

Appendix A. Data Appendix

This appendix describes the construction of the main variables used in the analysis, including how voucher use, contraceptive outcomes, and pregnancy outcomes are defined using administrative records and survey data.

A1. First-stage Outcomes

- **Voucher use** is a binary indicator constructed from PPMI billing records, equal to one if PPMI records show a charge to the M-CARES study voucher for any contraceptive purchase within 100 days of recruitment, and zero otherwise. By construction, voucher use is zero for participants in the control group, who may nonetheless purchase birth control on their own. Minor discrepancies arise within the treatment group due to administrative or implementation issues.

First, some individuals in the treatment group purchase birth control but do not use their voucher. If they return to the clinic at a later date, for example, they may have forgotten to use it. In this case, we do not believe that receiving the voucher could affect their outcomes. We find that 3.4% (54/1,567) of treated women purchased birth control within 100 days without using the voucher.

Second, while the voucher should only have been used to purchase birth control and related services, we find that 1.3% (21/1,567) of our treatment group appear to have used the voucher without an observed birth control purchase. We believe that this type of deviation reflects the fact that a patient may have had an evaluation for pregnancy or for the suitability of a particular contraceptive method, which then indicated that the method was not appropriate. Therefore, the patient did not end up purchasing the method, but the services related to that method were billed to the study.

A2. Contraceptive Choice Outcomes

All contraceptive outcomes are constructed from PPMI billing records and defined cumulatively, using all birth control purchases at PPMI from recruitment through a given date t .

- **PPMI charges on birth control** is defined as the total dollar amount of all birth control purchased at PPMI from recruitment through date t . Dollars have been transformed into real 2025 dollars using the historical consumer price index for all urban consumers (CPI-U).
- **Any birth control purchase** is a binary indicator equal to one if at least one birth control purchase at PPMI occurs between recruitment and date t , and zero otherwise.
- **LARC insertion** is a binary indicator equal to one if a LARC was inserted at any point between recruitment and date t , regardless of subsequent removal.
- **Contraceptive efficacy** is defined as the maximum contraceptive efficacy across all methods purchased at PPMI between recruitment and date t .
- **Temporal coverage** is defined as the sum of the days covered by all PPMI birth control purchases between recruitment and date t . Days of coverage is the number of days that a purchased unit covers multiplied by the number of units purchased. Unit coverage is 1,095 days for implants, 2,190 days for Liletta, 1,825 days for Mirena, 3,650 days for Paragard, 1,095 days for Skyla, 28 days for birth control pills, 90 days for Depo-Provera injections, 28 days for rings, and 1 day for diaphragm.

- **Index of contraceptive choice** aggregates the five previous outcomes by standardizing each of them using the control-group mean and standard deviation and averaging across outcomes, as follows:

$$\text{Index}_i = \frac{1}{5} \sum_{o=1}^5 \frac{y_i^o - \bar{y}^{o,c}}{\sigma^{o,c}}$$

where y_i^o is the value of outcome o for individual i , $\bar{y}^{o,c}$ is the arithmetic mean of outcome o in the control group, and $\sigma^{o,c}$ is the standard deviation of outcome o in the control group, with both defined within the study phase. An increase in the index indicates higher contraceptive use, efficacy, and coverage.

Figure C1 plots the six contraceptive outcomes over the 26-month follow-up period, and Table 2 presents outcomes at two time horizons: cumulative outcomes through 100 days, corresponding to the period during which participants can use their voucher, and cumulative outcomes through 26 months.

A3. Pregnancy Outcomes

All pregnancy outcomes are constructed using reconciled data from PPMI billing records, the Y2FU survey, and MDHHS birth records. We reconciled these different sources of data to create a comprehensive individual panel up to 26 months after recruitment for pregnancies, abortions, and births, based on the date these pregnancies ended. We treated events as the same if they matched in both administrative and survey data. Because survey responses contain errors, we allowed some tolerance in matching events without exact matches. For abortions, we treated events as the same if they occurred within two months of each other, or if reports across sources occurred exactly one year apart. For births, we matched events if dates were within 10 days or matched on at least two date components (e.g., month and year matched but the day was different; month and day matched exactly but the year was different) as long as the recording aligned with the recorded total number of children born. When events were matched using these rules, we retained the event date as recorded in the administrative data. Miscarriages reported in the survey were recoded as abortions if they occurred in the same month and year as an abortion in the administrative data. In a handful of cases, we manually updated this reconciliation when other information suggested a reporting error in one source (e.g., a misreported year occurring after the survey). Pregnancy, abortion, and birth are defined as cumulative binary indicators equal to one if a given event occurred between recruitment and date t .

- **Pregnancy** is a binary indicator equal to one if a pregnancy occurred and ended by date t , including all births, abortions, and miscarriages occurring after enrollment, and zero otherwise
- **Abortion** is a binary indicator equal to one if an abortion occurred and ended by date t , considering abortions after enrollment, and zero otherwise
- **Birth** is a binary indicator equal to one if a birth occurred and ended by date t , and zero otherwise.

Figure 2 plots these outcomes for each month, and Table 3 presents estimates at 26 months.

Appendix B. Summary of Deviations from the Pre-Analysis Plan

This study was preregistered at the [American Economic Association RCT Registry](#). After data collection, we identified several instances where the pre-registered analyses were less well-suited than expected, redundant, or more effectively measured using alternative approaches. Below, we describe these deviations from our pre-analysis plan and explain why we made these changes.

B1. Primary Outcomes for Contraceptive Choice

B1.1. Index of contraceptive choice:

At the request of the editor and referees, we do not present results for the index in the main text. The results for the index appear in Appendix Figure C1.A.

B2. Primary Outcomes for Pregnancy and Childbearing

B2.1. Main outcomes:

The pre-analysis plan listed five outcomes for the domain of “unintended pregnancy and childbearing”: (1) pregnancies, (2) abortions, (3) births, (4) positive pregnancy tests, (5) emergency contraception use, and (6) an index of unintended pregnancy and childbearing combining (1)-(5). Once we received the data, we found that (4) added only 9 additional pregnancies to those observed in other sources, while (5) is nearly always zero (i.e., these purchases are rarely made at Planned Parenthood). Consequently, the index double-counts pregnancies when using both (1) and (4) and averages in many zeros when including (5). Our paper, therefore, focuses only on outcomes (1)–(3) over the first 26 months available in the data and disregards (4)-(6). Appendix Table C2 presents the results for all pre-specified outcomes for the interested reader.

B2.2. Incidence vs count measures:

Although the pre-analysis plan specified count measures for pregnancies, abortions, and births, the main analysis uses binary indicators for these outcomes. This choice reflects the empirical distribution of the data: approximately 95% of observations take values of zero or one, so the count outcomes behave almost identically to binary indicators in practice. In addition, measurement error is concentrated in the right tail of the count distribution, as the rare cases with three or more pregnancies within 26 months often involve multiple abortion records occurring close together, making it difficult to distinguish distinct pregnancies from repeated procedures related to a single pregnancy or reporting error.

Appendix Table C2 presents the analysis for the pre-registered count outcomes at 12 and 24 months.

B3. First-stage specification and IV estimator

B3.1. First-stage dependent variable:

The pre-analysis plan specified the index of contraceptive choice as the first-stage dependent variable for pregnancy outcomes. As the analysis developed, we determined that estimating effects on contraceptive choice was also of interest, which was not included in the pre-analysis plan. However, the pre-specified first-stage outcome, the index of contraceptive choice, cannot be used when examining the individual components of the index as second-stage outcomes. Consequently, in the main text we use voucher use (0/1) as the first-stage dependent variable for the analysis of contraceptive choice and pregnancy outcomes (equations 2a–2b). This choice facilitates direct comparisons across contraceptive and pregnancy outcomes and yields a clear and transparent interpretation of the estimated effects, while capturing multiple relevant margins of contraceptive behavior, including any contraceptive purchase, method switching (conditional on purchase),

and changes in coverage within method (conditional on remaining on the same method). Appendix Table C3 additionally presents second-stage results for pregnancy outcomes using the index of contraceptive choice as the first-stage outcome, which does not alter our conclusions.

B3.2. First-stage specification:

The pre-analysis plan specified a first stage using only voucher assignment as instrument, because we did not anticipate multiple changes in the trial, including the recruitment population, the absolute generosity of the voucher, and the policy environment, which altered the relative costs of different methods. Due to these multiple changes, we elected to estimate a heterogeneous first stage, implemented both through the theoretically motivated specification in equation (3) and through a LASSO-based approach. This deviation is motivated by substantial heterogeneity in intervention intensity across groups and changes in trial implementation over time, which generate large differences in voucher take-up. Allowing for a heterogeneous first stage improves efficiency and places greater weight on groups with higher take-up.

B3.3. Estimator:

Our pre-analysis plan proposed a 2SLS estimator. However, we use GMM because it is more efficient under heteroskedasticity and in overidentified settings.

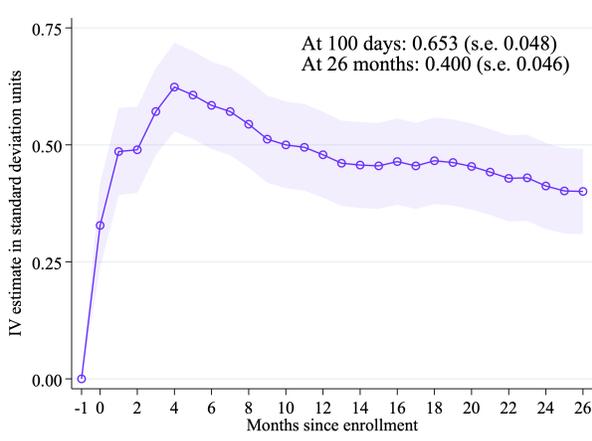
B3.4. Multiple inference:

We prespecified reporting multiple-inference adjusted p-values using Westfall and Young (1993) within two domains: (a) contraceptive efficacy and (b) unintended pregnancy and childbearing. We do not report Westfall-Young adjusted results because some resamples fail due to small cell sizes for covariate categories. Instead, we focus on Bonferroni-Holm adjusted p-values, which are usually more conservative and do not require resampling. For contraceptive outcomes, all estimates are highly statistically significant at the 1% level for individual measures and for the overall index. For pregnancy outcomes, we focus on fewer outcomes than originally specified (see #1), and pregnancy and abortion estimates remain statistically significant at the 5% level after using the Bonferroni-Holm correction, with adjusted p-values of 0.017 and 0.014, respectively. In short, Bonferroni-Holm corrections for multiple testing do not alter inference.

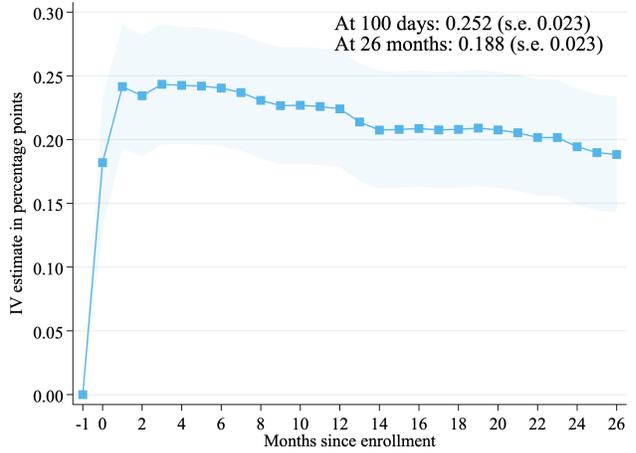
Appendix C. Additional Estimates

Appendix Figure C1. Treatment Effects of Voucher Use on Contraceptive Use

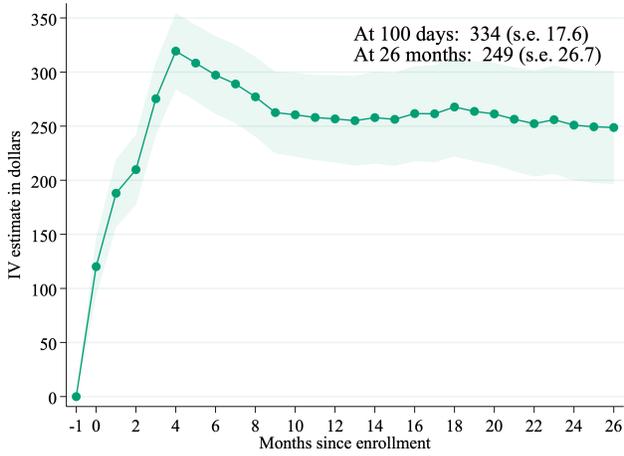
A. Index of Contraceptive Choice



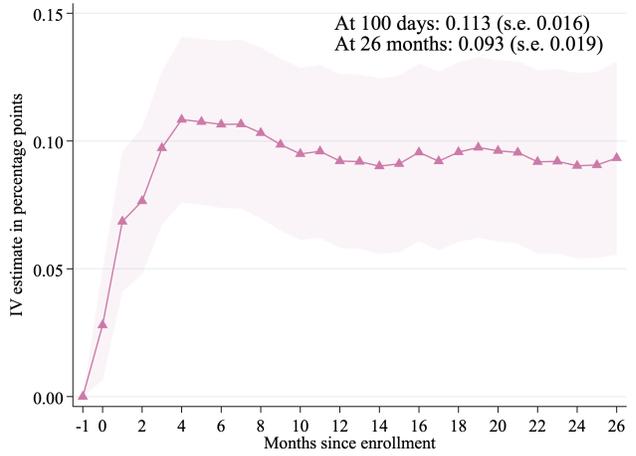
B. Any Birth Control Purchase



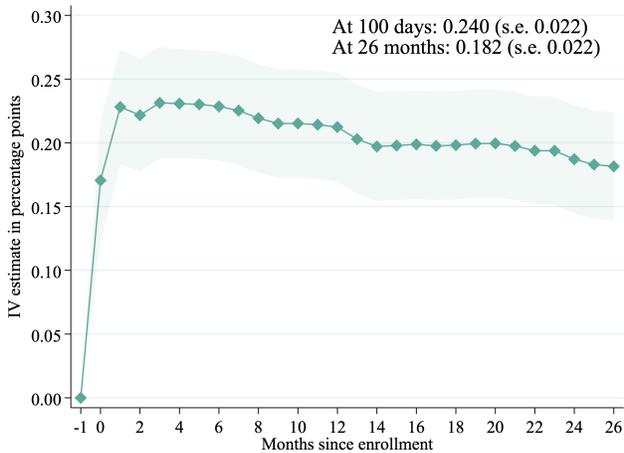
C. PPMI Charges on Birth Control in Dollars



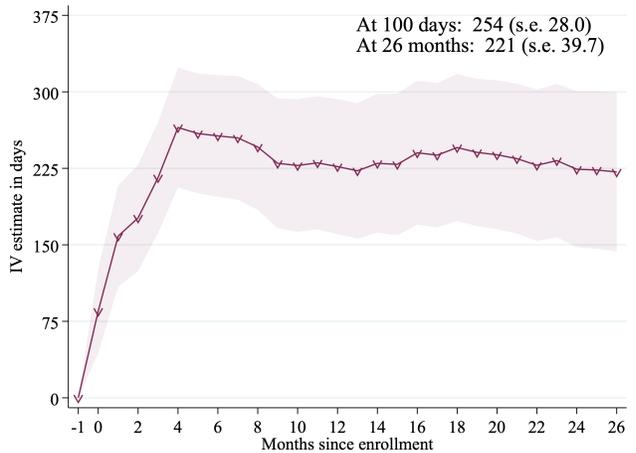
D. LARC Insertion



E. Contraceptive Efficacy



F. Temporal Coverage in Days



Notes: All individuals are observed through 26 months. Each point estimate is from a separate IV regression that models first stage heterogeneity as in equation (3). Standard errors are corrected for heteroskedasticity (Huber 1967, White 1980).

Appendix Table C1. Voucher Amounts by Income Group and Study Phase

Women's Income Group	PPMI Sliding Scale: % of Fee Charged	Randomly Assigned Voucher Amounts			
A. Phase 1: Voucher Amounts by Income Group from August 2018 to March 3, 2019					
		Control		Treatment	
≤ 100% FPL	0%	<i>Not recruited</i>		<i>Not recruited</i>	
101-150% FPL	25%	\$0		\$123	
151-200% FPL	50%	\$0		\$246	
201-250% FPL	75%	\$0		\$369	
≥ 251% FPL	100%	\$0		\$492	
B. Phase 2: Voucher Amounts by Income Group from March 4, 2019, to November 3, 2019					
		Control		Treatment	
≤ 100% FPL	0%	<i>Not recruited</i>		<i>Not recruited</i>	
101-150% FPL	25%	\$0		\$223	
151-200% FPL	50%	\$0		\$446	
201-250% FPL	75%	\$0		\$669	
≥ 251% FPL	100%	\$0		\$892	
C. Phase 3: Voucher Amounts by Income Group from November 4, 2019, to Sept. 12, 2021					
		Ages 18-21		Ages 22-25	
		Control	Treatment	Control	Treatment
≤ 100% FPL	0%	<i>Not recruited</i>		\$0	\$107
101-150% FPL	25%	\$0	\$267	\$0	\$441
151-200% FPL	50%	\$0	\$533	\$0	\$533
201-250% FPL	75%	\$0	\$800	\$0	\$800
≥ 251% FPL	100%	\$0	\$1,066	\$0	\$1,066
D. Phase 4: Voucher Amounts by Income Group from September 13, 2021, to February 2023					
		Control		Treatment	
≤ 100% FPL	0%	<i>Not recruited</i>		<i>Not recruited</i>	
101-150% FPL	25%	\$0		\$267	
151-200% FPL	50%	\$0		\$534	
201-250% FPL	75%	\$0		\$801	
≥ 251% FPL	100%	\$0		\$1,068	

Notes: Dollar values represent the voucher amount for the control group (\$0) and the treatment group by income group by study phase. Income groups are determined by the relationship of household income to the Federal Poverty Line (FPL). Phases are described in the text.

Appendix Table C2. Treatment Effects of Voucher Use on Pre-specified Pregnancy Outcomes (First Stage Outcome: Voucher Use)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	At 12 months				At 24 months			
	IV				IV			
	ITT	No first-stage heterogeneity	Theoretical first-stage heterogeneity	LASSO first-stage heterogeneity	ITT	No first-stage heterogeneity	Theoretical first-stage heterogeneity	LASSO first-stage heterogeneity
A. Number of Pregnancies		<i>Control mean: 0.182</i>				<i>Control mean: 0.266</i>		
Effect	0.00196 (0.00846)	0.00382 (0.0164)	-0.0180 (0.00745)	-0.0120 (0.00865)	-0.000211 (0.0141)	-0.000412 (0.0273)	-0.0352 (0.0162)	-0.0305 (0.0177)
% change	1.08%	2.10%	-9.89%	-6.61%	-0.0793%	-0.155%	-13.2%	-11.5%
B. Number of Abortions		<i>Control mean: 0.171</i>				<i>Control mean: 0.207</i>		
Effect	-0.00115 (0.00780)	-0.00224 (0.0151)	-0.0127 (0.00573)	-0.0132 (0.00709)	-0.00352 (0.0114)	-0.00687 (0.0221)	-0.0267 (0.0101)	-0.0267 (0.0115)
% change	-0.673%	-1.31%	-7.43%	-7.72%	-1.70%	-3.32%	-12.9%	-12.9%
C. Number of Births		<i>Control mean: 0.00249</i>				<i>Control mean: 0.0349</i>		
Effect	0.00324 (0.00213)	0.00632 (0.00414)	0.000 (0.000513)	0.000245 (0.000936)	0.00740 (0.00679)	0.0144 (0.0132)	-0.00634 (0.00717)	-0.00675 (0.00850)
% change	130%	253%	3.24%	9.82%	21.2%	41.4%	-18.2%	-19.3%
D. Positive Pregnancy Tests		<i>Control mean: 0.0343</i>				<i>Control mean: 0.0399</i>		
Effect	-0.00721 (0.00636)	-0.0141 (0.0123)	-0.00433 (0.00509)	-0.0119 (0.00693)	-0.00776 (0.00691)	-0.0151 (0.0134)	-0.00707 (0.00664)	-0.0176 (0.00809)
% change	-21.0%	-41.1%	-12.6%	-34.7%	-19.5%	-38.0%	-17.7%	-44.0%
E. Emergency Contraception		<i>Control mean: 0.0143</i>				<i>Control mean: 0.0187</i>		
Effect	0.00624 (0.00484)	0.0122 (0.00937)	-0.000500 (0.00427)	0.00803 (0.00652)	0.00447 (0.00568)	0.00873 (0.0110)	-0.00282 (0.00502)	0.0122 (0.00831)
% change	43.6%	85.0%	-3.49%	56.1%	23.9%	46.7%	-15.1%	65.2%
F. Index of Unintended Pregnancy and Childbearing								
Effect	0.0159 (0.0164)	0.0310 (0.0319)	-0.0357 (0.0145)	-0.0305 (0.0192)	0.00500 (0.0171)	0.00976 (0.0332)	-0.0407 (0.0201)	-0.0346 (0.0235)

Notes: Each point estimate is from a separate regression. Columns 2-4 and 6-8 model first-stage heterogeneity as indicated. Results are either at 12 months (columns 1-4) or at 24 months (columns 5-8). Standard errors are corrected for heteroskedasticity (Huber 1967, White 1980).

Appendix Table C3. Treatment Effects of Voucher Use on Pre-specified Pregnancy Outcomes (First Stage Outcome: Index of Contraceptive Choice)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	At 12 months				At 24 months			
	IV				IV			
	ITT	No first-stage heterogeneity	Theoretical first-stage heterogeneity	LASSO first-stage heterogeneity	ITT	No first-stage heterogeneity	Theoretical first-stage heterogeneity	LASSO first-stage heterogeneity
A. Number of Pregnancies		<i>Control mean: 0.182</i>				<i>Control mean: 0.266</i>		
Effect	0.00196 (0.00846)	0.00450 (0.0193)	-0.0192 (0.00975)	-0.0152 (0.0120)	-0.000211 (0.0141)	-0.000485 (0.0322)	-0.0321 (0.0205)	-0.0246 (0.0220)
% change	1.08%	2.47%	-10.6%	-8.37%	-0.0793%	-0.182%	-12.1%	-9.24%
B. Number of Abortions		<i>Control mean: 0.171</i>				<i>Control mean: 0.207</i>		
Effect	-0.00115 (0.00780)	-0.00264 (0.0178)	-0.00855 (0.00769)	-0.0103 (0.0104)	-0.00352 (0.0114)	-0.00809 (0.0260)	-0.0254 (0.0142)	-0.0183 (0.0159)
% change	-0.673%	-1.54%	-5.01%	-6.01%	-1.70%	-3.91%	-12.3%	-8.87%
C. Number of Births		<i>Control mean: 0.00249</i>				<i>Control mean: 0.0349</i>		
Effect	0.00324 (0.00213)	0.00743 (0.00491)	0.000292 (0.000926)	0.000261 (0.00126)	0.00740 (0.00679)	0.0170 (0.0156)	-0.00360 (0.00909)	0.000437 (0.0106)
% change	130%	298%	11.7%	10.5%	21.2%	48.7%	-10.3%	1.25%
D. Positive Pregnancy Tests		<i>Control mean: 0.0343</i>				<i>Control mean: 0.0399</i>		
Effect	-0.00721 (0.00636)	-0.0166 (0.0145)	-0.00642 (0.00622)	-0.00714 (0.00872)	-0.00776 (0.00691)	-0.0178 (0.0158)	-0.0101 (0.00870)	-0.0105 (0.0105)
% change	-21.0%	-48.3%	-18.7%	-20.8%	-19.5%	-44.7%	-25.4%	-26.3%
E. Emergency Contraception		<i>Control mean: 0.0143</i>				<i>Control mean: 0.0187</i>		
Effect	0.00624 (0.00484)	0.0143 (0.0111)	0.00496 (0.00652)	0.00579 (0.00731)	0.00447 (0.00568)	0.0103 (0.0130)	0.000943 (0.00769)	0.00494 (0.00799)
% change	43.6%	100%	34.6%	40.4%	23.9%	55.0%	5.04%	26.4%
F. Index of Unintended Pregnancy and Childbearing								
Effect	0.0159 (0.0164)	0.0364 (0.0378)	-0.0248 (0.0219)	-0.00357 (0.0264)	0.00500 (0.0171)	0.0115 (0.0391)	-0.0247 (0.0259)	-0.00205 (0.0291)

Notes: Each point estimate is from a separate regression. Columns 2-4 and 6-8 model first-stage heterogeneity as indicated. Results are either at 12 months (columns 1-4) or at 24 months (columns 5-8). Standard errors are corrected for heteroskedasticity (Huber 1967, White 1980).

Appendix Table C4. First-Stage Heterogeneity Tests

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Within 100 days of enrollment						
Dependent Variable	Voucher use	Index of contraceptive choice	Any birth control purchase	PPMI charges on birth control in dollars	LARC insertion	Contraceptive efficacy	Temporal coverage in days
Control mean	0.000	0.000	0.369	116	0.0530	0.343	152
Voucher	0.536 (0.0461)	0.174 (0.137)	0.0983 (0.0626)	82.4 (46.6)	0.0130 (0.0424)	0.0904 (0.0587)	46.9 (90.1)
Voucher × AB visit ¹	-0.337 (0.0356)	-0.137 (0.108)	-0.0103 (0.0482)	-91.7 (38.7)	-0.0376 (0.0303)	-0.0118 (0.0455)	-58.7 (68.2)
Voucher × Phase 2	-0.0555 (0.0342)	0.241 (0.104)	0.0195 (0.0501)	85.8 (35.3)	0.100 (0.0341)	0.0268 (0.0467)	170 (69.2)
..... × Phase 3	-0.152 (0.0359)	0.107 (0.107)	0.0263 (0.0501)	37.7 (38.3)	0.0394 (0.0337)	0.0277 (0.0468)	51.2 (68.5)
..... × Phase 4	-0.229 (0.0418)	0.0733 (0.133)	0.0129 (0.0570)	0.951 (46.1)	0.0503 (0.0403)	0.0172 (0.0537)	38.5 (88.1)
Voucher × Clinic 1	-0.0200 (0.0732)	0.0168 (0.225)	-0.0781 (0.0948)	28.6 (78.2)	0.0247 (0.0650)	-0.0702 (0.0898)	95.2 (144)
..... × Clinic 2	0.151 (0.0461)	0.0507 (0.146)	-0.0148 (0.0652)	60.6 (50.8)	0.0171 (0.0446)	-0.0126 (0.0612)	0.348 (91.9)
..... × Clinic 3	0.180 (0.0382)	0.189 (0.125)	0.0716 (0.0529)	93.5 (43.6)	0.0265 (0.0382)	0.0671 (0.0498)	85.9 (84.4)
..... × Clinic 4	0.122 (0.0408)	-0.00549 (0.125)	0.00452 (0.0561)	44.3 (43.8)	-0.0228 (0.0368)	0.00241 (0.0528)	-59.1 (78.6)
..... × Clinic 5	0.0552 (0.0412)	0.0173 (0.117)	-0.0403 (0.0536)	42.9 (40.5)	0.0108 (0.0338)	-0.0364 (0.0503)	18.9 (73.7)
..... × Clinic 6	0.0477 (0.0473)	-0.0115 (0.142)	-0.0218 (0.0653)	18.9 (49.4)	-0.0150 (0.0418)	-0.0226 (0.0613)	16.5 (89.6)
..... × Clinic 7	0.0462 (0.0639)	0.104 (0.181)	0.0619 (0.0851)	38.3 (59.1)	0.0203 (0.0562)	0.0582 (0.0798)	12.5 (122)
..... × Clinic 8	0.149 (0.0492)	-0.0434 (0.157)	0.0104 (0.0676)	23.7 (53.7)	-0.0474 (0.0471)	0.00686 (0.0634)	-70.5 (113)
..... × Clinics 9-13	0.181 (0.105)	0.148 (0.256)	-0.0687 (0.150)	122 (107)	0.0751 (0.0764)	-0.0545 (0.139)	103 (118)
Voucher × pre-visit LARC	-0.172 (0.0410)	0.274 (0.122)	0.0931 (0.0528)	69.2 (42.4)	0.0877 (0.0363)	0.0930 (0.0499)	164 (74.8)
..... × pre-visit injection	0.305 (0.0463)	-0.222 (0.107)	-0.0593 (0.0560)	-137 (42.0)	-0.0416 (0.0351)	-0.0559 (0.0526)	-76.7 (59.8)
..... × pre-visit nonprescription method ²	0.0474 (0.0334)	0.202 (0.108)	0.0492 (0.0467)	63.8 (37.3)	0.0527 (0.0324)	0.0486 (0.0440)	166 (75.3)
Observations	3,172	3,172	3,172	3,172	3,172	3,172	3,172
R-squared	0.500	0.142	0.253	0.153	0.0604	0.249	0.0684
Fstat: No heterogeneity ³	149	10.5	6.92	17.0	4.87	7.15	6.49
p-value	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Fstat: No heterogeneity by visit type	89.7	1.60	0.0452	5.62	1.55	0.0673	0.740
p-value	0.000	0.206	0.832	0.0178	0.214	0.795	0.390
Fstat: No heterogeneity by phase	12.2	2.00	0.103	2.68	3.28	0.146	2.56
p-value	0.000	0.112	0.959	0.0452	0.0200	0.932	0.0530
Fstat: No heterogeneity by site	3.77	0.489	0.736	0.659	0.592	0.710	0.629
p-value	0.000	0.883	0.676	0.747	0.805	0.700	0.773
Fstat: No heterogeneity by BCM ⁴	24.4	5.09	2.97	7.67	2.87	3.05	4.16
p-value	0.000	0.000119	0.0111	0.000	0.0138	0.00948	0.000908

Notes: Each column presents results from a regression for the dependent variable indicated at the top of the column. For space limitations, we report point estimates for selected Voucher-covariate interactions and omit the estimates for the uninteracted covariates. ¹AB visit stands for abortion visit. ²Nonprescription method includes condoms, withdrawal, and natural family planning, with a small number of reports of partner vasectomy at recruitment. ³No heterogeneity tests whether all interactions with voucher are jointly zero. ⁴BCM stands for pre-recruitment birth control method.

Appendix Table C5. Contraceptive Switching Matrix

A. 100 days after Enrollment

A.1. Treatment Group

Most Effective Method Billed Post-Visit and within 100 days of Enrollment						
Most Effective Birth Control Method Pre-Visit	LARC	Shot	Pill	Other Prescription Method	Did not purchase BC at PPMI	Total
LARC	45	3	27	4	153	232
Shot	5	81	0	1	6	93
Pill	45	6	215	8	130	404
Other Prescription Method	4	0	5	23	13	45
Non-Prescription Method	72	17	73	16	157	335
No Method	45	40	95	9	269	458
Total	216	147	415	61	728	1567
	Total	Percent				
Switched to more effective	432	27.6%				
Stayed on same method	364	23.2%				
Switched to less effective	43	2.7%				
No purchase of BC at PPMI	728	46.5%				

A.2. Control Group

Most Effective Method Billed Post-Visit and within 100 days of Enrollment						
Most Effective Birth Control Method Pre-Visit	LARC	Shot	Pill	Other Prescription Method	Did not purchase BC at PPMI	Total
LARC	9	0	13	6	205	233
Shot	2	82	3	1	12	100
Pill	16	8	159	4	231	418
Other Prescription Method	3	0	5	24	16	48
Non-Prescription Method	35	26	55	13	239	368
No Method	20	35	64	9	310	438
Total	85	151	299	57	1013	1605
	Total	Percent				
Switched to more effective	291	18.1%				
Stayed on same method	274	17.1%				
Switched to less effective	27	1.7%				
No purchase of BC at PPMI	1013	63.1%				

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B. 26 months after Enrollment

B.1. Treatment Group

Most Effective Method Billed Post-Visit and within 26 months of Enrollment						
Most Effective Birth Control Method Pre-Visit	LARC	Shot	Pill	Other Prescription Method	Did not purchase BC at PPMI	Total
LARC	54	4	28	5	141	232
Shot	7	80	0	1	5	93
Pill	47	8	225	8	116	404
Other Prescription Method	5	1	5	24	10	45
Non-Prescription Method	80	18	81	14	142	335
No Method	56	42	100	10	250	458
Total	249	153	439	62	664	1567
	Total	Percent				
Switched to more effective	474	30.2%				
Stayed on same method	383	24.4%				
Switched to less effective	46	2.9%				
No purchase of BC at PPMI	664	42.4%				

B.2. Control Group

Most Effective Method Billed Post-Visit and within 26 months of Enrollment						
Most Effective Birth Control Method Pre-Visit	LARC	Shot	Pill	Other Prescription Method	Did not purchase BC at PPMI	Total
LARC	32	2	18	6	175	233
Shot	10	76	3	1	10	100
Pill	25	11	187	5	190	418
Other Prescription Method	4	0	5	26	13	48
Non-Prescription Method	47	23	64	13	221	368
No Method	31	42	76	9	280	438
Total	149	154	353	60	889	1605
	Total	Percent				
Switched to more effective	360	22.4%				
Stayed on same method	321	20.0%				
Switched to less effective	35	2.2%				
No purchase of BC at PPMI	889	55.4%				

Notes: Rows capture the most effective birth control method before enrollment measured using both survey responses and PPMI billing data. Columns capture the most effective birth control method purchased at PPMI in the 100 days after enrollment (Panel A), and within 26 months after enrollment (Panel B). Methods observable in PPMI billing records are LARC, injectable contraception, pill, and other prescription methods (ring, patch, and diaphragm). Nonprescription methods are observed in the recruitment survey and include condoms, withdrawal, and natural family planning, as well as a small number of reports of a partner with a vasectomy at recruitment. PPMI does not perform sterilization procedures, and individuals with prior sterilization were not eligible for the study. Only 0.5% of our sample report having undergone sterilization in the Y2FU survey. Entries in the matrices represent the empirical frequencies of individuals with the indicated pre-enrollment and post-enrollment methods. Purple shading indicates that individuals stayed on the same method. Green shading (below the diagonal) shows individuals switching to more effective methods, and pink shading (above the diagonal) indicates that individual switched to less effective methods. Below each matrix, the number of individuals staying on the same method and switching to more effective and less effective methods are summarized as a percent of all individuals. Significantly more individuals purchased birth control and switched to more effective methods in the voucher group (panels A.1 and B.1) than in the control group (panel A.2 and B.2).

Appendix Table C6. Heterogeneous Effects on Birth Control Method by Trial Phase

A. At 100 Days

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	<i>All phases</i>		<i>Phase 1</i>		<i>Phase 2</i>		<i>Phases 3-4</i>	
	ITT	IV	ITT	IV	ITT	IV	ITT	IV
A. Switched to more effective method								
	<i>Control mean: 0.181</i>		<i>Control mean: 0.275</i>		<i>Control mean: 0.227</i>		<i>Control mean: 0.130</i>	
Effect	0.0913	0.0750	0.0605	0.0299	0.116	0.120	0.0870	0.0672
	(0.0129)	(0.0164)	(0.0326)	(0.0423)	(0.0251)	(0.0345)	(0.0169)	(0.0310)
% change	50.3%	41.4%	22.0%	10.8%	51.2%	53.0%	66.8%	51.6%
B. Stayed on same method								
	<i>Control mean: 0.171</i>		<i>Control mean: 0.223</i>		<i>Control mean: 0.247</i>		<i>Control mean: 0.117</i>	
Effect	0.0597	-0.00267	0.0838	0.0261	0.0576	-0.0370	0.0534	0.0133
	(0.0108)	(0.00881)	(0.0294)	(0.0363)	(0.0219)	(0.0274)	(0.0132)	(0.0255)
% change	35.0%	-1.56%	37.6%	11.7%	23.3%	-15.0%	45.8%	11.4%
C. Any birth control purchase								
	<i>Control mean: 0.369</i>		<i>Control mean: 0.521</i>		<i>Control mean: 0.501</i>		<i>Control mean: 0.257</i>	
Effect	0.159	0.252	0.163	0.215	0.169	0.227	0.152	0.311
	(0.0154)	(0.0234)	(0.0385)	(0.0460)	(0.0301)	(0.0408)	(0.0202)	(0.0412)
% change	43.2%	68.3%	31.4%	41.3%	33.8%	45.3%	59.3%	121%
D. LARC insertion								
	<i>Control mean: 0.0530</i>		<i>Control mean: 0.0830</i>		<i>Control mean: 0.0379</i>		<i>Control mean: 0.0516</i>	
Effect	0.0856	0.113	0.0454	0.0404	0.134	0.174	0.0713	0.104
	(0.0103)	(0.0163)	(0.0271)	(0.0305)	(0.0195)	(0.0281)	(0.0135)	(0.0284)
% change	162%	213%	54.7%	48.6%	355%	460%	138%	202%
E. Injection use								
	<i>Control mean: 0.0953</i>		<i>Control mean: 0.106</i>		<i>Control mean: 0.131</i>		<i>Control mean: 0.0741</i>	
Effect	0.00219	-0.00321	-0.0122	0.00486	-0.00361	-0.0203	0.00982	0.00361
	(0.00777)	(0.00758)	(0.0212)	(0.0186)	(0.0160)	(0.0212)	(0.00963)	(0.0180)
% change	2.30%	-3.36%	-11.5%	4.60%	-2.75%	-15.4%	13.3%	4.88%
F. Pills purchase								
	<i>Control mean: 0.191</i>		<i>Control mean: 0.287</i>		<i>Control mean: 0.292</i>		<i>Control mean: 0.112</i>	
Effect	0.0789	0.0722	0.152	0.190	0.0516	-0.0122	0.0714	0.101
	(0.0135)	(0.0203)	(0.0379)	(0.0498)	(0.0279)	(0.0382)	(0.0162)	(0.0355)
% change	41.3%	37.7%	52.9%	66.2%	17.7%	-4.20%	63.6%	89.7%
G. Other birth control method purchase								
	<i>Control mean: 0.0374</i>		<i>Control mean: 0.0642</i>		<i>Control mean: 0.0490</i>		<i>Control mean: 0.0236</i>	
Effect	0.00547	0.00760	-0.00855	-0.0205	0.00995	0.0191	0.00735	0.00843
	(0.00631)	(0.00838)	(0.0195)	(0.0232)	(0.0127)	(0.0160)	(0.00713)	(0.0149)
% change	14.6%	20.3%	-13.3%	-32.0%	20.3%	38.9%	31.2%	35.8%
Observations	3,172	3,172	527	527	934	934	1,711	1,711

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B. At 26 Months

	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
	<i>All phases</i>		<i>Phase 1</i>		<i>Phase 2</i>		<i>Phases 3-4</i>	
	ITT	IV	ITT	IV	ITT	IV	ITT	IV
A. Switched to more effective method								
	<i>Control mean: 0.224</i>		<i>Control mean: 0.302</i>		<i>Control mean: 0.265</i>		<i>Control mean: 0.181</i>	
Effect	0.0751	0.0542	0.0521	0.0252	0.103	0.118	0.0669	0.0235
	(0.0135)	(0.0177)	(0.0331)	(0.0433)	(0.0258)	(0.0368)	(0.0181)	(0.0324)
% change	33.5%	24.2%	17.2%	8.33%	38.9%	44.3%	37.0%	13.0%
B. Stayed on same method								
	<i>Control mean: 0.200</i>		<i>Control mean: 0.238</i>		<i>Control mean: 0.258</i>		<i>Control mean: 0.159</i>	
Effect	0.0438	-0.00355	0.0807	0.0495	0.0463	-0.0164	0.0311	-0.0210
	(0.0113)	(0.00822)	(0.0304)	(0.0374)	(0.0225)	(0.0282)	(0.0142)	(0.0265)
% change	21.9%	-1.77%	33.9%	20.8%	17.9%	-6.36%	19.5%	-13.2%
C. Any birth control purchase								
	<i>Control mean: 0.446</i>		<i>Control mean: 0.577</i>		<i>Control mean: 0.552</i>		<i>Control mean: 0.354</i>	
Effect	0.124	0.188	0.137	0.181	0.145	0.197	0.109	0.185
	(0.0158)	(0.0232)	(0.0384)	(0.0454)	(0.0298)	(0.0411)	(0.0214)	(0.0440)
% change	27.9%	42.2%	23.8%	31.4%	26.2%	35.7%	30.9%	52.3%
D. LARC insertion								
	<i>Control mean: 0.0928</i>		<i>Control mean: 0.125</i>		<i>Control mean: 0.0713</i>		<i>Control mean: 0.0943</i>	
Effect	0.0667	0.0934	0.0188	0.0154	0.115	0.160	0.0552	0.0743
	(0.0117)	(0.0193)	(0.0300)	(0.0408)	(0.0216)	(0.0317)	(0.0156)	(0.0335)
% change	71.8%	101%	15.1%	12.4%	161%	224%	58.6%	78.9%
E. Injection use								
	<i>Control mean: 0.104</i>		<i>Control mean: 0.109</i>		<i>Control mean: 0.143</i>		<i>Control mean: 0.0831</i>	
Effect	-0.000500	0.00257	-0.00889	0.00781	-0.0101	-0.0157	0.00734	0.0119
	(0.00825)	(0.0100)	(0.0221)	(0.0197)	(0.0165)	(0.0236)	(0.0105)	(0.0218)
% change	-0.481%	2.47%	-8.12%	7.13%	-7.05%	-11.0%	8.83%	14.3%
F. Pills purchase								
	<i>Control mean: 0.236</i>		<i>Control mean: 0.321</i>		<i>Control mean: 0.321</i>		<i>Control mean: 0.167</i>	
Effect	0.0652	0.0910	0.147	0.195	0.0602	0.0656	0.0425	0.0611
	(0.0141)	(0.0230)	(0.0385)	(0.0508)	(0.0284)	(0.0409)	(0.0175)	(0.0399)
% change	27.7%	38.6%	46.0%	60.8%	18.8%	20.5%	25.4%	36.5%
G. Other birth control method purchase								
	<i>Control mean: 0.0436</i>		<i>Control mean: 0.0755</i>		<i>Control mean: 0.0579</i>		<i>Control mean: 0.0269</i>	
Effect	0.00774	0.0105	-0.00524	-0.0139	0.00338	0.00810	0.0141	0.0237
	(0.00688)	(0.0101)	(0.0219)	(0.0264)	(0.0134)	(0.0173)	(0.00788)	(0.0178)
% change	17.7%	24.1%	-6.95%	-18.4%	5.83%	14.0%	52.5%	88.1%
Observations	3,172	3,172	527	527	934	934	1,711	1,711

Notes: Each point estimate reports either an ITT or IV estimate from equation (3). The reported number of observations and control mean are calculated separately within each phase. Other prescription methods include ring, patch, and diaphragm. Measures of switching to a more effective method or remaining on the same method are defined for the full sample, although only participants with an observed contraceptive purchase can be identified as having switched or remained on a method. Standard errors are robust to heteroskedasticity (Huber 1967; White 1980).