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Health Care Provider Attitudes and Practices Related ‘Quick Start’ Provision of Combined Hormonal Contraception and Depot Medroxyprogesterone Acetate to Adolescents

Isabel A. Morgan, MSPH¹, Yokabed Ermias, MPH¹, Lauren B. Zapata, PhD¹, Kathryn M. Curtis, PhD¹, Maura K. Whiteman, PhD¹

¹Division of Reproductive Health, National Center for Chronic Disease Prevention and Health Promotion, CDC, 4700 Buford Highway, Atlanta, GA 30341

Abstract

PURPOSE: Adolescents may encounter many barriers to initiating contraception. ‘Quick Start’ is a recommended approach for initiating contraception on the same day as a provider visit. We examined factors associated with health care provider attitudes and practices related to ‘Quick Start’ provision of combined hormonal contraception (CHC) and depot medroxyprogesterone acetate (DMPA) to adolescents.

METHODS: We analyzed weighted survey data from providers in publicly-funded health centers and from office-based physicians (n=2,056). Using multivariable logistic regression, we estimated adjusted odds ratios (aORs) and 95% confidence intervals (CIs) of the associations between provider characteristics and frequent (very often or often vs. not often or never) ‘Quick Start’ provision of CHC and DMPA to adolescents in the past year.

RESULTS: The prevalence of considering ‘Quick Start’ as safe was high for CHC (public-sector providers [87.5%]; office-based physicians [80.2%]) and DMPA (public-sector providers [80.9%]; office-based physicians [78.8%]). However, the prevalence of frequent ‘Quick Start’ provision was lower, particularly among office-based physicians (CHC: public-sector providers [74.2%]; office-based physicians [45.2%]; DMPA: public-sector providers [71.4%]; office-based physicians [46.9%]). Providers who considered ‘Quick Start’ unsafe or were uncertain about its safety had lower odds of frequent ‘Quick Start’ provision compared with those who considered it safe (public-sector providers: CHC aOR=0.09 95% CI 0.06–0.13, DMPA aOR=0.07 95% CI 0.05–0.10; office-based physicians: CHC aOR=0.06 95% CI 0.02–0.22, DMPA aOR=0.07 95% CI 0.02–0.20).

CONCLUSIONS: While most providers reported that ‘Quick Start’ initiation of CHC and DMPA among adolescents is safe, fewer providers reported frequent ‘Quick Start’ provision in this population, particularly among office-based physicians.

Corresponding Author: Lauren Zapata, PhD, MSPH, 4770 Buford Hwy, Mailstop F-74, Atlanta, GA 30341; lzapata@cdc.gov.

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IMPLICATIONS AND CONTRIBUTIONS: These findings highlight the need to explore barriers to implementing of ‘Quick Start’ of hormonal contraception for adolescents, which may increase contraception access and uptake in this population.

Keywords

health care provider; Quick Start; combined hormonal contraception [CHC]; depot medroxyprogesterone [DMPA]; family planning; U.S. Medical Eligibility Criteria (US MEC) for Contraceptive Use; implementation

Introduction

The need for multiple visits to a health care provider can result in delayed access to contraception (1, 2). Allowing women to initiate a contraceptive method on the day of the initial healthcare visit may improve initiation and continuation rates with user-dependent methods, including combined hormonal contraception (CHC; i.e., combined oral contraceptive pills, contraceptive patch, vaginal ring) and depot medroxyprogesterone acetate (DMPA) (3, 4). ‘Quick Start’, or same-day initiation, is an approach to reduce barriers to accessing contraception by eliminating repeat visits, if they are unnecessary (5). The U.S. Selected Practice Recommendations for Contraceptive Use (US SPR) addresses common concerns regarding initiation and use of specific contraceptive methods (6). For women who are starting CHC or DMPA, the US SPR guidelines state that the benefits of starting at the time of the initial healthcare visit likely exceed any risks, and providers should consider starting a method at any time, when reasonably certain the patient is not pregnant (6).

Adolescents have unique needs and experiences that influence their knowledge of, access to and uptake of reproductive health services, including contraception (7, 8). In 2011–2015, 55.5% of adolescent women aged 15–19 years who had ever had vaginal intercourse had ever used oral contraceptive pills and 17.3% had ever used an injectable (9). One study suggests that up to 25% of women never fill their initial prescription for oral contraceptive pills, after an initial visit with a family planning clinic (10). This may be more prevalent among adolescents who may be less likely to access reliable transportation or schedule time to visit a pharmacy to fill their prescription. A study on continuation of oral contraceptive pills among 193 women aged less than 22 years demonstrated that 77% of women in the ‘Quick Start’ group were taking their birth control pills at 3 months compared with 56% of women in the conventional start group (11). An assessment of strategies to improve reproductive health care services identified ‘Quick Start’ initiation of hormonal contraception and IUDs as one of 31 evidence-based clinical practices to improve access to and uptake of reproductive health services (1). Using ‘Quick Start’ to provide contraception may reduce risk of unintended pregnancy by decreasing the need for repeat visits and increasing continuation rates and contraceptive method adherence (12).

While contraceptive access is influenced by multiple factors (e.g., insurance coverage, facility-based family planning protocols, contraceptive method availability, patient knowledge of contraceptive effectiveness; [1,13–15]), research suggests that provider contraceptive counseling strategies and provider preferences can influence successful

initiation. A national survey of public and private contraceptive service providers reported that 38% of obstetricians/gynecologists and 78% of Planned Parenthood providers offer ‘Quick Start’ initiation of oral contraceptive pills (14). Limited data are available on provider attitudes on the safety of ‘Quick Start’ initiation of contraception to adolescents. Understanding provider attitudes on the safety of ‘Quick Start’ for adolescents in particular is an important factor that may influence contraceptive counseling strategies and provision practices. Our analysis is the first to examine health care provider attitudes related to ‘Quick Start’ initiation of CHC and DMPA for adolescents and to identify the factors associated with frequent ‘Quick Start’ provision of CHC and DMPA to adolescents.

Methods

During 2013–2014, surveys were mailed to a random sample of 4,000 public-sector health centers that provided family planning services (i.e., any service related to postponing or preventing pregnancy) and 2,000 office-based physicians. Public-sector health centers were identified from a Guttmacher Institute database of all publicly-funded family planning centers nationwide. At the time of the survey, about half of all publicly-funded family planning health centers receive federal funds from the Title X family planning program, the only federal program devoted to providing family planning services to low-income and underserved women. By design, we sampled 2,000 clinics that received Title X funding and 2,000 clinics that did not receive Title X funding. Within these strata (Title X, non-Title X), clinics were randomly selected by health center type (e.g., community health center, health department) proportionate to the relative number in the population for that strata. Additional details on the development of the Guttmacher Institute database are described elsewhere (19). For each sampled health center, we asked that one provider complete the survey. Office-based physicians specializing in adolescent medicine (i.e., pediatricians, family practice physicians, and internal medicine physicians), obstetrics and gynecology and family medicine were sampled from the American Medical Association (AMA) Physician Masterfile, a database that includes information on U.S. AMA member and nonmember board-certified physicians. Providers were eligible to participate in the survey if they provided family planning services to women of reproductive age at least twice per week. The initial mailing was followed by a reminder postcard and a second survey mailing to non-respondents. Additional efforts to contact non-respondents and to determine eligibility were made by telephone.

Of 6,000 surveys distributed to public-sector health centers and office-based physicians, 2,118 health centers/physicians were deemed eligible, 1,000 were deemed ineligible (comprised mainly of public-sector health centers no longer open and office-based physicians not providing family planning services), and 2,882 had unknown eligibility (comprised mainly of non-respondents and those with surveys returned as undeliverable). We calculated the response rates assuming that the proportion of health care providers eligible in the unknown subgroup was the same as the proportion in the known eligibility subgroup. The resulting response rate was 51.2% (n=2,087).

Survey

The survey was a 33-item questionnaire designed to assess health care providers' attitudes and practices related to contraceptive provision and application of federal contraceptive guidance and recommendations, including the U.S. Medical Eligibility Criteria for Contraceptive Use (US MEC), U.S. Selected Practice Recommendations for Contraceptive Use (US SPR), and Providing Quality Family Planning Services (QFP). The survey was pilot-tested with physicians representing each targeted specialty, nurse practitioners, certified nurse midwives, and epidemiologists, prior to implementation.

Demographic Characteristics of Providers and Clinics

We collected data on health care provider and clinic characteristics, including clinic receipt of Title X funding (Title X or non-Title X) and provider primary clinical focus at the clinic (reproductive health [obstetrics/gynecology or family planning/reproductive health] or primary care [family medicine, adolescent health or pediatrics, or general health care]) for public-sector providers; physician specialty (obstetrics/gynecology, family medicine, or adolescent medicine) for office-based physicians; and gender (female or male); region (Northeast, Midwest, South, or West); and years since completion of formal clinical training (less than 5 years, 5–14 years, or 15 years or more) for both provider types.

Demographic Characteristics of Clinic Patient Populations

The survey instructed providers to indicate the percentage of their female patients of reproductive age who paid for their visit using Medicaid or other public assistance, and the percentage who were adolescents. Response options included 0–24%, 25–49%, and 50%.

Provider Attitudes on the Safety of 'Quick Start' Initiation of Contraception for Adolescents

To assess provider attitudes on the safety of 'Quick Start' initiation of contraception for adolescents, providers were asked the following question: "For each of the following contraceptive methods, how safe do you think it is to start [an adolescent woman] on the day of her visit regardless of the timing of her menses ('Quick Start') if you are reasonably certain she is not pregnant?" For both CHC and DMPA, response options included, 'very safe', 'safe', 'unsafe', 'very unsafe' and 'don't know'. Very few providers responded 'don't know' (<0.05% for both CHC and DMPA). For analysis, responses were dichotomized as 'very safe or safe' and 'very unsafe, unsafe, or don't know'.

Frequency of 'Quick Start' Provision of Contraception to Adolescents

To assess the frequency of 'Quick Start' provision of contraception to adolescents, providers were asked the following question: "In the past year, when providing or prescribing combined hormonal contraceptives (combined oral contraceptives [COCs], patch, ring), how often did you start [an adolescent woman] on the day of her visit regardless of the timing of her menses ('Quick Start') if you were reasonably certain she was not pregnant?" Providers were instructed to answer questions about provision practices as they related to their or their clinical team's practices when providing family planning services in the last year. Response options included, 'very often or often' and 'not often or never'. If providers selected 'not often or never' they were asked to indicate a reason why, selecting from five

response options. The response options included ‘I do not think it is safe’; ‘I have liability concerns’; ‘I do not have enough training’; ‘I do not think it is appropriate for adolescents’; or ‘My practice/ health center protocol does not allow it’. If a description of their reason(s) for infrequently providing/prescribing CHC to adolescents was not listed, providers were allowed to write-in a brief explanation. Providers could select more than one response. For analysis, write-in responses were recoded into existing response options, if applicable. This was done independently by two co-authors who met to discuss discrepancies and reach consensus before executing recodes. After reviewing write-in responses, concerns related to bleeding patterns emerged as a common concern for ‘Quick Start’ provision of CHC, thus we created a separate response option for reporting purposes. Providers were presented a similar question and the same response options to describe their frequency of ‘Quick Start’ provision of DMPA to adolescents, and reasons for infrequent ‘Quick Start’ provision.

Analysis

Of 2,087 providers who responded to the survey, we excluded 31 respondents who indicated they were administrators or office managers, or who indicated they did not serve adolescents. For analyses examining CHC, 128 providers were excluded for non-response to questions about attitudes on the safety of ‘Quick Start’ initiation and provision of CHC to adolescents, leaving an analytic sample of 1,959. For analyses examining DMPA, 149 respondents were excluded for non-response to questions about attitudes on the safety of ‘Quick Start’ initiation and provision of DMPA to adolescents, leaving an analytic sample of 1,938.

Provider and clinic demographic characteristics were summarized using descriptive statistics. We used bivariate and multivariable logistic regression to estimate crude odds ratios (ORs), adjusted odds ratios (aOR) and 95% confidence intervals (CIs). Covariates found to be statistically significant at the 0.05 alpha level in bivariate models and other variables selected *a priori* based on the literature (i.e., region and provider gender) were used to construct the multivariable models. The primary outcomes were provider frequency of ‘Quick Start’ provision of CHC and DMPA to adolescents in the past year (defined as frequent [very often or often] or infrequent [not often or never]). Data were weighted to account for non-response and sample selection probabilities. All analyses were performed in Stata version 14.0 software (15). The project was determined to be non-research, public health practice by the CDC and Institutional Review Board approval was not needed.

Results

Demographic Characteristics of Providers, Clinics, and Clinic Patient Populations

Provider and clinic patient population demographic characteristics are described by provider type (Table 1). For public-sector providers, half (52.5%) practiced at health center sites that received Title X funding. About half of public-sector providers reported their primary clinical focus as reproductive health (54.8%) and half as primary care (44.6%). For office-based physicians, most (60.6%) specialized in obstetrics and gynecology, 39.0% in family medicine, and less than 1% in adolescent medicine. For both public-sector providers and office-based physicians, the largest proportion of respondents were female, completed their

formal clinical training 15 or more years ago, reported a high proportion (50%) of female patients of reproductive age who receive family planning services, and reported a low proportion (0–24%) of female patients of reproductive age who are adolescents. Whereas the largest proportion of public-sector providers (48.1%) reported a high proportion (50%) of female patients of reproductive age with Medicaid or other public assistance, the majority of office-based physicians (59.8%) reported a low proportion (0–24%).

Health Care Provider Attitudes and Practices Related to the Safety of ‘Quick Start’ Initiation of Contraception for Adolescents

Among public-sector providers, 87.5% and 80.9% reported ‘Quick Start’ initiation of CHC and DMPA, respectively, as safe for adolescents (Table 1); 74.2% and 71.4% reported frequent ‘Quick Start’ provision of CHC and DMPA, respectively. Among office-based physicians, 80.2% and 78.8% reported ‘Quick Start’ initiation of CHC and DMPA as safe, respectively. However, only 45.2% of office-based physicians reported frequent ‘Quick Start’ provision of CHC, and only 46.9% reported frequent ‘Quick Start’ provision of DMPA.

Factors Associated with ‘Quick Start’ Provision of CHC and DMPA to Adolescents for Public-Sector Providers

Table 2 presents data on factors associated with frequent ‘Quick Start’ provision of CHC and DMPA to adolescents for public-sector providers. A lower proportion of providers who practiced in clinics that did not receive Title X funding reported frequent ‘Quick Start’ provision compared with providers who practiced in Title X funded clinics for both CHC (68.6% versus 84.3%) and for DMPA (69.4% and 78.9%); however, in multivariable analysis this factor was only statistically significant for CHC (aOR 0.59 95% CI 0.45–0.78). Primary clinical focus, proportion of female patients of reproductive age who receive family planning services, and attitudes on the safety of ‘Quick Start’ for adolescents were each statistically significantly associated with frequent ‘Quick Start’ provision of CHC and DMPA. More specifically, for CHC, compared with providers whose primary clinical focus at the clinic was reproductive health (84.1%), fewer providers whose primary clinical focus at the clinic was primary care (68.2%; aOR 0.65 95% CI 0.49–0.86) reported frequent ‘Quick Start’ provision. Also, compared with providers who reported that 50% of their female patients of reproductive age receive family planning services (83.0%), fewer providers who reported that proportion to be 1–24% (55.9%; aOR 0.42 95% CI 0.28–0.63) reported frequent ‘Quick Start’ provision. Last, compared with providers who reported ‘Quick Start’ initiation of CHC as safe (82.2%), those who did not report the practice as safe (24.3%) had lower odds of reporting frequent ‘Quick Start’ provision of CHC to adolescents (aOR 0.09 95% CI 0.06–0.13). Similar patterns were observed for these factors in association with the frequency of ‘Quick Start’ provision of DMPA to adolescents (Table 2).

Factors Associated with ‘Quick Start’ Provision of CHC and DMPA to Adolescents for Office-Based Physicians

Table 3 presents data on factors associated with frequent ‘Quick Start’ provision of CHC and DMPA to adolescents for office-based physicians. Physician specialty, time since completed formal clinical training, and attitudes on the safety of ‘Quick Start’ were each

significantly associated with ‘Quick Start’ provision of CHC and DMPA. Specifically, for CHC, compared with providers trained in obstetrics and gynecology (39.1%), more providers trained in adolescent medicine (83.1%; aOR 5.43 95% CI 3.09–9.53) reported frequent ‘Quick Start’ provision. The proportion of family medicine physicians reporting ‘Quick Start’ provision (59.3%) did not differ significantly from obstetrician gynecologists (aOR 1.62 95% CI 0.75–3.49). By duration of time since completion of training, the prevalence of frequent ‘Quick Start’ provision of CHC to adolescents was lowest for providers who completed clinical training 15 or more years ago and highest for providers most recently (less than 5 years ago) completing clinical training (32.2% vs. 81.2%, respectively; aOR 0.15 95% CI 0.06–0.38). Last, compared with providers who reported ‘Quick Start’ initiation of CHC for adolescents as safe, those who reported the practice as unsafe or were uncertain about its safety had lower odds of frequently using ‘Quick Start’ to provide CHC (5.9% compared with 56.7%; aOR 0.06 95% CI 0.02–0.22). Similar patterns were observed for the frequency of ‘Quick Start’ provision of DMPA related to physician specialty, time since completion of formal clinical training, and attitudes towards the safety of ‘Quick Start’. Additionally for DMPA, compared with providers with a high proportion (50%) of female patients of reproductive age paying using Medicaid or other public assistance, fewer providers with a low (0–24%) proportion reported frequent ‘Quick Start’ provision (40.3% vs. 68.3%; aOR 0.34 95% CI 0.16–0.70).

Provider Reasons for Infrequent ‘Quick Start’ Provision of CHC and DMPA to Adolescents

Table 4 describes provider reasons for infrequent ‘Quick Start’ provision of CHC and DMPA to adolescents, among providers that reported not often or never providing CHC and DMPA same-day. The most common specified reasons reported by public-sector providers for infrequent ‘Quick Start’ provision of CHC included concerns for safety (Title X, 25.3%; non-Title X, 29.6%) and liability (Title X, 18.2%; non-Title X, 19.6%). Among providers who practiced in Title X funded clinics who reported infrequent ‘Quick Start’ provision of CHC, 20.0% indicated that their practice or health center protocol does not allow the practice; and 26.6% selected ‘Other’, indicating a reason not listed to describe infrequent ‘Quick Start’ provision of CHC. For DMPA, almost half (49.7%) of providers who practiced in Title X funded clinics reported that their practice or health center protocols do not allow ‘Quick Start’ provision of DMPA and 35.7% of providers in non-Title X funded clinics reported concerns for safety with using ‘Quick Start’ to initiate DMPA among adolescents. Office-based physicians most frequently reported concerns for safety (25.9%), bleeding (25.5%) and liability (23.5%) as reasons for infrequent ‘Quick Start’ provision of CHC. Additionally, 26.2% reported concerns for liability and 34.8% selected ‘Other’.

Discussion

This analysis finds that the majority of providers consider ‘Quick Start’ initiation of CHC and DMPA safe for adolescents; however, fewer providers reported frequent ‘Quick Start’ provision, with proportions lowest among office-based physicians. Health care providers’ frequency of using ‘Quick Start’ to provide CHC and DMPA to adolescents varied by provider and clinic patient population demographic characteristics. Among public-sector providers, primary clinical focus, the proportion of female patients of reproductive age

who receive family planning services, and provider attitudes on the safety of ‘Quick Start’ provision were each significantly associated with frequency of ‘Quick Start’ provision of CHC and DMPA. We also found that a greater proportion of providers who practiced in Title X funded clinics reported frequent ‘Quick Start’ provision of CHC compared with providers who practiced in clinics that did not receive Title X funding. For office-based physicians, physician specialty and time since completing formal clinical training were each significantly associated with frequency of ‘Quick Start’ provision of CHC and DMPA. For DMPA only, compared with providers with a high proportion (50%) of female patients of reproductive age paying using Medicaid or other public assistance, fewer providers with a low (0–24%) proportion reported frequent ‘Quick Start’ provision of DMPA. In this analysis, provider attitudes on the safety of ‘Quick Start’ initiation of CHC and DMPA for adolescents were the strongest factors associated with the frequency of ‘Quick Start’ provision of CHC and DMPA to adolescents.

Variations in ‘Quick Start’ provision patterns by Title X funding status at public-sector clinics may be explained by differential onsite availability of contraceptive methods and use of facility-based protocols that support ‘Quick Start’ across clinic sites (16–19). For example, findings from a Guttmacher Institute report found that Title X clinics were more likely to provide nearly all reversible contraceptive methods on-site than non-Title X-funded clinics, and they were also more likely to use a ‘Quick Start’ protocol to initiate oral contraceptive pills (OCPs) (19). Specifically, 87% of Title X-funded clinics often or sometimes use a ‘Quick Start’ protocol to initiate OCPs, compared with 66% of non-Title X-funded clinics (19). Additionally, 94% of Title X funded clinics stock DMPA onsite and inject same-day, compared with only 87% of clinics that did not receive Title X funding (19). More frequent ‘Quick Start’ provision of hormonal contraception to adolescents by providers whose primary clinical focus is reproductive health and who provide family planning services to a higher proportion of patients of reproductive age may reflect greater opportunity to provide contraceptive services to adolescents. Among office-based physicians, adolescent medicine providers more often reported frequent ‘Quick Start’ provision of CHC and DMPA to adolescents compared with obstetricians and gynecologists, despite recommendations in support of ‘Quick Start’ provision of contraception to adolescents by both the American Academy of Pediatrics (AAP) and the American College of Obstetricians and Gynecologists (ACOG). An AAP technical report indicated that combined oral contraceptives, vaginal ring, and DMPA can be initiated using ‘Quick Start’ or ‘same-day’ in healthy, non-pregnant adolescents (22). Similarly, an ACOG committee opinion encourages health care providers to initiate combined hormonal contraception in a single visit (‘same-day’) if pregnancy can be reasonably excluded (23). The finding that practice patterns differ by provider specialization despite similarities in recommendations from professional organizations and high proportions of office-based physicians considering ‘Quick Start’ for adolescents as safe, highlights the need to explore barriers to implementing this practice among different specialties and their practice settings.

While the majority of public-sector providers reported frequent ‘Quick Start’ provision of both methods, barriers to frequent ‘Quick Start’ provision may be different among the subset of providers who reported infrequent use of ‘Quick Start’. For example, among those who reported infrequent ‘Quick Start’ provision of DMPA to adolescents, the most commonly

reported reason by Title X providers was that their practice or health center protocols do not allow it, but non-Title X providers most commonly reported that they did not think it was safe. Post-hoc analyses showed that a greater proportion of providers who practiced in clinics that received Title X funding and reported infrequent ‘Quick Start’ provision of DMPA to adolescents were registered nurses, compared with providers in non-Title X funded clinics. This suggests that the type of provider staffed at clinic locations may influence ‘Quick Start’ provision of DMPA to adolescents. Facility-level policies and state laws likely influence contraceptive provision practices by limiting the scope of practice and prescriptive authority among advanced clinical practitioners (e.g., nurse practitioners and certified nurse midwives) and registered nurses (24).

Pertaining to infrequent ‘Quick Start’ provision of CHC, our data also suggests that providers may be concerned about irregular bleeding and safety with adolescents, despite evidence that bleeding patterns and side effects following ‘Quick Start’ initiation of COC are similar to conventional start (4, 11, 21). A study comparing side effects of oral contraceptive pills between a ‘Sunday Start’ group and ‘Quick Start’ group found no statistical significance in breakthrough bleeding or nausea and vomiting (11). Our findings suggest that infrequent ‘Quick Start’ provision of DMPA to adolescents may be related to safety and liability concerns. Concerns associated with quick starting DMPA include the potential for initiation during the follicular phase and impacts of DMPA exposure on the developing fetus for undetected pregnancies, despite lack of evidence indicating adverse risk (20). Because of these concerns one practice is to provide CHC in the interim, but this may increase risk for an unintended pregnancy; Rickert and colleagues found that young women assigned to receive CHC before initiating a DMPA injection in a follow-up visit were almost 4 times as likely to become pregnant compared with participants assigned to receive a DMPA injection in the initial visit (3).

A few limitations warrant noting. Surveys were self-administered and thus the information may be subject to social desirability and recall error. Response rates were lower than desired though consistent with several mailed provider surveys (25–28) and weighed for nonresponse. Finally, the survey did not include a question on provider attitudes on the safety of CHC for adolescents, as it did for DMPA, although extensive research on contraceptive provision to adolescents indicates that health care providers most often recommend CHC (29, 30). Despite these limitations, these data contribute to the literature on provider attitudes and practices related to contraception for a special population – adolescents.

Conclusions

‘Quick Start’ provision of contraception to women is an evidence-based practice that is outlined in the US SPR guidelines and endorsed by ACOG and AAP, and is an appropriate approach for providing contraception to healthy, non-pregnant adolescent clients seeking to initiate contraception. While most providers reported that ‘Quick Start’ initiation of CHC and DMPA among adolescents is safe, fewer providers reported frequent ‘Quick Start’ provision in this population, particularly among office-based physicians. These findings

can inform guideline dissemination efforts and development of facility-based protocols to support ‘Quick Start’ provision of CHC and DMPA to adolescents.

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Table 1.

Demographic Profile and Clinic Patient Population of U.S. Health Care Providers Providing Family Planning Services, Stratified by Provider Type (n=2,056)

Characteristic	Public-Sector Providers [§] (n=1,650)		Office-Based Physicians (n=406)	
	Unweighted n	Weighted %	Unweighted n	Weighted %
Title X Funding				
Yes	1,052	52.5	-	-
No	598	47.5	-	-
Primary Clinical Focus [^]				
Reproductive Health	968	54.8	-	-
Primary Care	673	44.6	-	-
Physician Specialty				
Obstetrics and Gynecology	-	-	265	60.6
Family Medicine	-	-	62	39.0
Adolescent Medicine	-	-	79	0.34
Gender				
Male	143	10.3	173	43.0
Female	1,496	89.1	232	56.4
Region				
Northeast	224	14.3	79	15.8
Midwest	305	18.8	86	24.2
South/Mid-Atlantic	660	37.2	137	33.6
West	461	29.7	104	26.4
Time since completed formal clinical training				
< 5 years	305	19.8	50	15.2
5–14 years	524	32.6	115	28.2
15 years	800	46.4	238	55.1
Proportion of female patients of reproductive age who receive family planning services [¶]				
1–24%	165	11.9	59	19.5
25–49%	264	17.8	107	26.6
50%	1,192	68.4	237	52.4
Proportion of female patients of reproductive age with Medicaid or other public assistance				
0–24%	401	22.4	223	59.8
25–49%	430	26.4	89	22.7
50%	769	48.1	90	16.4
Proportion of female patients of reproductive age that are adolescents				
0–24%	724	46.0	274	83.2
25–49%	666	38.9	54	14.5
50%	203	11.5	71	0.53

	Public-Sector Providers [¶] (n=1,650)		Office-Based Physicians (n=406)	
	Unweighted n	Weighted %	Unweighted n	Weighted %
Attitudes on the safety of 'Quick Start' ~ initiation of CHC for adolescents				
Safe	1,460	87.5	333	80.2
Unsafe or Don't Know	128	8.6	68	18.3
Attitudes on the safety of 'Quick Start' initiation of DMPA for adolescents				
Safe	1,353	80.9	332	78.8
Unsafe or Don't Know	232	15.0	69	19.7
Frequency of 'Quick Start' provision of CHC to adolescents in the past year				
Very Often or Often	1,261	74.2	200	45.2
Not Often or Never	342	22.7	195	51.7
Frequency of 'Quick Start' provision of DMPA to adolescents in the past year				
Very Often or Often	1,200	71.4	206	46.9
Not Often or Never	392	25.0	179	48.2

[¶]Includes Title-X and non-Title X providers

[¥]Family planning service was defined as any service related to postponing or preventing pregnancy. This may include a medical examination related to provision of a method, contraceptive counseling, method prescription, or supply visits. A patient may receive a family planning service even if the primary purpose of the visit is not for contraception.

[^]Primary clinical focus at the clinic (reproductive health [obstetrics/gynecology or family planning/reproductive health] or primary care [family medicine, adolescent health or pediatrics, or general health care])

[~]'Quick Start' is defined as starting a woman on the day of her visit regardless of the timing of her menses

Note: CHC = Combined Hormonal Contraception; DMPA = Depot Medroxyprogesterone Acetate

Table 2:

Factors Associated with Frequent ‘Quick Start’ Provision of Combined Hormonal Contraception and Depot Medroxyprogesterone Acetate to Adolescents in the Past Year, for Public-Sector Providers[¶]

Characteristics	CHC		DMPA		aOR [∞] (95% CI)
	“Very Often or Often” Unweighted n	Weighted %	“Very Often or Often” Unweighted n	Weighted %	
Title X Funding					
Yes	854	84.3	790	78.9	<i>ref</i>
No	385	68.6	389	69.4	0.59 (0.45–0.78)*
Primary Clinical Focus [^]					
Reproductive Health	791	84.1	750	81.2	<i>ref</i>
Primary Care	445	68.2	426	66.1	0.74 (0.57–0.97)*
Proportion of female patients of reproductive age who receive family planning services [‡]					
1–24%	87	55.9	85	55.3	0.42 (0.28–0.63)*
25–49%	175	67.6	173	66.9	0.72 (0.51–1.01)
50%	961	83.0	907	79.7	<i>ref</i>
Attitudes on the safety of ‘Quick Start’ [¶] of CHC for adolescents					
Safe	1,208	82.2	-	-	-
Unsafe or Don’t Know	31	24.3	-	-	0.09 (0.06–0.13)*
Attitudes on the safety of ‘Quick Start’ [¶] of DMPA for adolescents					
Safe	-	-	1,121	83.7	<i>ref</i>
Unsafe or Don’t Know	-	-	58	24.0	0.07 (0.05–0.10)*

* $p < 0.05$

[¶] Includes providers who practice in Title-X funded and non-Title X funded clinics

[‡] Family planning service is defined as any service related to postponing or preventing pregnancy. This may include a medical examination related to provision of a method, contraceptive counseling, method prescription, or supply visits. A patient may receive a family planning service even if the primary purpose of the visit is not for contraception.

[^] Primary clinical focus at the clinic (reproductive health [obstetrics/gynecology or family planning/reproductive health] or primary care [family medicine, adolescent health or pediatrics, or general health care])

[∞] Adjusted for Title X funding, primary clinical focus, provider gender, region, and proportion of female patients of reproductive age who receive family planning services

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Adjusted for Title X funding, primary clinical focus, provider gender, region, proportion of female patients of reproductive age who receive family planning services, and provider attitudes on the safety of DMPA for adolescents

~ 'Quick Start' is defined as starting a woman on the day of her visit regardless of the timing of her menses

Note: aOR = Adjusted Odds Ratio; CHC = Combined Hormonal Contraception; CI = Confidence Interval; DMPA = Depot Medroxyprogesterone Acetate; ref = referent group

Table 3:

Factors Associated with Frequent ‘Quick Start’ Provision of Combined Hormonal Contraception and Depot Medroxyprogesterone Acetate to Adolescents in the Past Year, for Office-Based Physicians

Characteristics	CHC			DMPA		
	“Very Often or Often” Unweighted n	Weighted %	aOR [†] (95% CI)	“Very Often or Often” Unweighted n	Weighted %	aOR [∞] (95% CI)
Physician specialty						
Obstetrics and Gynecology	100	39.1	<i>ref</i>	112	45.2	<i>ref</i>
Family Medicine	35	59.3	1.62 (0.75–3.49)	32	54.2	1.33 (0.63–2.80)
Adolescent Medicine	64	83.1	5.43 (3.09–9.53)*	59	78.7	3.21 (1.74–5.90)*
Time since completed formal clinical training						
< 5 years	40	81.2	<i>ref</i>	40	82.6	<i>ref</i>
5–14 years	70	56.4	0.32 (0.12–0.82)*	65	53.1	0.15 (0.04–0.57)*
15 years	88	32.2	0.15 (0.06–0.38)*	97	37.0	0.10 (0.03–0.36)*
Proportion of female patients of reproductive age with Medicaid or other public assistance						
0–24%	94	39.7	0.47 (0.21–1.05)	88	40.3	0.34 (0.16–0.70)*
25–49%	49	58.1	0.91 (0.34–2.43)	50	56.2	0.52 (0.20–1.35)
50%	56	58.6	<i>ref</i>	64	68.3	<i>ref</i>
Attitudes on the safety of ‘Quick Start’ ~ provision of CHC						
Safe	196	56.7	<i>ref</i>	-	-	-
Unsafe or Don’t Know	3	5.9	0.06 (0.02–0.22)*	-	-	-
Attitudes on the safety of ‘Quick Start’ provision of DMPA						
Safe	-	-	-	199	58.7	<i>ref</i>
Unsafe or Don’t Know	-	-	-	4	8.1	0.07 (0.02–0.20)*

* $p < 0.05$

[†] Adjusted for physician specialty, time since completed formal clinical training, provider gender, region, proportion of female patients of reproductive age receiving family planning services, and proportion of female patients of reproductive age with Medicaid or other public assistance

[∞] Adjusted for physician specialty, time since completed formal clinical training, provider gender, region, and proportion of female patients of reproductive age receiving family planning services, and proportion of female patients of reproductive age with Medicaid or other public assistance

~ ‘Quick Start’ is defined as starting a woman on the day of her visit regardless of the timing of her menses

Note: aOR = Adjusted Odds Ratio; CHC = Combined Hormonal Contraception; CI = Confidence Interval; DMPA = Depot Medroxyprogesterone Acetate; *ref* = referent group

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Table 4: Provider Reasons[^] for Infrequent ‘Quick Start’ Provision of CHC and DMPA to Adolescents in the Past Year

	n (%)*	CHC				DMPA			
		Public-Sector Providers		Office-Based Physicians		Public-Sector Providers		Office-Based Physicians	
		Title X	non-Title X	Title X	non-Title X	Title X	non-Title X	Title X	non-Title X
Reasons for not often or never using the ‘Quick Start’ [~] approach to provide contraception to adolescents ^{±^}		157 (15.7)	171 (31.4)	193 (53.0)	211 (21.1)	166 (30.6)	179 (51.1)		
%*									
Do not think it is safe	25.3	29.6	25.9	25.7	35.7	22.0			
Liability concerns	18.2	19.6	23.5	21.2	19.3	26.2			
Not enough training	3.9	8.0	4.3	2.9	6.3	2.6			
Not appropriate for adolescents	7.8	14.3	21.1	5.9	5.4	13.9			
Practice/health center protocol does not allow it	20.0	13.6	3.5	49.7	21.7	18.3			
Concerns about bleeding [‡]	6.8	10.8	25.5	-	-	-			
Other	26.6	22.4	18.0	17.0	21.6	34.8			

* Weighted percentages

[~] ‘Quick Start’ is defined as starting a woman on the day of her visit regardless of the timing of her menses

[±] Providers could select more than one reason

[‡] Generated from write-in responses

[^] Among respondents who reported not often or never using the ‘Quick Start’ approach to provide CHC or DMPA to adolescents in the past year