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Family Medicine

BRIEF REPORT

Expanding Access to Contraceptive Services in a Family Medicine Residency Clinic: The Rapid Access to Contraception Clinic Model

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ABSTRACT

Background and Objectives: Learning to provide long-acting reversible contraception (LARC) during family medicine residency is an important step in building capacity for the primary care workforce to meet the reproductive health care needs of communities. We aimed to measure the impact of adding a contraceptive visit type (CVT) allowing for rapid access to contraception (RAC) on family medicine resident LARC procedure numbers.

Methods: Our program created a CVT in which patients were seen only for contraceptive services. We added the CVT to third-year family medicine resident continuity clinic schedules and a block of CVTs (the RAC clinic) to the third-year gynecology rotation. Residents self-reported LARC procedure numbers performed throughout residency, and the totals were compared for graduating residents from 2023 (post-RAC cohort) to 2022 graduates and 2018–2022 graduates (pre-RAC cohort).

Results: Post-RAC cohort residents reported a statistically significant increase in intrauterine device (IUD; *P*=.015) and contraceptive implant (*P*=.010) removals compared to the 2022 pre-RAC cohort. Insertions of IUDs and contraceptive implants were unchanged when compared to the pre-RAC cohort. IUD removals (*P*=.004) and insertions (*P*=.034), and contraceptive implant removals (*P*=.028) were significantly increased for post-RAC compared to 2022 graduates, with no difference in contraceptive implant insertions (*P*=.211).

Conclusions: The addition of the CVT and RAC clinic contributed to an increase in LARC removals in both comparisons, and IUD insertions between 2022 and 2023. This clinic model offers an opportunity for other family medicine residency programs to improve access to contraceptive services and increase resident training in LARC management.

INTRODUCTION

Ready access to all family planning services, including contraceptive care, allows patients to choose when and if they will have children.[1–5] Being able to fully counsel patients on options, to provide reproductive services free from coercion,[6–8] and to provide all types of contraception are critical tasks for family medicine physicians.[9] Comfort with offering procedural contraception, including intrauterine devices (IUDs) and contraceptive implants (collectively termed long-acting reversible contraceptives [LARCs]), often hinges on adequate training during residency.[10–13] Training future primary care providers in all contraceptive options requires clinical opportunities for LARC insertion and removal.[14,15] We sought to increase patient access to contraceptive services in our urban family medicine residency program while simultaneously increasing the number of LARC procedures performed by family medicine residents by creating a new contraception appointment type and linking it to a resident block schedule.

METHODS

At the end of June 2022, our academic family medicine practice, operations directors, and scheduling leadership created a new visit type—contraceptive visit type (CVT)—which offered rapid access to contraception (RAC) services to our community. Patients were not required to use a CVT for scheduling contraceptive care, but only patients seeking contraceptive services were scheduled in these slots. Key aspects of this process included (a) A new 40-minute CVT was introduced within the

scheduling system; (b) patients could directly self-schedule online; (c) both new and established patients could be seen quickly, including same day; (d) CVTs were templated into third-year family medicine resident schedules; and (e) a block of six CVTs (termed the RAC clinic) was added to four clinic sessions in the gynecology rotation for third-year residents.

Self-reported procedure data from graduating family medicine residents were reviewed from 2018 to 2023. The numbers of IUD and contraceptive implant insertions and removals were self-reported by each resident over the course of their residency, and the totals were then summarized for each graduating class year from 2018 to 2023 (Table 1). The RAC clinic started in June 2022; thus, the 2023 graduating class experienced 1 full year with the CVT and RAC clinic and is referred to here as the post-RAC cohort.

The graduating classes from 2022, and 2018–2022 aggregated were analyzed in comparison to the post-RAC cohort (Table 2). Both 2022 and 2018–2022 aggregated were compared to account for trends and fundamental differences of experiences in graduating classes. This study was determined to be exempt by the University of Utah IRB.

RESULTS

The average number of IUD insertions for the pre-RAC (2018–2022) was 10.8 per resident (range 0-37), and the post-RAC (2023) average was 16.9 per resident (range 4–31; Table 1). We identified a statistically significant increase from 2022 to 2023 in IUD insertions (P=.034), while we found no significant difference between the pre-RAC (2018–2022) and post-RAC (2023) cohorts (*P*=.067). With IUD removals, the pre-RAC (2018–2022) average was 2.9 per resident (range 0–14), while the post-RAC (2023) average was 7.9 per resident (range 2–16). Our findings showed a statistically significant increase in average IUD removals in the post-RAC (2023) compared to the pre-RAC (2018–2022, *P*=.015) and 2022 graduates (*P*=.004).

For contraceptive implant insertions, the pre-RAC (2018–2022) average per resident was 17.6 (range 0–48), and the post-RAC (2023) average was 17.9 (range 3–49). We found no significant difference between the post-RAC (2023) compared to the pre-RAC (2018–2022) or 2022 graduates. Contraceptive implant removals showed a pre-RAC (2018–2022) average of 2.5 (range 0–11) per resident, while the post-RAC (2023) average was 5.5 per resident (range 2–9), resulting in a statistically significant increase for the post-RAC (2023) compared to the pre-RAC (2018–2022, *P*=.010) and 2022 graduates (*P*=.028).

Pre-RAC (2018–2022), 13 of 43 residents (30.2%) had never removed a contraceptive implant, 5 of 43 (11.6%) had never removed an IUD, 2 of 43 (4.7%) had never inserted an IUD, and 1 of 43 (2.4%) had never inserted a contraceptive implant. In comparison, post-RAC implementation, all 10 graduating residents each had performed all four core LARC procedures.

DISCUSSION AND CONCLUSIONS

Family medicine physicians are important providers of contraceptive services, and training in offering contraceptive options, including LARC, is a cornerstone of family medicine residency.[16] To improve patient access to contraceptive services, we established both rapid access to a contraception clinic and a new contraceptive visit type. The success of this care model was dependent on protecting space in provider schedules for patients seeking contraceptive services and allowing patients to self-schedule into any open contraceptive slot using the electronic medical record. Following the implementation of these changes, we observed a trend toward an increase in the average number of LARC procedures completed by residents, with a statistically significant increase in the average number of IUD and contraceptive implant removals as well as IUD insertions in the 2022 to 2023 comparison.

We found no significant difference in contraceptive implant insertions when comparing the post-RAC cohort (2023) to both the aggregated pre-RAC (2018–2022) and the 2022 pre-RAC cohorts. Our residents receive many opportunities to insert contraceptive implants while on their obstetrics rotation, thus adding outpatient procedures had less of an overall impact. We identified a significant increase in IUD insertions from 2022 to 2023, but not in the aggregate of 2018–2022 to 2023. This discrepancy may be due to fundamental differences in the graduating classes; the 2022 graduating class was more significantly affected by COVID-19 as a negative confounder.

Although we anticipated that the CVT would be used primarily for starting new contraceptive methods, many of these visits were used to remove LARCs. The demand for LARC removal underscores the importance of access so that patients can exercise bodily autonomy if they experience side effects[17] or wish to stop contraception for other reasons.

During the 5 years of pre-RAC data, some residents performed zero core LARC procedures. Post-RAC clinic, every graduating resident reported providing at least two of each procedure. Resident interest in procedures can likely influence procedure volumes, given the wide ranges of procedure experience within a class year, with some residents performing very few and others performing 20 or more. Competency to perform LARC procedures was assessed separately for individual residents and is beyond the scope of this article. Although no national family medicine standards exist for LARC procedure numbers needed to attain competency, clearly that competency is not possible with zero procedures and is more likely to be attained with increased opportunities to perform the procedure.

Barriers to implementation of this intervention included determining a sustainable precepting model and ensuring adequate supplies within the clinic. Initially, the RAC clinic occurred on Saturdays and was staffed by resident and attending volunteers, which was not sustainable; so the decision was made to move the RAC clinic into the third-year gynecology rotation and to have the clinic attending supervise. The large number of procedures performed during the RAC clinic also necessitated purchasing eight new IUD kits. Limitations of this study included availability of only 1 year of post-RAC intervention data and its setting at a single institution.

Creating convenient and timely patient access to the full spectrum of contraceptive services is an essential role of family physicians. The creation of RAC clinics and CVT slots is one method that can increase opportunities for family medicine residents to receive adequate training in contraceptive care and to be better positioned to offer these important services in their future practices.

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TABLE 1. Graduating Resident LARC Data 2018 –2023

Procedure type	Records	2018	2019 [a]	2020	2021	2022	2023 [b]
Number of residents per year[c]		8	8	8	9	10	10
IUD insertions							
Total	465	48	67	124	138	88	169
Average[d]	10.8	6	8.4	15.5	15.3	8.8	16.9
Standard deviation[d]	8.3	4.9	6.6	11.7	8.0	5.8	8.7
Range	0–37	0–13	0–18	3–37	3–29	2–21	4–31
IUD removals							
Total	124	12	16	32	42	22	79
Average[d]	2.9	1.5	2	4	4.7	2.2	7.9
Standard deviation[d]	2.8	1.1	2.4	2.1	4.4	1.6	5.2
Range	0–14	0–3	0–7	1–7	1–14	1–6	2–16
Contraceptive implant insertions							
Total	755	74	73	147	261	200	179
Average[d]	17.6	9.3	9.1	18.4	29	20	17.9
Standard deviation[d]	11.0	7.6	6.2	8.9	11.4	7.2	12.1
Range	0–48	1–19	0–21	2–28	13–48	7–29	3–49
Contraceptive implant removals							
Total	108	5	8	34	37	24	55
Average[d]	2.5	6.3	1	4.3	6.2	3	5.5
Standard deviation[d]	2.8	0.9	0.9	3.2	3.3	1.3	2.8
Range	0–11	0–2	0–2	1–11	0–10	0–4	2–9

[a] Data includes one resident who opted out of most contraceptive care.
[b] Shaded area indicates residents/procedures collected as part of the post-RAC cohort.
[c] Resident numbers increased due to a planned residency expansion.
[d] Average and standard deviation of individual residents' totals
Abbreviations: LARC, long-acting reversible contraception; IUD, intrauterine device; RAC, rapid access to contraception

TABLE 2. LARC Completion for Graduating Residents Pre- and Post-RAC Implementation

	Procedure records total	Procedure records pre-RAC 2018–2022	Procedure records pre-RAC 2022	Procedure records post-RAC 2023*	Welch's *t* test pre-RAC 2018–2022 to post-RAC records 2023		Mann-Whitney U test pre-RAC records 2022 to post-RAC records 2023
					t statistic	*P* value	*P* value
IUD insertions					-2.00	.067	**.034****
Total	634	465	88	169			
Average	12.0	10.8	8.8	16.9			
Standard deviation	8.6	8.3	5.8	8.7			
Range	0–37	0–37	2–21	4–31			
IUD removals					-2.93	**.015****	**.004****
Total	203	124	22	79			
Average	3.8	2.9	2.2	7.9			
Standard deviation	3.9	2.8	1.6	5.2			
Range	0–16	0–14	1–6	2–16			
Contraceptive implant insertions					-0.082	.936	.211
Total	934	755	200	179			
Average	17.6	17.6	20	17.9			
Standard deviation	11.1	11.0	7.2	12.1			
Range	0–49	0–48	7–29	3–49			
Contraceptive implant removals					-3.00	**.010****	**.028****
Total	163	108	24	55			
Average	3.1	2.5	3	5.5			
Standard deviation	3.0	2.8	1.3	2.8			
Range	0–11	0–11	0–4	2–9			

*Statistically significant
**Shaded area indicates residents/procedures collected as part of the post-RAC cohort.
Abbreviations: LARC, long-acting reversible contraception; RAC, rapid access to contraception

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