocket amount among users with out-of-pockets costs ranged from $36.19 (Tri-Lo-Sprintec) to $303.14 (Lo Loestrin Fe).

We identified which of the oral contraceptives had the largest share of users with out-of-pocket spending in 2018 after the passage of the contraceptive coverage requirement (Table 2). The oral contraceptive with the largest share of users with out-of-pocket spending was Ortho Tri-Cyclen (62.37%), which is a brand-name contraceptive also FDA-approved to treat acne. Average annual out-of-pocket cost for Ortho Tri-Cyclen users was $139.92. Average annual out-of-pocket costs for these users of oral contraceptives with large shares with out-of-pocket spending ranged from $101.02 (Ortho Micronor) to $258.01 (Loestrin Fe 1.5/30). The 10 oral contraceptives with the largest shares with out-of-pocket spending were all brand-name contraceptives with generics available. Users of the brand name usually paid an average of two to three times the amount that users of the most expensive generic alternative of each contraceptive paid. Users of Loestrin Fe 1.5/30 paid 5
times more than users of its most expensive generic alternative (Microgestin Fe 1.5/30). Eight of the oral contraceptives with large shares of users with out-of-pocket spending were combination pills, one was a progestin-only pill (Ortho Micronor), and one was an extended-cycle biphasic pill (Seasonique). Three of the 10 oral contraceptives with the largest shares of users with out-of-pocket spending contained iron (Generess Fe, Loestrin Fe 1.5/30 and Loestrin Fe 1/20).

Finally, we identified the oral contraceptives with the highest average annual out-of-pocket amount among users with out-of-pocket costs in 2018 after the passage of the contraceptive coverage requirement (Table 3). The three contraceptives with the highest average annual out-of-pocket amounts were all brand-name combination pills without generic alternatives: Natazia ($390.15), Taytulla ($303.44) and Lo Loestrin Fe ($303.14). The other seven contraceptives with the highest annual out-of-pockets costs were brand-name drugs with generics available. Three of these 10 contained iron (Lo Loestrin Fe, Generess Fe and Loestrin Fe 1.5/30 and Loestrin Fe 1/20). Yaz has also been indicated by the FDA to treat acne and symptoms of premenstrual dysphoric disorder (PMDD), a severe form of PMS.
4. Discussion

The ACA’s contraceptive requirement has made contraception more affordable for millions of women, and based on this analysis, only 10% of reproductive-aged female oral contraceptive users had out-of-pocket costs for their prescriptions in 2018 compared to 94% of oral contraceptive users in 2012. Out-of-pocket costs for oral contraception continued to decrease after 2012, which likely reflect health plans coming into compliance with the requirement over time, grandfathered health plans phasing out, and providers and consumers becoming more aware of the requirements. In 2018, women could still be paying out of pocket if they were enrolled in a grandfathered plan, or if they worked for a religious institution defined as a “house of worship” or if their health plan did not cover their contraceptive pill of choice.

There were three brand-name oral contraceptives without generics available that had high average annual out-of-pocket spending among users with out-of-pocket costs: Natazia, Taytulla and Lo Loestrin Fe. In 2015, the US Department of Health and Human Services issued guidance to clarify that if an individual’s attending provider recommends a particular service or FDA-approved item based on a determination of medical necessity, the plan or issuer must cover that service or item without cost-sharing [15]. Women who are still paying out of pocket for contraception may not realize that they can choose a generic alternative or another pill with the same formulation covered by their plan, or ask their plan for a waiver if their doctor thinks that they need the brand name based on medical necessity.

Women charged cost-sharing appear to be paying more for unique oral contraceptives that have inactive pills with iron or low doses of estrogen, have been FDA-approved to treat acne or symptoms of PMDD, or are brand-name contraceptives without generic alternatives. Promotion of these pills through direct-to-consumer advertising may be one factor contributing to their use [14]. Women may be more likely to ask

Table 1
Top 10 oral contraceptives with largest shares of users and average annual spending among users with out-of-pocket costs enrolled in large employer plans, IBM MarketScan Commercial Claims and Encounters Database, 2018

| Contraceptive name | Type | Progestin (mg) | Estrogen (mg) | Share of total OC users | Share of users with OOP | Average annual spending among users with OOP |
|--------------------|------|----------------|--------------|------------------------|------------------------|---------------------------------------------|
| 1 Lo Loestrin Fe*  | Combined biphasic with iron | Norethindrone acetate (1.0, 0.0) | Ethinyl estradiol (0.010, 0.010) | 7.33% | 20.29% | $303.14 |
| 2 Sprintec         | Combined monophasic | Norgestimate (0.25) | Ethinyl estradiol (0.035) | 7.27% | 9.10% | $43.63 |
| 3 Junel Fe 1/20    | Combined monophasic with iron | Norethindrone acetate (1.0) | Ethinyl estradiol (0.020) | 4.49% | 7.79% | $47.78 |
| 4 Microgestin Fe 1/20 | Combined monophasic with iron | Norgestimate (0.18, 0.215, 0.25) | Ethinyl estradiol (0.035, 0.035, 0.035) | 3.63% | 10.38% | $47.63 |
| 5 Tri-Sprintec 28  | Combined triphasic (treats acne) | Norethindrone acetate (1.0) | Ethinyl estradiol (0.020) | 3.43% | 9.39% | $37.47 |
| 6 Blisovi Fe 1/20  | Combined monophasic with iron | Norgestimate (0.18, 0.215, 0.25) | Ethinyl estradiol (0.020) | 3.41% | 8.09% | $49.63 |
| 7 TriNessa         | Combined monophasic | Norgestimate (0.25) | Ethinyl estradiol (0.035) | 2.83% | 12.47% | $42.77 |
| 8 Mononessa        | Combined monophasic | Norgestimate (0.25) | Ethinyl estradiol (0.035) | 2.67% | 13.46% | $46.63 |
| 9 Tri-Lo-Sprintec  | Combined triphasic | Norgestimate (0.18, 0.215, 0.25) | Ethinyl estradiol (0.025, 0.025) | 2.66% | 7.25% | $36.19 |
| 10 Estradiol-Norgestimate | Combined monophasic | Norgestimate (0.25) | Ethinyl estradiol (0.035) | 2.61% | 9.38% | $36.46 |

Source: Kaiser Family Foundation analysis of IBM MarketScan Commercial Claims and Encounters Database.

OC, oral contraceptive; OOP, out of pocket.

* Multisource brand; no generic; all other contraceptives in this table are generics or have generic alternatives.
Table 2
Top 10 oral contraceptives used by women in large employer plans with the largest share of annual out-of-pocket spending, IBM MarketScan Commercial Claims and Encounters Database, 2018

| Contraceptive name* | Type | Progestin (mg) | Estrogen (mg) | Share of users with OOP | Average annual spending among users with OOP | Generic alternatives (% of users with OOP spending, average annual OOP amount among users with OOP) |
|---------------------|------|----------------|--------------|-------------------------|---------------------------------------------|--------------------------------------------------------------------------------|
| Ortho-Cyclen 1 Tri- | Combined triphasic (treats acne) | Norgestimate (0.180, 0.215, 0.250) | Estradiol estradiol (0.035, 0.035, 0.035) | 62.37% | $139.92 | Tri-Estarylla (6.71%, $37.99), Tri-Linyah (13.12%, $42.46), TriNessa (12.47%, $42.77), Tri-Previlem (7.78%, $38.70), Tri-Sprintec (9.39%, $37.47) |
| Ortho-Cyclen 2 Ortho | Combined monophasic | Norgestimate (0.25) | Estradiol estradiol (0.035) | 61.23% | $138.52 | Estarylla (8.00%, $37.53), Feymnor (24.54%, $21.64), Mono-linyah (14.13%, $42.40), Monoesa (13.46%, $46.63), Previm (8.38%, $33.95), Sprintec (9.10%, $43.63) |
| Ortho-Novum 3 7/7/7 | Combined monophasic | Norethindrone (0.5, 0.75, 1.0) | Estradiol estradiol (0.035, 0.035, 0.035) | 59.24% | $172.58 | Alyacen 7/7/7 (11.57%, $31.52), Cyclafem 7/7/7 (7.82%, $29.89), Dasetta 7/7/7 (10.10%, $74.35), Necon 7/7/7 (10.21%, $68.01), Nortrel 7/7/7 (6.70%, $57.76), Pirmella 7/7/7 (7.36%, $49.22) |
| Ortho-Novum 4 Ortho | Combined monophasic | Norethindrone (1.0) | Estradiol estradiol (0.035) | 50.21% | $142.01 | Alyacen 1/35 (6.60%, $31.54), Cyclafem 1/35 (6.69%, $49.18), Dasetta 1/35 (12.07%, $50.83), Necon 1/35 (9.40%, $19.15), Nortrel 1/35 (10.35%, $54.05), Pirmella 1/35 (8.37%, $32.89) |
| Ortho 5 Micronor | Progestin only | Norethindrone (0.35) | Estradiol estradiol (0.020, 0.010) | 49.02% | $101.02 | Camila (5.38%, $30.21), Deblitane (10.77%, $28.02), Errin (7.34%, $17.48), Heather (7.36%, $33.28), jencyclo (10.64%, $23.66), Jolivette (9.77%, $30.85), Nora-BE (7.02%, $30.92), Norlyda (9.69%, $19.45), Sharobel (9.13%, $28.64) |
| 6 Micrette | Combined biphasic | Desogestrel (0.150) | Estradiol estradiol (0.020, 0.010) | 47.79% | $181.26 | Azurette (9.92%, $65.42), Karvia (8.13%, $71.03) |
| Generess Fe 7 | Combined monophasic | Norethindrone (0.8) | Estradiol estradiol (0.025) | 46.32% | $238.34 | Kaitlib Fe (2.98%, $87.08), Layolis Fe (6.01%, $124.61) |
| Seasonique 8 | Combined monophasic | Levonorgestrel (0.150) | Estradiol estradiol (0.030, 0.010) | 45.94% | $252.46 | Ameria (5.54%, $97.68), Ashlynia (5.09%, $86.81), Camrese (4.79%, $74.14), Daysee (4.35%, $80.79) |
| Loestrin Fe 1 | Combined monophasic | Norethindrone acetate (1.0) | Estradiol estradiol (0.010, 0.010) | 42.99% | $157.99 | Blisovi Fe 1/20 (8.00%, $49.63), Junel Fe 1/20 (7.70%, $47.78), Larin Fe 1/20 (12.94%, $41.56), Microgestin Fe 1/20 (10.38%, $47.63), Tarina Fe 1/20 (9.54%, $35.56) |
| Loestrin Fe 10 0.5/30 | Combined monophasic | Norethindrone acetate (1.5) | Estradiol estradiol (0.030) | 40.54% | $258.01 | Blisovi Fe 1.5/30 (8.38%, $44.17), Junel Fe 1.5/30 (7.14%, $50.09), Larin Fe 1.5/30 (12.23%, $50.13), Microgestin Fe 1.5/30 (9.95%, $50.55) |

Source: Kaiser Family Foundation analysis of IBM MarketScan Commercial Claims and Encounters Database.
* All of these are brand-name drugs; this analysis was limited to contraceptives with at least 100 users.

Table 3
Top 10 oral contraceptives used by women in large employer plans with highest average per-person out-of-pocket spending, IBM MarketScan Commercial Claims and Encounters Database, 2018

| Contraceptive name* | Type | Progestin (mg) | Estrogen (mg) | Percent of users with OOP | Average annual spending among users with OOP | Generic alternatives (% of users with OOP spending, average annual OOP amount among users with OOP) |
|---------------------|------|----------------|--------------|-------------------------|---------------------------------------------|--------------------------------------------------------------------------------|
| Natazia 1 | Combined quadphasic | Dienogest (2.0, 3.0) | Estradiol valerate (3.0, 2.0, 2.0, 1.0) | 12.82% | $390.15 | Tri-Lo Estarylla (10.51%, $37.39), Tri-Lo Marzia (7.68%, $29.77), Tri-Lo Sprintec (7.25%, $36.19) |
| Taytulla 2 | Combined monophasic | Norethindrone acetate (1.0) | Estradiol estradiol (0.020) | 21.96% | $303.44 | Generlic not available |
| Lo Loestrin Fe 3 | Combined biphasic with iron | Norgestimate (0.180, 0.215, 0.250) | Estradiol estradiol (0.025, 0.025, 0.25) | 20.29% | $303.14 | Generlic not available |
| Ortho 4 | Tri-Cyclen Lo | Combined triphasic | Norgestimate (0.180, 0.215, 0.250) | Estradiol estradiol (0.025, 0.025, 0.25) | 38.42% | $278.29 | Tri-Estarylla (10.14%, $50.09), Larin Fe 1.5/30 (12.23%, $50.13), Microgestin Fe 1.5/30 (9.95%, $50.55) |
| Loestrin Fe 5 1.5/30 | Combined monophasic with iron | Norethindrone acetate (1.5) | Estradiol estradiol (0.030) | 40.54% | $258.01 | Generlic not available |
| Seasonique 6 | Combined monophasic | Levonorgestrel (0.150) | Estradiol estradiol (0.030, 0.010) | 45.94% | $252.46 | Ameria (5.54%, $97.68), Ashlynia (5.09%, $86.81), Camrese (4.79%, $74.14), Daysee (4.35%, $80.79) |
| Yaz 7 | Combined monophasic | Drospirenone (3.0) | Estradiol estradiol (0.020) | 37.30% | $223.82 | Generlic not available |
| Generess Fe 8 | Combined monophasic with iron | Norethindrone (0.8) | Estradiol estradiol (0.025) | 46.32% | $238.34 | Generlic not available |
| Yasmin 9 | Combined monophasic | Drospirenone (3.0) | Estradiol estradiol (0.030) | 37.30% | $223.82 | Generlic not available |
| Quartette 10 | Combined quadphasic | | Estradiol estradiol (0.020, 0.010) | 24.12% | $189.88 | Rivelsa (2.99%, $77.34) |

Source: Kaiser Family Foundation analysis of IBM MarketScan Commercial Claims and Encounters Database.
* All of these are brand-name drugs; this analysis was limited to contraceptives with at least 100 users.
* Acne = indicated to treat acne; (Acne & PMDD) = indicated to treat acne and PMDD.
providers for a brand-name contraceptive that they have seen advertised and receive a prescription for this drug without knowing of generic alternatives or without an understanding that they can get a comparable product without out-of-pocket costs.

With the wide array of oral contraceptives to choose from and the large number of plans and carriers, it can be difficult for both the individual and provider to know which contraceptives are covered without cost-sharing under the various health plans. If an individual’s provider recommends a particular contraceptive or FDA-approved item based on a determination of medical necessity with respect to that individual, the health plan must cover that contraceptive without cost-sharing [16]. However, if there is not a medical necessity, it would be helpful for the provider to have some understanding of the patient’s health plan coverage before recommending a brand-name contraceptive without an available generic alternative. A 2012 survey of prescribers found that the majority of prescribers rarely asked about a patient’s prescription insurance coverage or consulted a drug list before writing a prescription [17]. Physicians’ use and documentation of contraceptives’ brand names rather than their generic names may also lead to promotion of brand-name contraceptive use when generic alternatives are available [18,19]. There may be information system technologies that could help providers access drug pricing information to help guide cost-conscious clinical decision making [20]. Some women may still prefer to pay out of pocket for a brand-name contraceptive over a generic alternative due to concerns about their clinical equivalence and differences in side effects [21].

There were a number of limitations to this analysis including the inability to identify the enrollee’s health plan. It was also not possible to know the reasons behind continued cost-sharing or reasons behind the use of certain contraceptives. We also could not determine whether the contraceptive was medically necessary for the patient.

Our analysis shows that some women may be paying out of pocket for brand-name contraceptives when generics are available or paying for brand-name contraceptives that do not have generics when they could be fully covered by the ACA if they are medically necessary. Some women will continue to pay out of pocket because of their grandfathered health plan, their employer or their preference for a certain oral contraceptive that is not fully covered by their health plan. Future research should investigate which health plans have fewer fully covered contraceptives and also effective modes of educating providers and patients about how to maximize the no-cost coverage benefit that has been extended to women.

Appendix Table 1
Share of contraceptive users with out-of-pocket spending for oral contraception by demographic characteristics, IBM MarkerScan Commercial Claims and Encounters Database, 2003–2018

| Age     | 2003 | 2010 | 2013 | 2017 | 2018 |
|---------|------|------|------|------|------|
| 15–19   | 97%  | 97%  | 30%  | 13%  | 12%  |
| 20–34   | 96%  | 96%  | 28%  | 11%  | 10%  |
| 35–44   | 97%  | 96%  | 26%  | 9%   | 9%   |
| Rural   | 97%  | 96%  | 27%  | 11%  | 10%  |
| Urban   | 92%  | 95%  | 30%  | 12%  | 11%  |

| Region  |
|---------|
| Northeast | 96%  | 97%  | 27%  | 9%   | 9%   |
| North Central | 92%  | 93%  | 29%  | 10%  | 10%  |
| South    | 99%  | 97%  | 31%  | 12%  | 11%  |
| West     | 98%  | 97%  | 21%  | 11%  | 9%   |

| Oral contraceptive type | 2003 | 2010 | 2013 | 2017 | 2018 |
|-------------------------|------|------|------|------|------|
| Brand name              | N/A  | 97%  | 48%  | 22%  | 22%  |
| Generic                 | N/A  | 96%  | 24%  | 10%  | 9%   |

N/A, not applicable. The coding for the generic indicator changed in 2010, making prior years uncomparable.

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