

# **Provider Perspectives on the Concept of IUD Self-Removal**

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# Background

Access to long-acting reversible contraception (LARC), including intrauterine devices (IUDs) and contraceptive implants, has increased dramatically in the last 15 years, largely due to focused efforts among family planning policy makers, clinicians, and researchers.<sup>1-4</sup> While much effort has concentrated on identifying and removing barriers to LARC insertion<sup>5-9</sup>, much less research has focused on reducing barriers to LARC removal, which has critical implications for reproductive autonomy.

Unlike other reversible contraceptives, LARC methods are designed to be removed by a clinician when desired.<sup>10</sup> Some potential users see the inability to discontinue the device themselves as a downside or deterrent to use.<sup>11-14</sup> Previous studies have documented barriers to LARC removal including provider hesitance or refusal to remove devices,<sup>15-20</sup> high out of pocket self-pay costs,<sup>21</sup> and long wait times for appointments.<sup>21</sup> One study of 1181 LARC users documented that over 10% faced barriers to removal,<sup>22</sup> but larger studies of the prevalence of barriers to LARC removal are lacking.

While IUD users are typically advised to return to a clinician for removal when desired, some IUD users have removed their own IUDs.<sup>23, 24</sup> In one study of internet forums discussing IUD self-removal experiences, IUD users commonly reported turning to self-removal when they were unable to access removal by a provider.<sup>25</sup> When successful, IUD self-removal experiences have been reported to be positive.<sup>23, 24, 26</sup> However, in one study of 190 IUD users presenting to a clinician for IUD removal who were willing to attempt to self-remove their IUD in the office, only 19% were successful.<sup>23</sup>

Successful self-removal requires the user to feel for their IUD strings; but in one study of 126 IUD users, about half were willing to feel for their own IUD strings, and among those who tried, approximately two-thirds are able to feel them.<sup>27</sup> Unsuccessful IUD self-removal attempts are typically characterized as the inability to feel the IUD strings or to grasp the IUD strings.<sup>23, 24</sup> Currently, other research is ongoing to document IUD self-removal success for users not presenting to a provider for removal, as well as develop guides to improve self-removal success.<sup>28</sup>

Little is known about what family planning providers think about IUD self-removal. IUD users considering self-removal report that they want to know from their provider if self-removal is acceptable and safe,<sup>25</sup> and in one study of 865 adolescents, only 11% were aware that IUD self-removal was safe, including 14% of past and present IUD users.<sup>29</sup> However, in one small qualitative study of 12 family physicians in one health system, providers were not concerned about safety but did expect to be involved in the IUD removal decision;<sup>30</sup> it is unknown if this is generalizable to other family planning providers.

Also, little is known about family planning providers' practices around counseling about IUD self-removal. In 2022, the Society of Family Planning issued guidance about contraception provision during the pandemic which included IUD self-removal; prior to that, no professional society had provided guidance about IUD self-removal counseling by providers.<sup>31</sup> In one study of 63 family planning clinics' practices during the first year of the pandemic, counseling about self-removal increased from 8% to 25%.<sup>32</sup> This is in comparison to 2% of obstetrician-gynecologists reporting self-removal counseling also surveyed in the first year of the pandemic.<sup>33</sup>

Improving the feasibility of IUD self-removal as an option will require technical assistance with finding and grasping the IUD strings as well as documentation of family planning providers' endorsement of IUD self-removal as a safe and acceptable option. To fill this gap in IUD self-removal access and inform the potential development of an IUD self-removal device, this observational study employed mixed methodologies to explore family planning providers' perspectives and practices around IUD self-removal. This research informs Medicines360's efforts to improve access to IUD discontinuation when desired, including exploring the possibility of developing a device to assist IUD users in removing their own IUD. This research was supported by Medicines360 and Arnold Ventures.

## **Provider perspectives, part 1: qualitative interviews**

### **Interview Methods**

#### **Sample and recruitment**

In the first part of the project, we recruited family planning providers to participate in virtual semi-structured one-on-one interviews to explore their perspectives and practices regarding IUD self-removal. We recruited providers via professional listservs including the Complex Family Planning listserv, the Society of Family Planning listserv, the Society of Teachers of Family Medicine abortion access listserv, and the Physicians for Reproductive Health Leadership Training Academy listserv. We included any type of clinician (e.g., obstetrician-gynecologists, family physicians, advanced practice clinicians) who provided at least one IUD in the last 12 months, and excluded those who do not provide patient care, who practice outside of the US, or who were still in training.

We aimed to get representation from a diverse provider population in terms of race and ethnicity, geographic location, specialty, practice settings, and years in practice. However, we found that after recruitment of the first 30 providers, our provider sample was overwhelmingly white, and so we then limited recruitment for the remaining interviews to providers of color.

#### **Data collection**

We developed an interview guide informed by previous studies about IUD removal and IUD self-removal.<sup>17, 24, 25, 30</sup> We pilot tested the guide with 7 clinicians and edited the guide for clarity. The guide included questions to explore perspectives and practices regarding IUD provision, IUD removal, IUD self-removal, and a theoretical self-removal device, along with demographics. The study's Principal Investigator (Jennifer Amico), a family planning fellowship-trained family physician with prior training and experience in qualitative interviewing, conducted all interviews virtually between August 2022 and May 2023. All participants were introduced to the interviewer and understood her to be an academic family physician who provides reproductive health care, and understood the study to be sponsored by Medicines360, a nonprofit pharmaceutical

company. Interviews lasted 30 to 90 minutes, were audio-recorded, and transcribed verbatim. Participants received a \$100 gift card for their time. Advarra Institutional Review Board reviewed the study protocol for ethical procedures in human subjects' research.

## **Data analysis**

We performed a content analysis of the interview data.<sup>34,35</sup> We started with a preliminary coding scheme developed deductively based on the interview guide structure. Then, a team of three researchers (Jennifer Amico, Bethany Wylie (of Camber Collective) and Melissa Mullins (of Camber Collective)) reviewed the initial transcripts and applied the coding scheme while identifying additional codes. We continued to modify the coding scheme through an iterative process until it was comprehensive. We analyzed transcripts on a rolling basis after the first two interviews and utilized memo writing to reflect on the data and identify saturation. While we identified data saturation by the 30th interview, we continued recruitment as described above to intentionally include more providers of color to better represent the diversity of family planning providers. We present counts below for some of the major themes to provide context to the qualitative results, which are summarized and organized by theme, with quotes illustrative of these themes.

## **Interview Results**

### **Provider demographics**

We interviewed 38 family planning providers, including 15 (39%) family physicians, 14 (37%) obstetrician-gynecologists, 5 (13%) advanced practice clinicians, and 4 (11%) adolescent medicine pediatricians. Providers represent 16 states plus DC, and most (35/38, 92%) use she/her or she/they pronouns. Eleven providers volunteered that they had taken out their own IUDs, and one additional provider volunteered that she had tried to remove her own IUD but was unable to.

**Table: Participant demographics (n=38)**

<b>Pronouns</b>		
	she/her or she/they	<b>35 (92%)</b>
	he/him	<b>3 (8%)</b>
<b>Race/ethnicity*</b>		
	White, Caucasian, or White and not Hispanic	<b>23 (61%)</b>
	Asian, South Asian, or Chinese	<b>5 (13%)</b>
	Black or African American	<b>4 (11%)</b>
	Latina, Latinx, Hispanic, Chicana, or Mexican-American	<b>4 (11%)</b>
	White and Latinx, or White and Hispanic	<b>2 (5%)</b>
<b>US Census region</b>		
	Northeast	<b>13 (34%)</b>
	West	<b>12 (32%)</b>
	South	<b>8 (21%)</b>
	Midwest	<b>5 (13%)</b>
<b>Guttmacher category**</b>		
	Most or very protective	<b>16 (42%)</b>
	Protective	<b>10 (26%)</b>
	Some restrictions/protections	<b>2 (5%)</b>
	Restrictive	<b>7 (18%)</b>
	Most or very restrictive	<b>3 (8%)</b>
<b>Completed training</b>		
	<3 years	<b>9 (24%)</b>
	3-10 years	<b>18 (47%)</b>
	11-20 years	<b>6 (16%)</b>
	>20 years	<b>5 (13%)</b>
<b>Credentials</b>		
	Family medicine	<b>15 (39%)</b>
	Obstetrician gynecologist	<b>14 (37%)</b>
	Advanced practice clinician	<b>5 (13%)</b>
	Adolescent pediatrician	<b>4 (11%)</b>

\* Participant demographics are open-ended and self-reported. We have listed all of the reported answers and organized them into categories. Categories are meant to organize data in a more concise and readable way and are not intended to marginalize or simplify diverse population demographics.

\*\* Restrictive or protective abortion policies, based on Guttmacher 2023 categories. [states.guttmacher.org/policies/](https://states.guttmacher.org/policies/) Accessed May 2023

## IUD removal perspectives and practices

The providers in our sample generally reported supporting patient autonomy and most explicitly said that they would remove an IUD “anytime, for any reason.” Most commonly, providers explained a strategy for IUD removal visits which included a statement to their patient at the start of the visit that it was up to the patient if they wanted the IUD removed. They then went on to describe that they would ask about reasons for the IUD removal, in order to ascertain whether the patient needed pre-conception counseling or if the patient would be interested in discussing other contraceptive methods, as well as to provide any medical information that could be helpful to patients who otherwise would want to keep the IUD. Several providers acknowledged that asking questions prior to a removal could be viewed by the patient as a barrier to removal, and some providers stated that they would explicitly invite the patient to opt out of answering any questions if desired.

*I do typically ask patients why they want to remove their IUD, but I say, I wanna understand why, but I will always remove your IUD if you want me to. (Participant 12)*

Most providers indicated that they have had IUD removal visits where, after receiving additional information from the provider, the patient decided against having the IUD removed. This change in the patient’s decision to remove was most commonly a result of the provider referencing the revised FDA duration of use for the levonorgestrel IUD Mirena, but also included examples of hearing that IUD removal was not the only option for management of undesired symptoms, or reassurance that symptoms did not mean that something was wrong with the device and placement. A few providers mentioned screening patients for recent intercourse (some referenced within 5 days) because removal of the IUD could lead to pregnancy from that past occurrence. Many providers indicated that when patients came in explicitly for IUD removal that they had usually already decided to have the IUD removed, and that patients did not change their mind about removal most of the time after speaking to providers.

Several providers in our sample referenced LARC coercion by the health care system as a reason to be attentive to not creating additional barriers to a patient’s experience of full autonomy regarding their IUD removal. Several acknowledged that patients may face barriers to removal by (other) providers pressuring patients to continue the IUD, and some described instances when their patients told them that they had a previous provider refuse to remove the IUD. Several providers referenced that the communities of color that they care for would be particularly impacted by barriers to discontinue the IUD when desired.

Several providers discussed their own evolution from a “LARC first” or “lead with LARC” mentality to a reproductive justice or patient autonomy lens, which they felt also impacted how they approach IUD removal visits. They usually described this evolution as a “journey” occurring specifically within the family planning community, and some expressed belief that generalists or other primary care providers may not have yet adapted this autonomy lens to LARC discontinuation. Some providers referenced that providing abortion care specifically helped them to develop and cultivate a patient autonomy lens for LARC care. Several providers described instances of their own discomfort or hesitance to remove IUDs earlier in their careers, referencing LARC enthusiasm in their family planning training and/or among health care providers generally, as the reason for their hesitance.



*I really want patients to have autonomy about [IUD use]. I want them to feel like they're in control of it. So, if they want it out, I don't argue with them. ... Earlier in my career, I feel like I would argue with people a little bit more. (Provider 5)*

## **Provider's professional experiences with IUD self-removal**

Overall, the providers in our sample were supportive of IUD self-removal, although varied in practices regarding if and how they incorporated counseling about self-removal. Some providers reported that IUD self-removal had never come up when talking to patients, or that it had only come up when their patients mentioned having self-removed an IUD in the past. Other providers reported bringing self-removal up with all or most of their patients, either at the time of counseling about contraceptive options or at the time of IUD insertion. Several providers discussed bringing up IUD self-removal in specific scenarios or depending on context clues from the conversations with their patients. For example, some providers brought it up if patients reported being concerned about returning for removal, if patients were planning to travel internationally, with patients with a history of intermittent health insurance coverage, or with patients considering an IUD who disliked the idea of not being able to discontinue it themselves.

*I have definitely had people who were traveling internationally, and often that's why they're getting [the IUD] placed, right? [Those patients say] "I'm gonna go study abroad ... so I'm here to place my LARC before I go away." And often in those situations I'll say, "If you need this out and there's no one around to do it, you can do it yourself, you just need to pull the strings." (Participant 24)*

## **How patients feel about IUD self-removal**

All providers reported that they believed that most of their patients would prefer to have their IUD removed by a health care provider instead of self-removal. Providers who brought up self-removal with their patients commonly reported that their patients typically reacted surprised or horrified, with patients rarely or never interested in or open to hearing more about how to self-remove an IUD.

*I discuss [IUD self-removal] with my patients they usually look at me like I have seven heads. ... I just get a very strong, no-thank-you reaction and look like that would be a crazy thing. "Why would I do that when I can come here?" (Participant 3)*

Providers varied in whether they believed that a self-removal option made their patients more interested in or more comfortable with using an IUD, most commonly reporting that they believed a self-removal option would make little difference for most of their patients or that they did not know how it would affect their patients' interest in an IUD. Some providers reported that a subset of patients would be more comfortable with or interested in an IUD with a self-removal option. No provider believed that a self-removal option would make their patients less comfortable with or less interested in an IUD.

Many providers reported having had patients self-remove an IUD, and typically this came up when patients mentioned self-removing an IUD as the reason that they didn't have an IUD anymore that was listed in their health record. A few providers reported that their patients were "apologetic" about having removed their own IUD, and a few providers described their patients



as feeling empowered, while most reported that there was little conversation about the self-removal that they could recall.

*I've had patients try and be unsuccessful. And I've had patients just come in with their IUDs in their purse and be like, yep, grabbed the strings, pulled, it was easy. ... My experience from talking with those patients is they're often really proud of themselves and feel really empowered at being able to do something themselves that would otherwise have needed an appointment and a healthcare provider. (Provider 17)*

Providers typically reported that they did not have enough patients express interest in IUD self-removal to be able to know which subsets of their patient populations would be most interested, but most were able to speculate about the characteristics associated with self-removal interest. These characteristics generally fell into three categories. Most commonly, providers reported that the typical patient expressing interest in IUD self-removal was self-resilient and described privileges including socioeconomic, professional, academic, and language proficiency. Other characteristics of this typical patient included those who are comfortable checking their IUD strings, tampon users, health care workers, and rural patients. The second category of patients who were theorized to be most interested in self-removal was those who would have difficulty accessing an in-clinic IUD removal, and these patients were typically characterized as having lower socioeconomic status, frequently travelling or relocating, lacking access to transportation, difficulty taking time off work to attend appointments, difficulty accessing childcare to attend appointments, or those without insurance or with high insurance deductibles. The third category theorized by providers, less commonly, was patients who wanted to avoid health care encounters for any reason, either due to discomfort with pelvic exams (e.g., history of sexual trauma, gender dysphoria), distrust in the medical system, or preference for a more natural approach (with a few speculating that there might be overlap in this group with copper IUD users).

*I think patients who have less access to care, patients who have less socioeconomic advantage, for whom coming in for a visit is more onerous, those that have jobs and kids and just for whom getting into the office is hard. I think that they would benefit the most. (Provider 12)*

## **Benefits and downsides of IUD self-removal to patients**

Every provider referenced health care access and/or reproductive autonomy as the primary reason that they were supportive of self-removal. Most providers reported that having a self-removal option would benefit their patients. Every provider also acknowledged that self-removal had the potential to reduce barriers to IUD discontinuation and that this may be most helpful for IUD users from marginalized communities who face the most barriers to IUD removal. The providers who reported self-removing their own IUDs referenced the reason for their choosing self-removal was for convenience or for privacy. A few providers reported that self-removal may be more comfortable for IUD users who have discomfort with speculum exams (e.g., transgender IUD users, sexual assault survivors), though other providers theorized that self-removal may be more uncomfortable. Several providers emphasized that self-removal should not be the only option for IUD removal and that patients should be able to see their providers for IUD removal if they preferred.

*I think that [IUD self-removal] allows patients to have more autonomy when it comes to their contraceptive method. Especially when it's long acting, it prevents them from having to come into a clinic or to schedule an appointment. ... Getting in to see one of us can take four to eight weeks. And if a person is highly motivated to remove their IUD for any reason at all, whether it's side effects or desire to achieve pregnancy, what you're really doing is limiting their reproductive ability, and I think that's kind of horrible. (Provider 31)*

When discussing the downsides to self-removal, every provider reported that it limited the patient's ability to obtain additional healthcare services in the office at the same time, typically including pre-conception counseling, switching to another contraceptive, and STI screening, but usually added that that should not prevent the IUD user from self-removal if they preferred it. A few providers mentioned that IUD users may self-remove hastily or without all of the information that they could be provided in an office visit, which may have led them to decide to continue the IUD; however, these same providers typically stated that IUD users should still have the option to self-remove despite the stated downsides.

*Well, if they're still wanting to not be pregnant, but they're removing it for ... side effects of the IUD, that would be the downside, to remove something that we could have helped treat or address before they pulled it out. (Provider 21)*

Overall, the health care providers in this sample reported that self-removal was safe. The "worst case scenarios" commonly theorized included incomplete removal (when the IUD would be brought down into the cervical canal), which would cause acute and possibly severe pain as well as decreased contraceptive efficacy, or that the patient might encounter an embedded IUD, which may result in having only part of the IUD removed. In the former example, providers expressed concern for the need for an urgent evaluation (e.g., visit to the Emergency Department), potentially in the context of patients who had difficulty scheduling or affording a non-urgent visit for IUD removal. In the latter example, providers reported that the issue would be that the user would not recognize that the device was embedded or that part of the IUD remained in the uterus, not that the self-removal itself caused the IUD to be embedded. In this instance, the implications for the patient would be no different than if the provider themselves fractured the IUD upon removal. A few providers theorized heavy bleeding during self-removal, if either the IUD user pulled too hard on an embedded IUD, or if the user had another health condition that would predispose them to bleeding (e.g., bleeding disorder, anti-coagulant medication, friable fibroid or other mass, or pregnancy), though none reported that they encountered heavy bleeding during an IUD removal that they performed. Lastly, the health risk of IUD self-removal theorized by several providers included the risk of attributing a symptom (e.g., pelvic pain) to the IUD that was due to another condition (e.g., ectopic pregnancy), which would delay the diagnosis.

*There might be a time where someone pulls and they can't remove the IUD, but that's not harmful to not be able to remove your IUD. It just means you're someone who has to come in and get it removed in the office, or find out if it's embedded, or something. And then, not uncommon to see someone [in the office] where you can't find the strings... But imagine those patients, you wouldn't be able to get the strings with your fingers if they*

were up in the cervix. But all of those things are not harmful. (Provider 6)

## **Benefits and downsides to IUD self-removal to providers and institutions**

The providers in this sample overall reported that IUD self-removal would not directly impact them financially, and by and large would not impact their health care systems, though some acknowledged that health care providers in other settings, such as private practice or Relative Value Unit (RVU) based compensation settings, may be hesitant to counsel about self-removal if it meant decreased reimbursement for them. The providers disagreed about whether or not they thought that IUD removal visits were reimbursed well in RVU-based systems. In this sample, most of the providers reported that having fewer IUD removal visits would potentially (though minimally) allow more visits for patients who needed visits for other concerns, and characterized their practices as being busy with patient visits.

*Because I am not RVU-based, I don't get more money the more patients I see ... But I imagine for someone who's in private practice who is RVU-based, who bills for every single encounter and the reimbursement from that is part of their paycheck, I imagine they wouldn't necessarily want all their patients self-removing their IUDs. But me personally, no impact. (Participant 26)*

A few providers suggested that if more patients removed their own IUDs, they would have to remember to ask patients about IUDs listed in their health records, especially in systems where patients typically get all their health care from one system that uses the same electronic record. Some providers theorized that if more patients attempted self-removal, they might get more messages from patients with questions and concerns about self-removal, potentially more urgent visits from patients with incomplete removals, or potentially more IUD re-insertions for patients who did not have symptoms resolve with IUD self-removal or who changed their mind after IUD self-removal.

## **Factors that make IUD self-removal easier or harder**

The providers in this study had a wide range of opinions about how easy or feasible self-removal would be for their patients. Some providers believed that everyone who wants to self-remove is able to do so (except for the small percentage with no strings or embedded IUD), and other providers believed that most people are unable to remove their own IUDs; some referenced the 20% success rate in a prior study.

When discussing what would make IUD self-removal easier, typically providers first mentioned having knowledge of self-removal, either knowing how to do it or even just knowledge that it was feasible, safe, or acceptable. Providers typically recommended a guide for patients or societal/social media messaging that it was ok to self-remove an IUD. Some providers reported that their patients would benefit from knowing that their health care provider endorsed self-removal, whereas other providers stated that their patients would prefer to hear success stories from other former IUD users about successful and/or attempted self-removal.

Several providers explained that longer string length would improve self-removal ease and success, and a few stated that they discussed self-removal and string length preferences with patients prior to IUD insertion for this purpose. A few providers theorized that having an

instrument to grasp the strings would aid in self-removal, and a few providers referenced using medical tools (forceps, pick-ups) for their own self-removal. Providers speculated that shorter strings, a cervix that was harder to reach (e.g., due to c-sections, obesity), or limitations in manual dexterity (e.g., short fingers, arthritis, disability) would make self-removal more difficult.

*The things that would make [IUD self-removal] easier, I think, are ... having given birth vaginally, like it just made it easier to get the strings. ... So I think like body habitus probably plays a role in like the ability to like reach and get a grasp of the strings. And then certainly comfort level with putting your fingers inside your vagina.... And I don't know that there is like any sort of technique that's recommended besides like bearing down and grabbing. ... I'm thinking like if there was a device to help remove it at home. I was terrified of like pinching my vagina with the ring forceps [for my own IUD self-removal]. So it would have to be carefully designed. (Participant 16)*

### **Theoretical IUD self-removal device**

While the providers in our sample were overall supportive of self-removal in general, they varied in their perspectives about a theoretical IUD self-removal device. Providers expressed initial reactions to the idea of a theoretical self-removal device ranging from excitement and positivity to skepticism and concern.

When discussing the implications of an IUD self-removal device for their patients, providers discussed the same themes that they described about the implications of IUD self-removal more generally. Providers who were supportive of the device often referenced reproductive autonomy, reproductive justice, or reproductive rights when discussing their support of the device. Along the same lines, providers occasionally expressed concerns that access to a self-removal device may lead to unnecessary IUD removals or may take away the opportunity to provide their patients with another method. A few providers were concerned that the existence of a device would create an additional health care disparity, where only some people had access to the device for self-removal. A few providers voiced concerns that a self-removal device could be used on IUD users by other people, especially partners, in a reproductively coercive way.

*I think that that's great to have more options for patients to be able to achieve self-removal. From what I've heard so far, it seems like there are a significant number of patients that attempt self-removal but are unsuccessful and ended up needing to come to a provider to have it removed... So that's awesome. (Provider 15)*

Providers varied in whether they believed a device was necessary or unnecessary for some patients seeking to self-remove their IUDs. Providers who thought that a device would be helpful reported that some people are not able to self-remove their IUDs otherwise, due to difficulty reaching their own cervix, finding the strings, or grasping the strings; some reported that not all of their patients were comfortable with the idea of feeling their cervix or IUD strings.

Providers who thought that a device was unnecessary often stated that IUD users could just use their fingers to self-remove, and reflected an opinion that users could already self-remove without a device. Providers who expressed that a device was unnecessary often described that it added costs to a procedure that would otherwise be free for the IUD user or would

add more complication to a simple procedure. A few providers who expressed that a device was not necessary, reported that their patients could get in easily to see them for an in-office IUD removal. Despite initial reactions from many providers expressing that a device was unnecessary, nearly all providers named benefits of a self-removal device or instances when a self-removal device would help some of their patients.

*I would think most people who wanna self-remove wouldn't need it. They could just grab the strings with their fingers. (Provider 2)*

Some providers suspected that interest in self-removal itself was low and so there wouldn't be a need for a self-removal device. However, other providers did report that they thought there would be a demand for a self-removal device. Several providers described the IUD self-removal device as an intermediate step between IUD self-removal without a device and visiting a provider for in-office IUD removal. Providers also speculated that the existence of a device would give the message that IUD self-removal was common, acceptable, or otherwise endorsed by the health care system, while others expressed concern that the existence of a device would suggest that a device was necessary for IUD self-removal.

Nearly all providers voiced that they believed that the self-removal device should be as affordable as possible and that it should be accessible without a provider (over-the-counter). Providers mostly reported that requiring a prescription would limit its accessibility, either due to inability to access the health care visit or because other providers would limit accessibility to a self-removal device. Some providers acknowledged that an over-the-counter product would not be covered by insurance, which would add costs to those who had insurance coverage, but also stated that those without insurance would potentially benefit most from a self-removal device. Several providers suggested that the device be included with all IUD insertions, but then upon further consideration, typically added that the downside of that would be that the IUD user would have to keep the device for potentially many years, which may not be feasible for many.

*If it's prescription, then I think it's going to almost defeat the purpose, because you may be able to call your doctor and be like, hey, I want to take out my own IUD, but I fear that there might be some [providers] who are like, let's come in and talk about it. So it kind of takes away the autonomy and your ability to just kind of do it on your own. (Provider 23)*

# Provider perspectives, part 2: quantitative survey

## Survey Methods

### Sample and recruitment

In the second part of the project, we recruited family planning providers to participate in an online self-administered 20-minute survey using Alchemer data collection software to quantify their perspectives and experiences regarding IUD self-removal. We recruited providers via emails to professional listservs including the same four listservs from the first part of the study (Complex Family Planning listserv, the Society of Family Planning listserv, the Society of Teachers of Family Medicine abortion access listserv, and the Physicians for Reproductive Health Leadership Training Academy listserv) with the addition of the Reproductive Health Access Project network listserv and the Planned Parenthood Federation of America clinician listserv. We collected survey responses from January 2023 to May 2023.

We included any type of clinician (e.g., obstetrician-gynecologists, family physicians, advanced practice clinicians) who provided at least one IUD insertion and one IUD removal in the last 12 months, and excluded those who do not provide patient care, who practice outside of the US, or who were still in training. Participants received a \$30 gift card for completing the survey. The Advarra Institutional Review Board reviewed the study for ethical procedures and determined that the study was Exempt from IRB oversight.

Similar to the interview phase of the project, we found that after the first two months of the survey administration, that the participants were overwhelmingly white and cisgender, so we then limited recruitment to providers of color or gender-diverse providers.

### Survey design

We created the 20-minute electronic survey based on preliminary analysis of the first 30 provider interviews regarding perspectives and experiences regarding IUD removal and IUD self-removal. The full survey included 50 multiple choice and open-ended questions on demographics, professional credentials, practice type and geographic location, provision and experience with IUD insertion and removal, perspectives about IUD self-removal, experiences with IUD self-removal, and perspectives about a theoretical IUD self-removal device.

### Data analysis

We included all completed surveys from eligible participants as well as data from partially completed surveys including at least primary outcome data, regarding perspectives about IUD self-removal. We used descriptive statistics to evaluate survey results and report prevalence of IUD self-removal attitudes and counseling practices. We conducted statistical analysis (Chi-square and Fishers exact test) using statistical software (Stata 15.1) to describe differences

noted between outcomes, as well as identified predictors of self-removal attitudes and counseling practices. We explored differences in attitudes and practices between specialty types and other demographics.

## Survey Results

### Participation and demographics

Two hundred and seventy-nine providers participated, with 266 completing surveys and 13 contributing partial surveys with at least primary outcome data. (Figure 1) They included 95 (34%) family physicians, 89 (32%) obstetrician-gynecologists, 86 (31%) advanced practice clinicians (APCs), 6 (2%) pediatricians and 3 (1%) internists. (Table 1) Most participants were female (93%), most were primarily in academic (33%) or Planned Parenthood (28%) clinical settings, and most (80%) taught learners at least once per month as part of a formal training program. Participants represented 43 states plus DC. Most (77%) respondents had had an IUD ever with 24% of all respondents successfully self-removing an IUD and 8% of respondents having had an unsuccessful IUD self-removal attempt; 30% reported helping someone who was not a patient remove an IUD outside of the health care system.

### IUD self-removal perspectives

Participants were overall supportive of self-removal, with the vast majority strongly or somewhat agreeing that having an IUD self-removal option was in the best interest of their patients (48% and 43%) and that self-removal was safe (62% and 33%). (Figure 2, Table 2) Most strongly (43%) or somewhat (31%) disagreed that their patients would remove the IUD too hastily if able to self-remove their IUD, and most strongly (17%) or somewhat (62%) agreed that a self-removal option may encourage their patients to get an IUD. A minority of providers (8-13%) reported that it was very important for patients to come in for IUD removal in order to initiate another contraceptive, provide pre-conception counseling, provide other health services, or to help manage IUD side effects without removing the IUD. Most (62%) of providers reported that having a telehealth visit would mitigate their concerns about the patient not coming in for in-office IUD removal completely (34%) or mostly (28%), with 22% reporting that they do not have any concerns. Providers estimated that between 1% and 100% (mean 42%, median 30%) of patients could physically remove their own IUDs.

### IUD self-removal practices and experiences

The vast majority (95%) of participants reported that they were aware of self-removal prior to the survey. (Table 3) Most reported having discussed it with a patient (64%) and most who regularly trained learners (n=218) had discussed it with a learner (72%). Of all participants, 17% had discussed IUD self-removal often or always with patients considering IUD placement, and 23% had discussed it often or always with patients considering IUD removal. Nearly half (44%) of all participants reported providing guidance to patients about how to self-remove an IUD, with 41% of all participants providing guidance during an in-person visit and 18% providing guidance during a remote visit (including 15% who provided guidance during both in-person and remote visits).



Nearly half (48%) of all participants reported being aware of at least one patient self-removing or attempting to self-remove an IUD, with 128 respondents reporting a total of 427 successful self-removal attempts and 284 unsuccessful self-removal attempts. Of those reporting awareness of patients who had attempted IUD self-removal, symptomatic IUD malposition was the most common complication, with 18 cases of symptomatic IUD malposition reported in total, followed by 6 cases of asymptomatic IUD malposition, 2 cases of string detachment, and 1 case of a retained IUD fragment. Respondents were given the option to write in other examples of self-removal complications, but no provider reported additional complications.

Respondents reported a typical practice of leaving IUD strings a median of 3cm from the external cervical os. Most respondents reported that they would hypothetically leave strings longer if their patient was interested in IUD self-removal (53%) or that they routinely leave strings longer for this purpose (16%); for these respondents (n=187), the median string length they reported they would provide for patients interested in self-removal was 4cm.

### **Predictors of IUD self-removal perspectives and practices**

Family physicians and obstetrician-gynecologists were significantly more likely than advanced practice clinicians to strongly agree self-removal is safe (71%, 67%, 49% respectively,  $p < 0.05$ ). (Table 4) Providers were significantly more likely to have discussed self-removal with a patient if they had had an IUD themselves at any time (71% vs 41%,  $p < 0.001$ ), if they train learners (67% vs 51%,  $p = 0.037$ ) and if they were a family physician or obstetrician-gynecologist compared to an advanced practice clinician (73% vs 68% vs 51%, respectively,  $p = 0.006$ ). Providers who reported that 33% or more of IUD removal visits resulted in patients not having their IUD removed were significantly less likely to have discussed IUD self-removal with patients (44% vs 66%,  $p = 0.047$ ).

### **IUD self-removal device**

The majority of respondents reported that they strongly (50%) or somewhat (45%) agreed that a self-removal device would be beneficial to some patients, and that they strongly (67%) or somewhat (31%) agreed that if a self-removal device was available, they would discuss it with their patients as an option. (Table 5) Of the participants who offered estimates of the proportion of their patients who would be interested in a self-removal device, the mean estimation was 33% (median 28%) with a range of 1 to 100% of patients being interested. Most providers endorsed an over-the-counter (OTC) device (45%) or reported that there would be benefits to both OTC and prescription-only products (36%), with 8% reporting that the device should be prescription only.

Strongly agreeing that a self-removal device would be beneficial for some patients was associated with strongly agreeing that it is in the best interests of patients to be able to remove their own IUDs (64% vs 37%,  $p < 0.001$ ) and with strongly agreeing that self-removal was safe (57% vs 39%,  $p = 0.026$ ). Strongly agreeing that they would discuss a self-removal device with patients was associated with strongly agreeing that it is in the best interests of patients to be able to remove their own IUDs (80% vs 55%,  $p < 0.001$ ) and with strongly agreeing that self-removal was safe (74% vs 55%,  $p = 0.026$ ).

## Discussion

In this mixed methods study of self-selected family planning providers, there was nearly universal support for IUD self-removal but a wide range of self-removal experiences and perspectives. We must interpret the support for self-removal with caution, as the providers who opted to participate were likely to be more interested in self-removal. However, this study provides important new findings about IUD self-removal counseling practices and perspectives among those in support of self-removal, which has been previously unexplored.

In contrast to other work about clinical encounters for IUD removal from the perspectives of providers,<sup>15, 17</sup> this study documents a greater cognizance of power dynamics and potential for reproductive coercion, as well as more detail about the adaptation of a reproductive justice or reproductive autonomy lens in the approach to IUD removal. It is unknown whether this reflects an evolved perspective among specifically family planning providers who opted to participate in a study about IUD self-removal, or reflective of the family planning community as a whole. Given the critical implications of provider resistance to IUD removal for patients,<sup>16, 18, 19</sup> further exploration from the perspectives of IUD users is needed to interpret the impact of these findings.

It is telling that among providers with widespread support for IUD self-removal, counseling about IUD self-removal was not routinely provided by most. Many providers in the interviews described counseling about self-removal only in particular scenarios, yet the vast majority believed that a self-removal option would benefit patients. This reflects a lack of consensus about how and when to counsel about self-removal, even among providers most supportive of it. A greater exploration of interest in self-removal among patients, success rate of self-removal attempts, and ways to improve self-removal success and patient satisfaction are needed to inform self-removal counseling practices going forward.

Despite general support for IUD self-removal, providers believed that most patients would prefer for their providers to remove the IUD, and this is supported by previous research which characterizes IUD self-removal as sought typically when in-office IUD removal was inaccessible.<sup>25</sup> While providers reported that patients who had difficulty accessing in-office removal would benefit most, they also characterized those potentially most interested in discussing self-removal as more socioeconomic privileged patient populations. Providers speculated that lack of awareness about self-removal was the largest barrier, which is supported by previous research demonstrating low awareness among IUD users,<sup>29</sup> so it is unknown if increasing awareness, particularly for those who do have access to in-office IUD removal, will increase utilization of this discontinuation method. Existing research suggests that IUD users considering self-removal have turned to the internet for content from IUD users rather than providers,<sup>25, 26</sup> and it is unknown whether counseling by providers is effective at increasing awareness about or interest in IUD self-removal.

Both the interviews and the surveys reflect a lack of consensus about the success rate of IUD self-removal attempts. This demonstrates that even providers who were the most interested and supportive of self-removal were unaware of the success rate; while the median success rate reported in the survey was 30%, not far from the 19% documented in the only currently published study of IUD self-removal success,<sup>23</sup> providers reported a success rate ranging from

1-100%. However, the real-world success rate of IUD self-removal is largely unknown, as the referenced study only enrolled participants who were already in clinic with limited time to attempt self-removal, and perhaps were not reflective of IUD users who do not have access to in-office IUD removal and have greater time to attempt self-removal. Further studies are urgently needed to document self-removal success, as providers who overestimate self-removal success, especially when counseling about it at the time of contraceptive counseling or IUD insertion, may cause potential IUD users to rely on self-removal when they are later unable to do so. While one study documented that education of IUD self-removal did not increase IUD use or change duration of IUD use,<sup>36</sup> the interview and survey findings indicate that many providers believe that a self-removal option has the potential to encourage IUD use. In this way, discussion about self-removal without a realistic view of success rates may have the unintentional effect of reducing reproductive autonomy.

Other than education, the intervention that providers reported in the interviews to most impact the success of self-removal was longer string length, which was associated with success in a previous study.<sup>23</sup> While this is an intervention that must be considered and implemented at the time of IUD insertion and not when the user is considering removal, providers who are interested in supporting IUD self-removal could consider leaving longer strings routinely for all patients or after discussion with patients about interest in self-removal. In the survey, providers indicated a median of 4cm for patients who were interested in self-removal, but research is needed to explore the ideal string length for self-removal while investigating other patient-centered outcomes such as discomfort from strings and rates of accidental removal with longer strings.

IUD users considering self-removal may be cautiously reassured by the perspectives and experiences regarding IUD self-removal safety, but should consider having a plan in place particularly for the instance of symptomatic incomplete IUD removal. While it has been documented that IUD users are concerned about the safety of self-removal,<sup>24, 30</sup> more than 95% of survey participants somewhat or strongly agreed that self-removal was safe. With 128 providers reporting knowledge of 427 successful and 284 unsuccessful IUD self-removal attempts, they only reported knowledge of complications that can occur during IUD use and in-office removal including symptomatic IUD malposition, asymptomatic IUD malposition, string detachment, and retained IUD fragment. While the accuracy of these estimates is unknown, these numbers suggest that complication rates of self-removal are low. Because the study sample was disproportionately Complex Family Planning trained or boarded subspecialists, they may be more likely to encounter IUD-related complications than the average family planning or reproductive health provider, which is additionally reassuring.

The interviews report nuanced perspectives regarding whether a self-removal device was necessary, with some providers enthusiastic that a device would increase access to self-removal, and others reporting that a device was overall unnecessary, but may be helpful for a minority of patients in specific circumstances. The survey respondents indicated almost unanimously (90% or greater) that a self-removal device would benefit some patients and if one were available, they would discuss it with patients as an option. Further research, including the perspectives of IUD users and potential IUD users, is essential to know whether a self-removal device has utility to improve the reproductive autonomy for IUD users.

This observational mixed methods study has several limitations. Primarily as stated above, this was a self-selected group who was aware that the study was about IUD self-removal before volunteering to participate, and it is likely that participants were more interested and supportive of self-removal than providers who did not participate. Additionally, participants were disproportionately specialty Complex Family Planning trained and boarded and disproportionately involved with training learners. Other clinicians, such as those not in academics and those with more generalist practices, may have different perspectives. There are many factors that we did not examine associated with potential barriers to IUD removal; for example, we did not collect demographic data about population density, so we may be missing voices of rural providers. Like all qualitative studies, the interviews may have been impacted by social desirability bias. While the interviewer explicitly said that there was no right or wrong answer about self-removal practices, participants may have felt that support for self-removal was socially desirable. In this context, the lack of standardized practices is potentially even more meaningful, as participants may have been biased to overemphasize rather than underemphasize self-removal counseling practices.

Additionally, this study only reports on providers' perspectives and self-reports without any means of verifying outcomes such as clinical practices and patient numbers. In particular, the self-removal attempts and complications reported by providers were by self-report and not based on patient records, and without any means of identifying if multiple providers identified the same cases. Lastly, providers in the study reported their impressions of patient perspectives based on their own clinical experiences, which reflects provider perspectives and not necessarily patient ones.

This study explored the perspectives of family planning providers who supported IUD self-removal, and highlighted areas that need further investigation. Improving awareness of and efficacy of self-removal has the potential to improve reproductive autonomy for IUD users and should be a priority in the context of work to increase access to the IUD nationally; a future device to aid in IUD self-removal has the potential to achieve both increased IUD self-removal success and public awareness. Developing a consensus about IUD self-removal counseling practices will require further investigation including IUD user perspectives about the concept of self-removal, user experiences with self-removal, and ways to improve success of self-removal.

**Disclaimer:** The findings and conclusions in this report are those of the authors and do not necessarily represent the views of Planned Parenthood Federation of America, Inc.

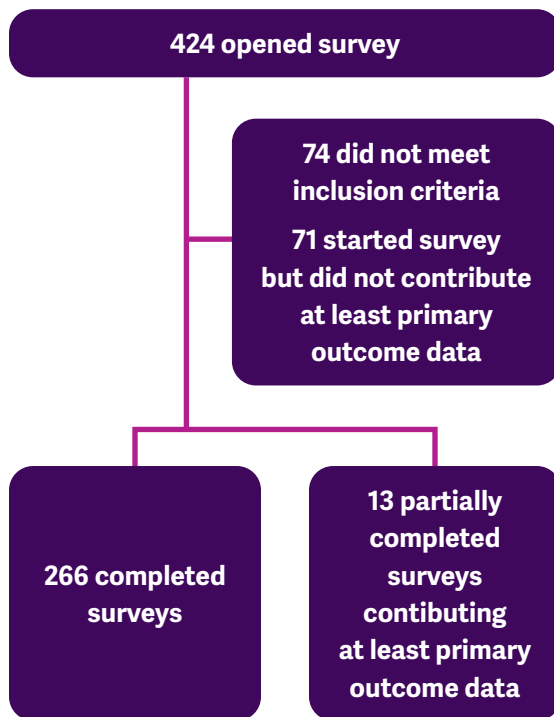
# References

1. Peipert JF, Madden T, Allsworth JE, Secura GM. Preventing unintended pregnancies by providing no-cost contraception. *Obstet Gynecol.* 2012;120(6):1291-7.
2. Blumenthal PD, Voedisch A, Gemzell-Danielsson K. Strategies to prevent unintended pregnancy: increasing use of long-acting reversible contraception. *Hum Reprod Update.* 2011;17(1):121-37.
3. Trussell J, Henry N, Hassan F, Prezioso A, Law A, Filonenko A. Burden of unintended pregnancy in the United States: potential savings with increased use of long-acting reversible contraception. *Contraception.* 2013;87(2):154-61.
4. ACOG Committee Opinion no. 450: Increasing use of contraceptive implants and intrauterine devices to reduce unintended pregnancy. *Obstet Gynecol.* 2009;114(6):1434-8.
5. Dehlendorf C, Levy K, Ruskin R, Steinauer J. Health care providers' knowledge about contraceptive evidence: a barrier to quality family planning care? *Contraception.* 2010;81(4):292-
6. Goodman S, Hendlish SK, Benedict C, Reeves MF, Pera-Floyd M, Foster-Rosales A. Increasing intrauterine contraception use by reducing barriers to post-abortal and interval insertion. *Contraception.* 2008;78(2):136-42.
7. Stanek AM, Bednarek PH, Nichols MD, Jensen JT, Edelman AB. Barriers associated with the failure to return for intrauterine device insertion following first-trimester abortion. *Contraception.* 2009;79(3):216-20.
8. Zerden ML, Tang JH, Stuart GS, Norton DR, Verbiest SB, Brody S. Barriers to Receiving Long-acting Reversible Contraception in the Postpartum Period. *Womens Health Issues.* 2015;25(6):616-21.
9. Curtis KM, Tepper NK, Jatlaoui TC, Whiteman MK. Removing medical barriers to contraception - evidence-based recommendations from the Centers for Disease Control and Prevention, 2016. *Contraception.* 2016;94(6):579-81.
10. Curtis KM, Jatlaoui TC, Tepper NK, Zapata LB, Horton LG, Jamieson DJ, et al. U.S. Selected Practice Recommendations for Contraceptive Use, 2016. *MMWR Recomm Rep.* 2016;65(4):1-66.
11. Asker C, Stokes-Lampard H, Beavan J, Wilson S. What is it about intrauterine devices that women find unacceptable? Factors that make women non-users: a qualitative study. *J Fam Plann Reprod Health Care.* 2006;32(2):89-94.
12. Foster DG, Karasek D, Grossman D, Darney P, Schwarz EB. Interest in using intrauterine contraception when the option of self-removal is provided. *Contraception.* 2012;85(3):257-62.
13. Lessard LN, Karasek D, Ma S, Darney P, Deardorff J, Lahiff M, et al. Contraceptive features preferred by women at high risk of unintended pregnancy. *Perspect Sex Reprod Health.* 2012;44(3):194-200.
14. White K, Hopkins K, Potter JE, Grossman D. Knowledge and attitudes about long-acting reversible contraception among Latina women who desire sterilization. *Womens Health Issues.* 2013;23(4):e257-63.
15. Manzer JL, Bell AV. The limitations of patient-centered care: The case of early long-acting reversible contraception (LARC) removal. *Soc Sci Med.* 2022;292:114632.
16. Higgins JA, Kramer RD, Ryder KM. Provider Bias in Long-Acting Reversible Contraception (LARC) Promotion and Removal: Perceptions of Young Adult Women. *Am J Public Health.* 2016;106(11):1932-7.
17. Amico JR, Bennett AH, Karasz A, Gold M. "I wish they could hold on a little longer": physicians' experiences with requests for early IUD removal. *Contraception.* 2017;96(2):106-10.
18. Amico JR, Bennett AH, Karasz A, Gold M. "She just told me to leave it": Women's experiences discussing early elective IUD removal. *Contraception.* 2016;94(4):357-61.

19. Hoggart L, Newton VL, Dickson J. "I think it depends on the body, with mine it didn't work": explaining young women's contraceptive implant removal. *Contraception*. 2013;88(5):636-40.
20. Kaneshiro B, Kon Z, Tschann M, Williams A, Kajiwarra K, Soon R. Meeting Women's Requests for Intrauterine Device and Contraceptive Implant Discontinuation: An Exploratory Survey of Physicians. *Hawaii J Health Soc Welf*. 2020;79(10):296-301.
21. Amico JR, Heintz C, Bennett AH, Gold M. Access to IUD removal: Data from a mystery-caller study. *Contraception*. 2020;101(2):122-9.
22. Poleon S, Thompson EL. Reasons for Intent to Discontinue and Remove Long-Acting Reversible Contraceptives: National Survey of Family Growth 2017-2019. *J Womens Health (Larchmt)*. 2022;31(5):733-40.
23. Foster DG, Grossman D, Turok DK, Peipert JF, Prine L, Schreiber CA, et al. Interest in and experience with IUD self-removal. *Contraception*. 2014;90(1):54-9.
24. Stimmel S, Hudson SV, Gold M, Amico JR. Exploring the experience of IUD self-removal in the United States through posts on internet forums. *Contraception*. 2022;106:34-8.
25. Amico JR, Stimmel S, Hudson S, Gold M. "\$231 ... to pull a string!!!" American IUD users' reasons for IUD self-removal: An analysis of internet forums. *Contraception*. 2020;101(6):393-8.
26. Broussard K, Becker A. Self-removal of long-acting reversible contraception: A content analysis of YouTube videos. *Contraception*. 2021;104(6):654-8.
27. Melo J, Tschann M, Soon R, Kuwahara M, Kaneshiro B. Women's willingness and ability to feel the strings of their intrauterine device. *Int J Gynaecol Obstet*. 2017;137(3):309-13.
28. Collins F, Gilmore K, Petrie KA, Benson LS. Developing an intrauterine device self-removal guide: a mixed methods qualitative and small pilot study. *Contracept Reprod Med*. 2022;7(1):10.
29. Glaser K, Fix M, Karlin J, Schwarz EB. Awareness of the option of IUC self-removal among US adolescents. *Contraception*. 2021;104(5):567-70.
30. Amico JR, Bennett AH, Karasz A, Gold M. Taking the provider "out of the loop:" patients' and physicians' perspectives about IUD self-removal. *Contraception*. 2018;98(4):288-91.
31. Stifani BM, Madden T, Micks E, Moayed G, Tarleton J, Benson LS. Society of Family Planning Clinical Recommendations: Contraceptive Care in the Context of Pandemic Response. *Contraception*. 2022;113:1-12.
32. Fay KE, Traore F, Amico JR. Intrauterine device self-removal practices during the COVID-19 pandemic among family planning clinics. *Contraception*. 2023;118:109889.
33. Weigel G FB, Ranji U, Salganicoff A. How OBGYNs adapted provision of sexual and reproductive health care during the COVID-19 pandemic 2020 [Available from: <https://www.kff.org/womens-health-policy/issue-brief/how-obgyns-adapted-provision-of-sexual-and-reproductive-health-care-during-the-covid-19-pandemic/>].
34. Denzin N, Lincoln Y. *The SAGE handbook of qualitative research*. Fourth edition ed: Thousand Oaks; 2011.
35. Krippendorff K. *Content analysis: an introduction to its methodology*. . Second Edition ed: Thousand Oaks; 2004.
36. Raifman S, Barar R, Foster D. Effect of Knowledge of Self-removability of Intrauterine Contraceptives on Uptake, Continuation, and Satisfaction. *Womens Health Issues*. 2018;28(1):68-74.

## Tables and Figures

**Figure 1: Participation flow chart**



**Table 1: Participant demographics (n=279)**

Specialty and fellowship training	n (%)
<b>Family medicine</b>	<b>95 (34%)</b>
Reproductive health fellowship	11
Obstetrics fellowship	4
<b>Obstetrics and gynecology</b>	<b>89 (32%)</b>
CFP or FFP	75
CFP boarded	55
Other fellowship	5
<b>Advanced Practice Clinician</b>	<b>86 (31%)</b>
<b>Pediatrician</b>	<b>6 (2%)</b>
Adolescent medicine fellowship	5
<b>Internist</b>	<b>3 (1%)</b>
Reproductive health fellowship	1
<b>Completed training</b>	
<3 years	48 (17%)
3-10 years	138 (49%)
11-20 years	68 (24%)
>20 years	25 (9%)

**CFP:** Complex Family Planning

**FFP:** Fellowship in Family Planning

Race/ethnicity			
Selecting only one category	252 (92%)	Selecting more than one category	24 (8%)
White	194 (70%)	*White and another race	21 (8%)
Asian	26 (9%)	*Asian and another race	5 (2%)
Latinx	10 (4%)	*Latinx and another race	13 (5%)
Black	20 (7%)	*Black and another race	4 (1%)
Other	2 (1%)	*Other and another race	6 (2%)
Prefer not to answer	3 (1%)		

\*not mutually exclusive categories



Gender	
Female	<b>260 (93%)</b>
Male	<b>9 (3%)</b>
GNB or GNB and transgender	<b>8 (3%)</b>
Prefer not to answer	<b>2 (1%)</b>

**GNB:** gender non-binary

Primary practice setting	
Academic	<b>93 (33%)</b>
Planned Parenthood	<b>78 (28%)</b>
FQHC or CHC	<b>47 (17%)</b>
Hospital-affiliated	<b>34 (12%)</b>
Private practice	<b>13 (5%)</b>
Independent FP clinic	<b>6 (2%)</b>
Other*	<b>8 (3%)</b>

**FQHC:** Federally qualified health center

**CHC:** Community health center

**FP:** family planning

\*Includes Indian Health Services, tribal health center, and college health

Practice details (N=279)	mean	median	sd	range
Direct clinical care time (%)	<b>70.0</b>	<b>80.0</b>	<b>26.7</b>	<b>5-100</b>
% Visits for reproductive aged AFAB patients	<b>74.2</b>	<b>80.0</b>	<b>23.0</b>	<b>15-100</b>
% Visits for reproductive health among AFAB patients	<b>68.7</b>	<b>75.0</b>	<b>28.2</b>	<b>5-100</b>
% Privately insured	<b>32.7</b>	<b>30</b>	<b>24.3</b>	<b>0-100</b>
% Publicly insured	<b>50.8</b>	<b>50</b>	<b>23.6</b>	<b>0-100</b>
% Uninsured	<b>16.4</b>	<b>10</b>	<b>19.7</b>	<b>0-100</b>
<b>IUD provision in the last 12 months</b>				
IUD placement (n=278)	<b>81.0</b>	<b>50</b>	<b>108.5</b>	<b>1-1000</b>
Simple IUD removal (n=279)	<b>43.4</b>	<b>20</b>	<b>78.6</b>	<b>1-1000</b>
Complex IUD removal (n=276)	<b>11.6</b>	<b>5</b>	<b>20.1</b>	<b>0-200</b>

**AFAB:** assigned female at birth

Trains learners*	<b>222 (80%)</b>
Provided telehealth in the last 30 days	<b>215 (77%)</b>

\*at least once per month over the last 12 months, as part of a formal training program

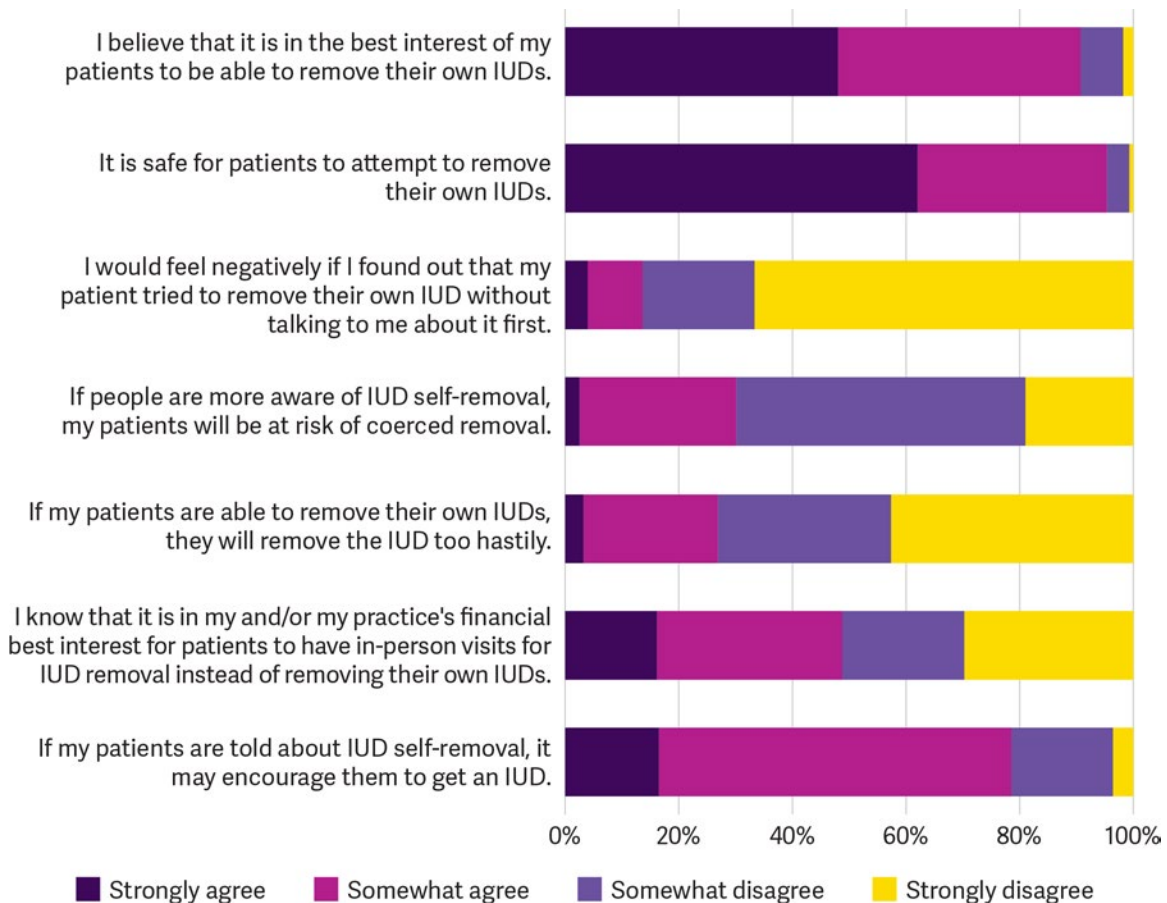
Primary practice state	
<b>US Census Regions</b>	<b>n=278*</b>
Northeast	<b>78 (28.1)</b>
Midwest	<b>36 (12.9)</b>
South	<b>50 (18.0)</b>
West	<b>114 (41.0)</b>
<b>State abortion policy**</b>	
Most/very protective	<b>106 (38.1)</b>
Protective	<b>75 (27.0)</b>
Some restrictions	<b>21 (7.6)</b>
Restrictive	<b>48 (17.3)</b>
Most/very restrictive	<b>28 (10.1)</b>

Personal IUD history	(n=270)
<b>Has had an IUD</b>	<b>209 (77%)</b>
Successful self-removal	<b>67</b>
Unsuccessful self-removal attempt	<b>21</b>
Did not attempt self-removal	<b>122</b>
<b>Assisted someone who was not a patient with IUD self-removal (n=270)</b>	<b>80 (30%)</b>

\*One participant preferred not to answer

\*\*Based on Guttmacher categories, accessed May 2023.

**Figure 2: IUD self-removal perspectives (n=279)**



**Table 2: IUD self-removal perspectives**

N=279, n(%)	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
I believe that it is in the best interest of my patients to be able to remove their own IUDs	5 (1.8)	21 (7.5)	119 (42.7)	134 (48.0)
It is safe for patients to attempt to remove their own IUDs	2 (0.7)	11 (3.9)	93 (33.3)	173 (62.0)
I would feel negatively if I found out that my patient tried to remove their own IUD without talking to me about it first.	186 (66.7)	55 (19.7)	27 (9.7)	11 (3.9)
If people are more aware of IUD self-removal, my patients will be at risk of coerced removal	53 (19.0)	142 (50.9)	77 (27.6)	7 (2.5)
If my patients are able to remove their own IUDs, they will remove the IUD too hastily.	119 (42.7)	85 (30.5)	66 (23.7)	9 (3.2)
I know that it is in my and/or my practice's financial best interest for patients to have in-person visits for IUD removal instead of removing their own IUDs	83 (29.8)	60 (21.5)	91 (32.6)	45 (16.1)
If my patients are told about IUD self-removal, it may encourage them to get an IUD.	10 (3.6)	50 (17.9)	173 (62.0)	46 (16.5)

N=279, n(%)	Not at all important			Very important
It is important for patients to come in for IUD removal in person so that I can counsel and/or initiate an alternative contraceptive	53 (19.0)	93 (33.3)	97 (34.8)	36 (12.9)
It is important for patients to come in for IUD removal in person so that I can provide pre-conception counseling	58 (20.8)	98 (35.1)	94 (33.7)	29 (10.4)
It is important for patients to come in for IUD removal in person so that I can provide other health care services.	83 (29.8)	104 (37.3)	69 (24.7)	23 (8.2)
It is important for patients to come in for IUD removal in person so that I can offer options to help them continue the IUD, if other options could potentially address their concern.	56 (20.1)	99 (35.5)	96 (34.4)	28 (10.0)

N=279	Not at all	Yes, somewhat	Yes, mostly	Yes, completely	No concerns
Would having a telehealth or remote visit mitigate your concerns about your patient not having an in-person visit for IUD removal?	4 (1.4)	40 (14.3)	79 (28.3)	94 (33.7)	62 (22.2)

**What percentage of patients could physically self-remove their own IUD?**

N=279	mean	median	sd	range
<b>I don't know: 34 (12.2%)</b>				
<b>Provided an estimate: 245 (87.8%)</b>				
Estimated percent successful	41.6	30	25.2	1-100

**Table 3: IUD self-removal practices**

<b>N=271 n(%)</b>	<b>Yes</b>	<b>No</b>
Aware that some people remove their own IUDs	<b>258 (95.2)</b>	<b>13 (4.8)</b>
Discussed IUD self-removal with a patient?	<b>174 (64.2)</b>	<b>97 (35.8)</b>
Discussed IUD self-removal with a learner? (n=218*)	<b>156 (71.6)</b>	<b>62 (28.4)</b>

\*Asked only of those who reported training learners

<b>N=271 n(%)</b>	<b>With patients considering IUD placement</b>	<b>With patients considering IUD removal</b>
Always	<b>17 (6.3)</b>	<b>26 (9.6)</b>
Often	<b>30 (11.1)</b>	<b>37 (13.7)</b>
Sometimes	<b>64 (23.6)</b>	<b>56 (20.7)</b>
Rarely	<b>42 (15.5)</b>	<b>45 (16.6)</b>
Never*	<b>118 (43.5)</b>	<b>107 (39.5)</b>

\*Including 97 participants who never discussed self-removal with a patient.

<b>N=271, n(%)</b>	<b>Yes</b>	<b>No*</b>
<b>Provided guidance on how to SR</b>	<b>119 (43.9)</b>	<b>152 (56.1)</b>
In-person	<b>110</b>	
Remote	<b>49</b>	

\*Including 97 participants who never discussed self-removal with a patient.

<b>N=271, n(%)</b>	<b>Yes</b>	<b>No*</b>
Aware of any patients who self-removed their own IUDs	<b>129 (47.6%)</b>	<b>142 (52.4%)</b>

### Number of patients with known self-removal attempts (n=270)

<b>N=128</b>	<b>Successful</b>	<b>Unsuccessful</b>
With my guidance	<b>Median 0</b>	<b>0</b>
	<b>Mean 1.2</b>	<b>0.5</b>
	<b>SD 2.3</b>	<b>3.6</b>
	<b>0-15</b>	<b>0-40</b>
	<b>N=149 successful SR attempts</b>	<b>N=65 unsuccessful SR attempts</b>
Without my guidance	<b>1</b>	<b>0</b>
	<b>2.2</b>	<b>1.7</b>
	<b>2.5</b>	<b>9.4</b>
	<b>0-10</b>	<b>0-100</b>
	<b>N=278 successful SR attempts</b>	<b>N=219 unsuccessful SR attempts</b>

### Complications of IUD self-removal attempts

<b>N=128</b>	<b>Mean (median)</b>	<b>SD</b>	<b>Range</b>	<b>Total cases</b>
Symptomatic IUD malposition	<b>0.1 (0)</b>	<b>0.6</b>	<b>0-5</b>	<b>18</b>
Asymptomatic IUD malposition	<b>0.05 (0)</b>	<b>0.2</b>	<b>94 (33.7)</b>	<b>29 (10.4)</b>
String detached	<b>0.02 (0)</b>	<b>0.1</b>	<b>0-2</b>	<b>6</b>
Fragment remained	<b>0.01 (0)</b>	<b>0.09</b>	<b>0-1</b>	<b>2</b>
Other	<b>0</b>			

### String length practices

Typical string length, cm (N=271)	<b>Median 3</b>
	<b>Mean 3.1</b>
	<b>SD 0.9</b>
	<b>1-10</b>
If patient interest in self-removal, would leave strings longer (N=271, n(%))	<b>No 66 (23.4)</b>
	<b>Yes, hypothetically 144 (53.1)</b>
	<b>Yes, routinely 43 (15.9)</b>
	<b>Don't know 18 (6.6)</b>
If patient interest in self-removal, string length, cm (N=187)	<b>Median 4</b>
	<b>Mean 4.2</b>
	<b>SD 1.0</b>
	<b>1.5-10</b>

**Table 4: Predictors of IUD self-removal perspectives and practices**

Association of clinician type and strongly agreeing that IUD self-removal is safe

	Total (n=270)	Strongly agreeing that self-removal is safe (n=169) n, (%)	All other responses* (n=101) n, (%)	p
Family physician	95	67 (71%)	28 (29%)	0.006
Obstetrician-gynecologist	89	60 (67%)	29 (33%)	
Advanced practice clinician	86	42 (49%)	44 (51%)	

\*Somewhat agree, somewhat disagree, and strongly disagree

Predictors of having discussed IUD self-removal with patients

	Total	Has discussed	Never discussed	p
<b>Type of provider (n=263)</b>				
Family physician	93	68 (73%)	25 (27%)	0.006
Obstetrician-gynecologist	87	59 (69%)	28 (31%)	
Advanced practice clinician	83	42 (51%)	41 (49%)	
<b>Trains learners (n=271)</b>				
Yes	218	147 (67%)	71 (33%)	0.037
No	53	27 (51%)	26 (49%)	
<b>Provides telehealth (n=271)</b>				
Yes	211	142 (67%)	69 (33%)	0.049
No	60	32 (53%)	28 (47%)	
<b>Personal use of IUD (n=270)</b>				
Yes	209	148 (71%)	61 (29%)	<0.001
No	61	25 (41%)	36 (59%)	
<b>Perception of % of patients who change mind about IUD removal (n=271)</b>				
<33%	246	163 (66%)	83 (34%)	0.047
>33%	25	11 (44%)	14 (56%)	

**Table 5: IUD self-removal device perspectives**

N=266, n(%)	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
I believe that a self-removal device would be beneficial to some patients.	2 (0.8)	12 (4.5)	119 (44.7)	133 (50.0)
If this device was accessible to my patients and they were interested in using it, I would discuss it with them as an option.	1 (0.4)	4 (1.5)	83 (31.2)	178 (66.9)

**What percentage of patients would be interested in an IUD self-removal device?**

N=266	mean	median	sd	range
<b>Don't know: 122 (45.9%)</b>				
<b>Provided an estimate: 144 (54.1%)</b>				
Percent interested	41.6	30	25.2	1-100

**Opinions on self-removal device availability**

N=271 n(%)	N=266, n(%)
Prescription only	20 (7.5)
Benefits to both prescription and over-the-counter availability	95 (35.7)
Over the counter	119 (44.7)
Don't know/no opinion	32 (12.0)

**Predictors of strongly agreeing that a self-removal device would be beneficial for some patients (n=266)**

	Total (n=266)	Strongly agree (n=133) n, (%)	All other responses* (n=133) n, (%)	p
<b>I believe that it is in the best interest of my patients to be able to remove their own IUDs</b>				
Strongly agree	129	82 (64%)	47 (36%)	<0.001
All other responses*	137	51 (37%)	86 (63%)	
<b>It is safe for patients to attempt to remove their own IUDs</b>				
Strongly agree	166	94 (57%)	72 (43%)	0.005
All other responses*	100	39 (39%)	61 (61%)	

\*Somewhat agree, somewhat disagree, and strongly disagree



Predictors of strongly agreeing that they would discuss a self-removal device with patients (n=266)

	Total (n=266)	Strongly agree (n=178) n, (%)	All other responses* (n=88) n, (%)	p
<b>I believe that it is in the best interest of my patients to be able to remove their own IUDs</b>				
Strongly agree	129	103 (80%)	26 (20%)	<0.001
All other responses*	137	75 (55%)	62 (45%)	
<b>It is safe for patients to attempt to remove their own IUDs</b>				
Strongly agree	166	123 (74%)	43 (26%)	0.001
All other responses*	100	55 (55%)	45 (45%)	

\*Somewhat agree, somewhat disagree, and strongly disagree

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