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Changes in U.S. Healthcare Provider Practices Related to Emergency Contraception

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Abstract

Introduction: Emergency contraception (EC), including EC pills (ECPs) and the copper intrauterine device, can prevent pregnancy after sexual encounters in which contraception was not used or used incorrectly. The U.S. Selected Practice Recommendations for Contraceptive Use (U.S. SPR), initially released in 2013, provides evidence-based clinical recommendations on the provision of EC. The objective of this analysis was to assess the percentage of health care providers reporting frequent provision of select EC practices around the time of and after the release of the U.S. SPR.

Methods: We conducted two cross-sectional mailed surveys using different nationwide samples of office-based physicians and public-sector providers in 2013 and 2014 (n = 2,060) and 2019 (n = 1,420). We compared the percentage of providers reporting frequent provision of select EC practices by time period, overall, and by provider type.

Results: In 2019, few providers frequently provided an advance prescription for ECPs (16%), an advance supply of ECPs (7%), or the copper intrauterine device as EC (8%), although 41% frequently provided or prescribed regular contraception at the same time as providing ECPs. Providers in 2019 were more likely than providers in 2013 and 2014 to provide or prescribe contraception at the same time as providing ECPs (adjusted prevalence ratio, 1.26; 95% confidence interval, 1.001–1.59) and to provide a copper intrauterine device as EC (adjusted prevalence ratio, 3.87; 95% confidence interval 2.10–7.15); there were no other significant differences by time period.

Conclusions: Few providers report frequent provision of recommended EC practices. Understanding the barriers faced by providers and clinics in implementing these practices may improve access to EC.

In the United States, approximately 45% of pregnancies are unintended (Finer & Zolna, 2016), and one-third are conceived within 18 months of a previous live birth (Gemmill & Lindberg, 2013). Unintended pregnancy is associated with inadequate or delayed prenatal care, substance use, low birth weight, infant mortality, birth defects, and delays in child

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development (Gipson, Koenig, & Hindin, 2008). Women with short interpregnancy intervals are also at increased risk for adverse pregnancy outcomes (Schummers et al., 2018). Most unintended pregnancies are attributed to nonuse, inconsistent use, or incorrect use of contraception, whereas only 5% are due to contraception method failure (Frost, Darroch, & Remez, 2008). Emergency contraception (EC) can prevent pregnancy after sexual encounters in which contraception was not used or used incorrectly. Four EC methods are available in the United States: the copper intrauterine device (Cu-IUD) and three formulations of EC pills (ECPs) (levonorgestrel [LNG] 1.5 mg, ulipristal acetate [UPA] 30 mg, and the Yuzpe regimen, which uses regular combined estrogen and progestin oral contraceptive pills) (Curtis, 2016). The Cu-IUD can be used safely within 5 days after unprotected sexual intercourse and is more than 99% effective at decreasing the risk of pregnancy (Cleland, Zhu, Goldstuck, Cheng, & Trussell, 2012). If taken within 5 days of unprotected intercourse, LNG pills are 47%–100% effective (Curtis, 2016; Raymond, Taylor, Trussell, & Steiner, 2004) and UPA is 62%–85% effective (Curtis, 2016; Glasier et al., 2010). UPA may be more effective than LNG ECPs for women with obesity (Jatlaoui & Curtis, 2016).

Timely use is important for EC to be effective for women not desiring pregnancy. Although a Cu-IUD requires a visit to a health care provider and UPA ECPs are only available by prescription, LNG ECPs are available over the counter in the United States. However, barriers to timely access still exist, including low stock of LNG ECPs and confusion about access requirements (Moore, Ryan, & Stamm, 2019). The U.S. Selected Practice Recommendations for Contraceptive Use (U.S. SPR) includes recommendations for health care providers on contraception management topics, including initiation of EC (both the Cu-IUD and ECPs), increasing access to EC through advance provision of ECPs, and initiation of regular contraception in conjunction with provision of ECPs (Curtis, 2016). Because health care providers may influence how women access and use EC, understanding health care provider practices related to EC is important. The objective of this analysis was to assess the percentage of health care providers reporting frequent implementation of four EC practices: provision of an advance prescription for ECPs, provision of an advance supply of ECPs, provision of regular contraception at the same time as providing ECPs, and provision of the Cu-IUD as EC around the time of (2013–2014) and after (2019) the initial release of the U.S. SPR. We also sought to understand the differences in the frequency of implementation for each EC practice by provider type and whether respondents used the U.S. SPR.

Methods

We conducted two cross-sectional mailed surveys using different nationwide samples of office-based physicians and public-sector providers around the time of (June 2013 to May 2014) and after (January 2019 to November 2019) the initial U.S. SPR release. Based on power calculations and anticipating nonresponse, we mailed surveys to 2,000 office-based physicians and 4,000 public-sector health centers, during both survey cycles. Office-based physicians included practicing specialists in obstetrics and gynecology, family medicine, and adolescent medicine, sampled from the American Medical Association Physician Masterfile, which includes information on American Medical Association member and

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nonmember U.S. board-certified physicians (American Medical Association, 2021). Office-based physicians were randomly selected by specialty to meet predetermined numbers by specialty (i.e., 5 in 10 sampled office-based physicians specialized in obstetrics and gynecology, approximately 4 in 10 specialized in family medicine, and approximately 1 in 10 specialized in adolescent medicine). Public sector clinic providers included physician and nonphysician clinicians (e.g., nurse, nurse practitioner, physician assistant, certified nurse midwife) working at health centers that received public funding for family planning services; these health centers were sampled from a nationwide Guttmacher Institute database. By design, one-half of the sampled health centers received funding from the federal Title X family planning program and one-half did not. Within these strata, health centers were randomly selected by type (e.g., health department, community health center) in proportion to the relative number for that strata in the database. At each sampled health center, any eligible provider could complete the survey. For office-based physicians and public sector providers, sampling fractions were calculated based on the number of each strata to be sampled and the total number in the respondent universe (e.g., the sampling fraction for office-based physicians specializing in obstetrics and gynecology in 2019 was 1 in 34 based on the desire to sample 1,000 out of a universe of 34,426). Office-based physicians and public sector providers were eligible to complete the survey if they provided family planning services to at least two women of reproductive age per week.

All survey packages included a postage-paid return envelope, and respondents were given the option to complete the survey online. The initial mailing was followed by a reminder postcard sent approximately 1 month later, and nonrespondents were mailed a second survey approximately 2 months after the initial mailing. We performed additional outreach to nonrespondents by telephone to determine eligibility and request participation if eligible. Incentives were not offered to potential respondents.

Providers were asked to indicate how often in the past year they or their clinical team had: 1) provided an advance prescription for ECPs to a woman not specifically seeking EC; 2) provided an advance supply of ECPs to a woman not specifically seeking EC; 3) provided or prescribed a contraceptive at the same time as ECPs were provided; and 4) provided a Cu-IUD as EC. Response options included very often, often, not often, or never. Very often and often responses were combined to represent frequent implementation of each EC practice, and not often and never responses were combined to represent infrequent implementation. The 2019 survey asked providers if they had used the U.S. SPR and how important various sources of information are for staying informed about recommended clinical practices related to contraception. We created a variable to capture any use of the U.S. SPR defined as use of the U.S. SPR print version or reporting the U.S. SPR as an important or minor source for staying informed about recommended contraceptive clinical practices; we did not include the use of the CDC contraception guidance website or mobile app because we could not separate use for U.S. SPR content from use for U.S. Medical Eligibility Criteria for Contraceptive Use content.

Using guidance from the American Association for Public Opinion Research (The American Association for Public Opinion Research, 2016), we calculated response rates by assuming that the proportion of providers eligible to participate was the same in the unknown

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eligibility subgroup as the known eligibility subgroup, but defined who constituted the unknown eligibility subgroup two different ways. For consistency with prior calculations and reporting of response rates for other similar mailed surveys (Simmons, Zapata, & Curtis, 2018; Tyler et al., 2012), we first defined the unknown eligibility subgroup as including those with survey packages returned as undeliverable, sampled providers or health centers with disconnected or out-of-service phone numbers, those who were otherwise unable to be reached by phone or refused follow-up phone contact, and nonrespondents. Using this methodology, the overall response rates were 51.2% for the 2013 and 2014 survey and 40.2% for the 2019 survey. Classifying those with survey packages returned as undeliverable or those with disconnected or out-of-service phone numbers as ineligible versus unknown (attempts were made to identify corrected mailing addresses and phone numbers) resulted in overall response rates of 60.3% for the 2013 and 2014 survey (Of the 6,000 clinics and physicians contacted, 2,118 were deemed eligible, 1,552 were deemed ineligible (mainly office-based physicians not providing family planning services and public sector clinics no longer open), and 2,330 were of unknown eligibility; 2,087 surveys were completed) and 50.7% for the 2019 survey (Of the 6,000 clinics and physicians contacted, 1,466 were deemed eligible, 1,623 were deemed ineligible (mainly office-based physicians not providing family planning services and public-sector clinics no longer open), and 2,911 were of unknown eligibility; 1,444 surveys were completed). The project did not require institutional review board approval because the CDC determined the activity to be nonresearch, public health practice.

We pooled data from both surveys, excluding nonclinician respondents (e.g., health educators, clinic administrators) ($n = 51$), resulting in an analytic sample of 3,480 providers ($n = 2{,}060$ for the 2013–2014 survey and $n = 1{,}420$ for the 2019 survey). We examined sample characteristics by survey cycle to determine how respondents may have differed. For each survey, we estimated the percent of providers reporting frequent implementation of each EC practice, overall and by provider type. We calculated the absolute differences between the 2019 and 2013 and 2014 survey estimates and used contrast statements and t tests to examine the significance ($p < .05$) of the differences. We conducted multivariable logistic regression to estimate adjusted prevalence ratios (aPRs) and 95% confidence intervals (CIs) of the associations between survey time point and frequent implementation of each EC practice. Because the provision of a Cu-IUD as EC depends on provider training, method availability, and patient choice, we also examined the association between survey time point and any provision of a Cu-IUD as EC. In these models, we adjusted for provider characteristics that differed ($p < .10$) between surveys (i.e., provider type and gender). Last, among 2019 survey respondents only, we examined frequent implementation of each EC practice by reported use of the U.S. SPR. In modeling for this association, we adjusted for provider characteristics associated with use of the U.S. SPR (i.e., provider type). We used SAS-callable SUDAAN for all analyses to account for the complex sample design and generate nationally representative estimates. Specifically, we weighted data to correct for nonresponse and differential probability of selection into the sample by provider and health center type.

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Results

The characteristics of respondents, including differences between the surveys, are described in Table 1. In both surveys, approximately half of respondents completed their formal clinical training of 15 or more years before the survey, and more than 80% were trained in interval care IUD insertion. More than onehalf of the respondents in both surveys reported providing family planning services to 50% or more of their female patients of reproductive age. Only provider type and gender differed ($p < .10$) between surveys. In 2019, survey respondents included a lower proportion of office-based physicians specializing in obstetrics and gynecology compared with the 2013 and 2014 survey respondents (47.0% vs. 53.1%) and a greater proportion of office-based family medicine physicians (40.4% vs. 34.1%). A greater proportion of respondents were female in 2019 compared with 2013 and 2014 (73.1% vs. 60.5%).

Table 2 summarizes the percentage of health care providers reporting frequent implementation of the four EC practices by provider type and survey time point and presents prevalence ratios comparing the 2019 survey versus the 2013 and 2014 survey, adjusted for provider type and gender. In 2019, few providers frequently provided an advance prescription for ECPs (15.7%) or an advance supply of ECPs (7.1%) to a woman not specifically seeking EC. Similarly, few providers frequently provided a Cu-IUD as EC (7.7%). A greater proportion (40.8%) of providers frequently provided or prescribed contraception at the same time as providing ECPs. Comparing 2019 and 2013 and 2014, there were no differences the overall in frequent provision of an advance prescription (aPR, 0.95; 95% CI, 0.66–1.39) or advance supply of ECPs to a woman not specifically seeking EC (aPR, 0.87; 95% CI, 0.52–1.44). However, providers in 2019 were more likely than providers in 2013 and 2014 to frequently provide or prescribe contraception at the same time as providing ECPs (aPR, 1.26; 95% CI, 1.001–1.59) and to frequently provide a Cu-IUD as EC (aPR, 3.87; 95% CI, 2.10–7.15). The proportion of providers who reported any provision of a Cu-IUD as EC increased significantly between the 2013 and 2014 survey and the 2019 survey (from 22.1% in the 2013–2014 survey to 39.4% in 2019 survey; aPR, 1.90; 95% CI, 1.50–2.42 [data not shown]).

Stratifying comparisons between years by provider type, in 2019 public sector Title X clinic providers (aPR, 0.86; 95% CI, 0.76–0.96) and public sector non-Title X clinic providers (aPR, 0.71; 95% CI, 0.55–0.91) were less likely than their counterparts in 2013 and 2014 to frequently provide an advance prescription for ECPs to a woman not specifically seeking EC (Table 2). Public sector Title X clinic providers in 2019 were also less likely than public sector Title X clinic providers in 2013 and 2014 to frequently provide an advance supply of ECPs to a woman not specifically seeking EC (aPR, 0.82; 95% CI, 0.72–0.93). Related to provision of a Cu-IUD as EC, office-based obstetrics and gynecology physicians (aPR, 3.88; 95% CI, 1.80–8.37), public sector Title X clinic providers (aPR, 2.74; 95% CI, 2.02–3.66), and public sector non-Title X clinic providers (aPR, 1.76; 95% CI, 1.06–2.92) in 2019 were more likely than their counterparts in 2013 and 2014 to frequently provide this service.

Among providers who participated in the 2019 survey, 61.5% of respondents reported the use of the U.S. SPR (data not shown). A higher percentage of providers using the U.S.

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SPR reported frequent implementation of each EC practice compared with those who did not use the U.S. SPR, with significant differences ($p < .05$) in proportions found for each practice, except for the frequent provision of an advance supply of ECPs to a woman not specifically seeking ECPs (Table 3). After adjustment for provider type, use of the U.S. SPR was significantly associated with frequently providing or prescribing contraception at the same time as providing ECPs (aPR, 1.62; 95% CI, 1.07–2.44) and frequently providing a Cu-IUD as EC (aPR, 3.30; 95% CI, 1.25–8.71).

Discussion

In our 2019 nationwide sample of health care providers that provide family planning services, few respondents reported frequently providing an advance prescription for ECPs (16%), an advance supply of ECPs (7%), or a Cu-IUD as EC (8%); 41% frequently provided regular contraception at the time of ECPs. Overall, there were no significant changes in prevalence of frequently providing or prescribing an advance supply of ECPs between 2013 and 2014 and 2019. However, we observed increases in the proportion of providers overall who frequently provided regular contraception at the same time as ECPs and who provided a Cu-IUD as EC between 2013 and 2014 and 2019, even after adjusting for provider characteristics that differed between survey years (i.e., provider type and gender). In 2019, providers who reported using the U.S. SPR were more likely to provide contraception at the same time as ECPs and provide Cu-IUD as EC compared with those who did not use the U.S. SPR.

Providing a prescription for or a supply of ECPs in advance of need removes access barriers (ACOG Committee Opinion Number 542, 2012; Curtis, 2016; Upadhya, 2019). A systematic review found that the advance provision of ECPs increased use and did not lead to increases in unprotected intercourse without contraception or condoms, frequent EC use, sexually transmitted infections, or changes in use of regular contraception (Rodriguez, Curtis, K, Jackson, & Kapp, 2013). Although advance provision of ECPs has not been shown to decrease rates of unintended pregnancy on a population level, this finding may be due to infrequent advance provision and lack of timely ECP use after every act of unprotected intercourse (Aiken & Trussell, 2016; Rodriguez et al., 2013). When taken appropriately, ECPs decrease the risk of pregnancy. We observed significant decreases between 2013 and 2014 and 2019 in the percentage of public sector Title X providers reporting frequent provision of an advance prescription for and an advance supply of ECPs; decreases in frequent provision of an advance prescription were also observed among public sector non-Title X providers. These decreases might reflect changes in provider practices based on availability of over-the-counter LNG ECPs (Food and Drug Administration, 2013), or public sector clinics potentially reallocating limited resources for provider-dependent services (e.g., long-acting reversible contraception insertion and removal). Although over-the-counter access to LNG ECPs removes the need for a health care contact, advance provision of ECPs addresses additional barriers to access such as differences in insurance coverage, finding a pharmacy that stocks ECPs (Moore et al., 2019), requiring additional documentation for purchase (Chau et al., 2017), stocking behind counter or locked security device (Chau et al., 2017; Cleland, Bass, Doci, & Foster, 2016), time to acquire ECPs, and transportation. Some women may prefer UPA ECPs, which are not available over the

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counter, given that they may be more effective than LNG ECPs, including on days 3–5 after unprotected intercourse and among women with obesity (Jatlaoui & Curtis, 2016).

Although in 2019 fewer than one-half (41%) of providers in our sample frequently provided regular contraception at the time of providing ECPs, significantly more providers in the 2019 compared with the 2013 and 2014 survey reported this practice. Increases in this practice, along with the observed increases in frequently providing Cu-IUD as EC, might be attributable to more professional organizations releasing position statements on the topic (Committee Opinion No 707: Access to Emergency Contraception, 2017; Emergency Contraception, 2017; Upadhya, 2019) in addition to the U.S. SPR guidance (Curtis, 2016) that may be incorporated into standards of care and residency programs. Our results found that reported use of the U.S. SPR in practice was significantly associated with frequently providing or prescribing contraception at the same time as providing ECPs. Providing access to regular contraception when providing ECPs decreased the burden of additional contacts with the health care system and minimizes any gap in pregnancy protection after ECPs are taken. However, it may be difficult to include counseling and provision of regular contraception within the time frame of a visit. Improvements in EC practices may also be due to other improvements in U.S. family planning services and not attributable solely to the U.S. SPR. Use of the U.S. SPR may also be a proxy for provider family planning experience, which could influence EC practices.

The results from our analysis are similar to previous studies that indicated low prevalence of provision of a Cu-IUD as EC (Harper et al., 2012; Luchowski et al., 2014; Schubert, Bishop, & Gold, 2016; Sonfield, Kost, Gold, & Finer, 2011), despite its greater effectiveness compared with ECPs. However, we also observed a significant increase in this practice from 2013 and 2014 to 2019, which may reflect overall increases in use of long-acting reversible contraception (IUDs and implants) (Daniels & Abma, 2020; Daniels, Daugherty, Jones, & Mosher, 2015). A lack of onsite availability (French, Rangel, & Mattingly, 2018) of CuIUDs may partially explain low provision of Cu-IUD as EC. In a prior survey, office-based physicians and public sector Title X health care providers indicated that the availability onsite of CuIUD was 53.5% and 59.7%, respectively (Centers for Disease Control and Prevention, 2011), yet other barriersd such as scheduling challenges, shorter appointment times, and facility policiesdmay prevent same day insertion even if available onsite (Morgan, Zapata, Curtis, & Whiteman, 2019). Patient factors also influence choice of EC type, such as am awareness of different methods, prior experience with IUDs, concern about side effects or the IUD placement procedure, and patient’s choice of regular contraception use after EC (Goodman et al., 2018; Kaller, Mays, Freedman, Harper, & Biggs, 2020).

Many studies published on health care provider EC practices have been from convenience samples from a localized area (Batur, Cleland, McNamara, Wu, & Pickle, 2016; Reed, Vaughn, & Pomerantz, 2012) or among only one subset of family planning providers (Lawrence, Rasinski, Yoon, & Curlin, 2010; Luchowski et al., 2014). One strength of our analysis is that data are from large, nationally representative surveys of family planning providers in the United States. Our analysis also had several limitations. Although not unexpected given research showing low and declining response rates to postal surveys of health care professionals (Cook, Dickinson, & Eccles, 2009), our response rates were lower

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than desired and we were unable to determine how respondents and nonrespondents differed with respect to EC practices. However, the data were weighted, including for nonresponse, to be nationally representative. The survey did not specifically define response options for questions on frequency of implementation for the EC practices (very often, often, not often, never), so responses were subject to respondent interpretation. Also, reported use of the U.S. SPR may be underestimated. Other sources of clinical information (e.g., health center protocols) often incorporate the U.S. SPR and providers may not realize that they are using the guidance. In addition, the survey did not ask about provider attitudes related to EC, which likely impact provider practices and may serve as potential barriers to the provision and prescription of EC. Last, although we adjusted for respondent characteristics that differed between surveys, it is possible that observed differences in EC practices may have been due to differences in survey respondents participating in the 2019 and the 2013 and 2014 surveys.

Implications for Practice and/or Policy

The results from our analysis have important clinical and public health implications for health care provider practices related to EC. Providing an advance prescription or supply of ECPs to a woman of reproductive age removes barriers to obtaining EC, thereby allowing a woman to be better prepared for any sexual encounter in which contraception was not used or used incorrectly. Only LNG EC is available over the counter, and other forms of EC may be preferred based on patient characteristics, timing after intercourse, and personal preferences. Although increases in frequently providing Cu-IUD as EC and providing or prescribing contraception at the time of EC were observed, wider implementation of these practices could improve access to regular contraception for those women wishing to prevent unintended pregnancy. Further exploration of barriers faced by providers and clinics in implementing recommended practices for EC provision may help improve access to EC, while also ensuring women are able to select the methods that best meet their needs and preferences.

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Table 1

Characteristics of Health Care Providers Who Provide Family Planning Services, United States, 2013–2014 and 2019

Respondent Characteristics	2013–204 (Around U.S. SPR Release)* (*n* = 2,060)	2019 (After U.S. SPR Release) (*n* = 1,420)
	n (%)†	*n* (%)†
Provider type‡		
Office-based obstetrics/gynecology physician	265 (53.1)	181 (47.0)
Office-based family medicine physician	62 (34.1)	37 (40.4)
Office-based adolescent medicine physician	79 (0.3)	83 (0.4)
Public-sector Title X clinic provider	1054 (6.7)	779 (5.6)
Public-sector non-Title X clinic provider	600 (5.9)	340 (6.6)
Gender‡		
Male	316 (38.9)	171 (26.5)
Female	1732 (60.5)	1233 (73.1)
Time since completion of formal clinical training		
<5 years	356 (15.8)	260 (18.1)
5–14 years	642 (28.8)	457 (33.7)
15–24 years	604 (25.9)	397 (26.5)
≥25 years	434 (28.1)	293 (20.9)
Trained in interval care IUD insertion		
Yes	1338 (82.4)	922 (85.1)
No	674 (16.2)	476 (14.4)
Region		
Northeast	303 (15.6)	215 (20.2)
Midwest	391 (23.5)	281 (22.3)
South	800 (34.1)	625 (31.0)
West	566 (26.8)	299 (26.6)
No. of female patients of reproductive age seen per week		
1–5	50 (1.1)	86 (0.8)
6–20	510 (18.7)	411 (19.4)
21–50	774 (33.5)	525 (38.7)

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Respondent Characteristics	2013–204 (Around U.S. SPR Release)* (*n* = 2,060)	2019 (After U.S. SPR Release) (*n* = 1,420)
	n (%)†	*n* (%)†
51–100	455 (31.5)	261 (32.6)
≥101	95 (6.5)	46 (4.3)
Proportion of female patients of reproductive age who receive family planning services		
0%–24%	226 (18.6)	140 (14.6)
25%–49%	371 (25.5)	279 (22.8)
50%–74%	477 (26.9)	359 (25.9)
≥75%	954 (27.5)	618 (35.7)
Proportion of female patients of reproductive age who pay for their visit using Medicaid or other assistance		
0%–24%	627 (55.2)	292 (51.2)
25%–49%	519 (23.1)	427 (26.4)
≥50%more	860 (20.4)	671 (21.0)
Proportion of female patients of reproductive age from a racial or ethnic minority group		
0%–24%	688 (49.2)	475 (41.5)
25%–49%	503 (29.6)	387 (35.4)
≥50%	812 (19.9)	535 (22.1)
Proportion of female patients of reproductive age who are adolescents		
0%–24%	1002 (78.6)	762 (75.3)
25%–49%	720 (17.5)	473 (20.3)
≥50%	274 (1.9)	149 (3.3)

Abbreviations: IUD, intrauterine device; U.S. SPR, United States Selected Practice Recommendations for Contraceptive Use.

*U.S. SPR, initially released in 2013.

†Unweighted numerators; weighted column percentages. Percentages may not add to 100 owing to missing data.

‡$p < .10$ based on a χ^2 test comparing the distributions between 2013–2014 and 2019.

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Table 2

Percentage of Health Care Providers Reporting Frequent Implementation* of Specific EC Practices, 2013–2014 and 2019, and Prevalence Ratios Comparing Frequent Provision Between 2019 and 2013–2014

EC Practice	2013–2014 (Around U.S. SPR Release)†		2019 (After U.S. SPR Release)		Absolute Difference‡	aPR§ (95% CI)
	Total *N*	Frequent Provision, %‖	Total *n*	Frequent Provision, %‖		
Provided an advance prescription for ECPs to a woman not specifically seeking ECPs						
Overall	2,010	16.7	1,388	15.7	−1.0	0.95 (0.66–1.39)
Office-based obstetrics/gynecology physician	258	16.7	178	15.2	−1.5	0.87 (0.55–1.36)
Office-based family medicine physician	61	11.5	37	13.5	2.0	1.33 (0.47–3.73)
Office-based adolescent medicine physician	78	62.8	82	58.5	−4.3	0.95 (0.79–1.14)
Public-sector Title X clinic provider	1,038	34.1	760	29.1	−5.0¶	0.86 (0.76–0.96)#
Public-sector non-Title X clinic provider	575	25.2	331	18.6	−6.6¶	0.71 (0.55–0.91)#
Provided an advance supply of ECPs to a woman not specifically seeking ECPs						
Overall	1,998	8.8	1,382	7.1	−1.7	0.87 (0.52–1.44)
Office-based obstetrics/gynecology physician	258	6.6	177	7.9	1.3	1.14 (0.55–2.37)
Office-based family medicine physician	60	6.7	37	2.7	−4.0	0.49 (0.06–1.34)
Office-based adolescent medicine physician	77	35.1	82	36.6	1.5	1.09 (0.80–1.49)
Public-sector Title X clinic provider	1,031	30.7	756	25.1	−5.6¶	0.82 (0.72–0.93)#
Public-sector non-Title X clinic provider	572	15.9	330	12.0	−3.9	0.74 (0.55–1.01)
Provided or prescribed contraception at the same time as provided ECPs						
Overall	1,996	31.9	1,388	40.8	8.9¶	1.26 (1.00–1.59)#
Office-based obstetrics/gynecology physician	256	30.5	179	35.8	5.3	1.17 (0.89–1.53)
Office-based family medicine physician	60	25.0	37	43.2	18.2	1.63 (0.92–2.89)
Office-based adolescent medicine physician	78	75.6	82	72.0	−3.6	0.94 (0.82–1.08)
Public-sector Title X clinic provider	1,033	67.6	760	65.2	−2.4	0.97 (0.92–1.02)
Public-sector non-Title X clinic provider	569	41.5	330	39.6	−1.9	0.96 (0.82–1.11)
Provided a copper IUD as EC						
Overall	1,986	2.8	1383	7.7	4.9¶	3.87 (2.10–7.15)#
Office-based obstetrics/gynecology physician	257	3.1	177	11.9	8.8¶	3.88 (1.80–8.37)#

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EC Practice	2013–2014 (Around U.S. SPR Release)†		2019 (After U.S. SPR Release)		Absolute Difference‡	aPR§ (95% CI)
	Total *N*	Frequent Provision, %‖	Total *n*	Frequent Provision, %‖		
Office-based family medicine physician	59	1.7	37	2.7	1.0	0.34 (0.19–0.62)
Office-based adolescent medicine physician	76	2.6	81	4.9	2.3	1.30 (0.48–7.34)
Public-sector Title X clinic provider	1,027	4.4	758	12.0	7.6¶	2.74 (2.02–3.66)#
Public-sector non-Title X clinic provider	567	3.8	330	6.5	2.7¶	1.76 (1.06–2.92)#

Abbreviations: aPR, adjusted prevalence ratio; EC, emergency contraception; ECPs, emergency contraception pills; IUD, intrauterine device; U.S. SPR, United States Selected Practice Recommendations for Contraceptive Use.

*Defined as very often or often implementing the EC practice in the past year.

†U.S. SPR, initially released in 2013.

‡2019 versus 2013–2014.

§2019 versus 2013–2014, adjusted for provider type (for overall models) and gender.

‖Weighted percentages.

¶$p < .05$ based on *t* test comparing estimates by survey time point.

#$p < .05$.

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Table 3

Proportion and Prevalence Ratios of Frequent Implementation* of Specific EC Practices During 2019, by Use of U.S. SPR (n = 1,420)

EC Practice	Frequent Provision		
	Used U.S. SPR (%)†	Did Not Use U.S. SPR (%)†	aPR (95% CI)‡
Provided an advance prescription for ECPs to a woman not specifically seeking ECPs§	20.2	8.0	2.38 (0.99–5.68)
Provided an advance supply of ECPs to a woman not specifically seeking ECPs§	9.2	3.5	2.21 (0.88–5.54)
Provided or prescribed contraception at the same time as provided ECPs§	48.0	28.4	1.62 (1.07–2.44)‖
Provided a copper IUD as EC§	10.5	3.1	3.30 (1.25, 8.71)‖

Abbreviations: aPR, prevalence ratio; EC, emergency contraception; ECPs, emergency contraception pills; IUD, intrauterine device; U.S. SPR, United States Selected Practice Recommendations for Contraceptive Use.

*Defined as very often or often implementing the EC practice in the past year.

†Unweighted numerators; weighted percentages.

‡Use U.S. SPR in practice (yes vs. no), adjusted for provider type.

§$p < .05$ based on c^2 test comparing distributions by use of U.S. SPR.

‖$p < .05$.

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