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Oral Contraceptive Pill Dispensing Policy and Unintended Pregnancy

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Gynecology and Reproductive
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Background: Pill Use and Unintended Pregnancy

- Nationally nearly half (47%) of pill users miss 1 or more pills per cycle (Rosenberg, 1999)
- The third most common reason for missing a pill is “No new pill pack,” cited in 10% of the instances of missed pills. (JD Smith et al., 2005)
- One out of seven women seeking abortion in the United States reported using pills in the month they conceived. (RK Jones et al, 2002)
- 73% of American women get one cycle per encounter (KA Phillips et al, 2004)

California's Family Planning Program

Family PACT

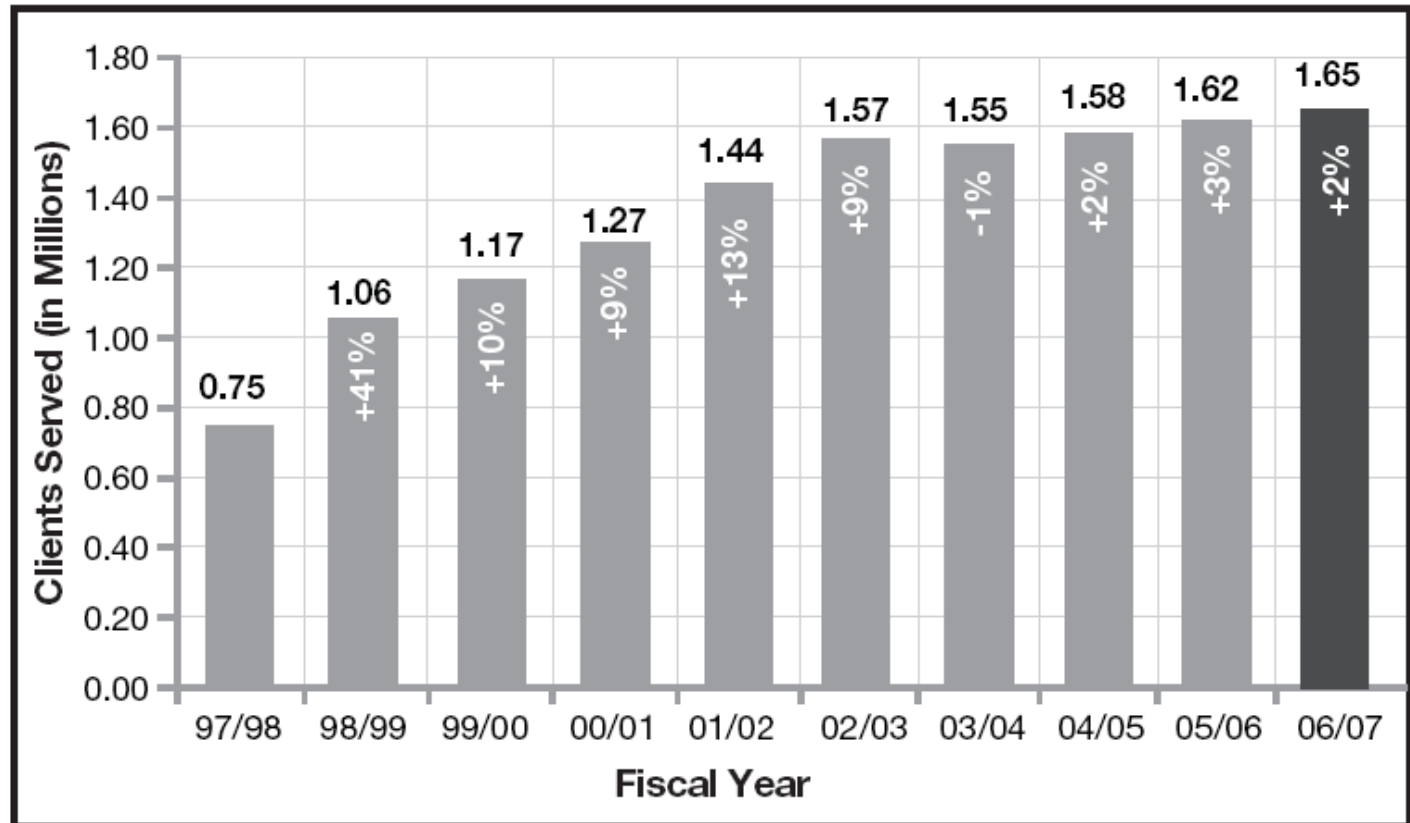
- Established by the California State Legislature in 1996 to provide comprehensive family planning and reproductive health services at no cost to California's low income residents.
- Federal Medicaid Waiver program since 2000
- Fee-for-Service Program
- Onsite client enrollment
- Providers
 - Over 2,000 enrolled Medi-Cal providers from public and private sector
- Clients
 - Over 1.6 million women & men each year





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Trend in Number of Clients Served by Family PACT



Source: Family PACT Enrollment and Claims Data

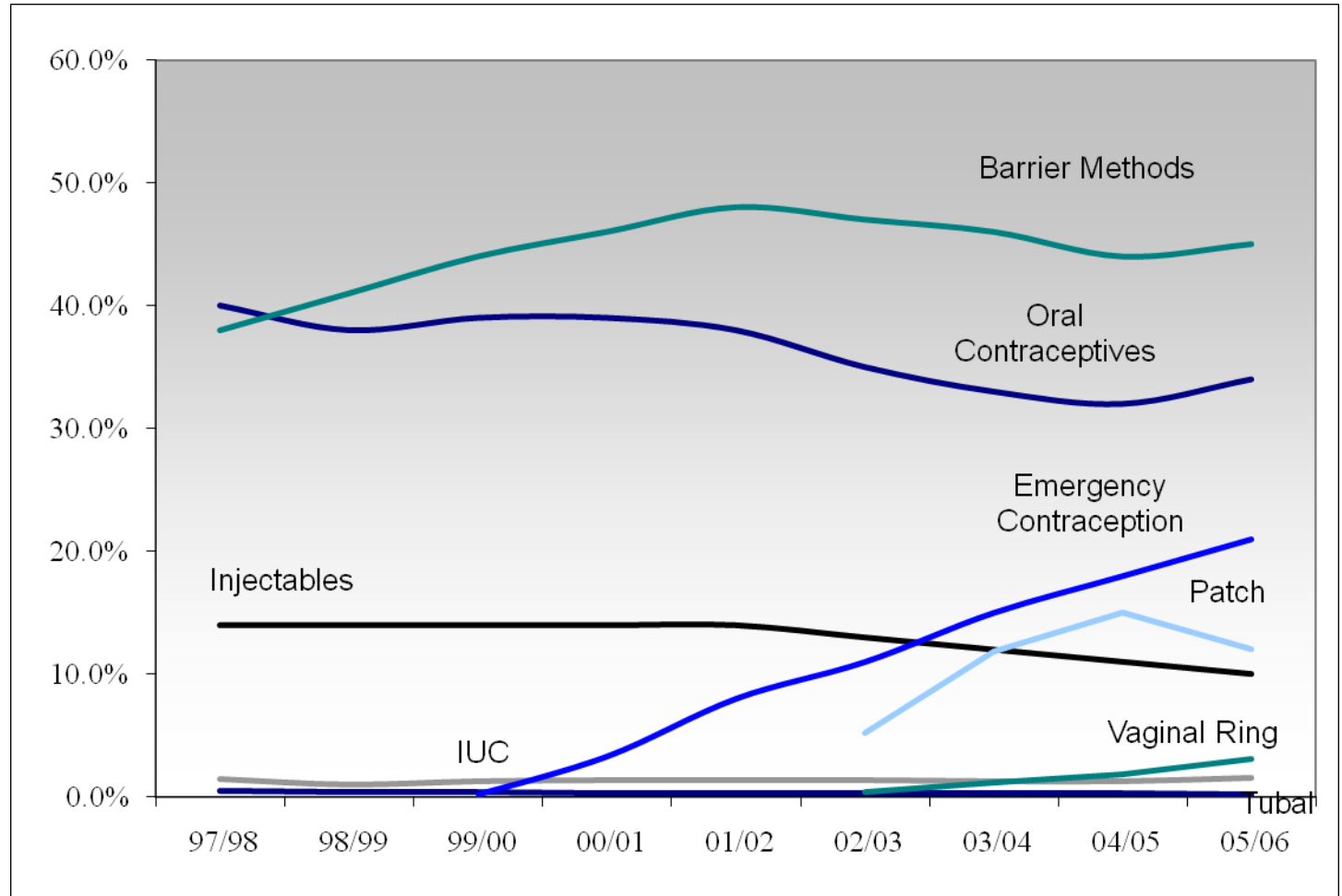


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Trends in the percentage of Family PACT female clients dispensed various forms of contraceptive methods, CY 1999-2005



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Our previous work

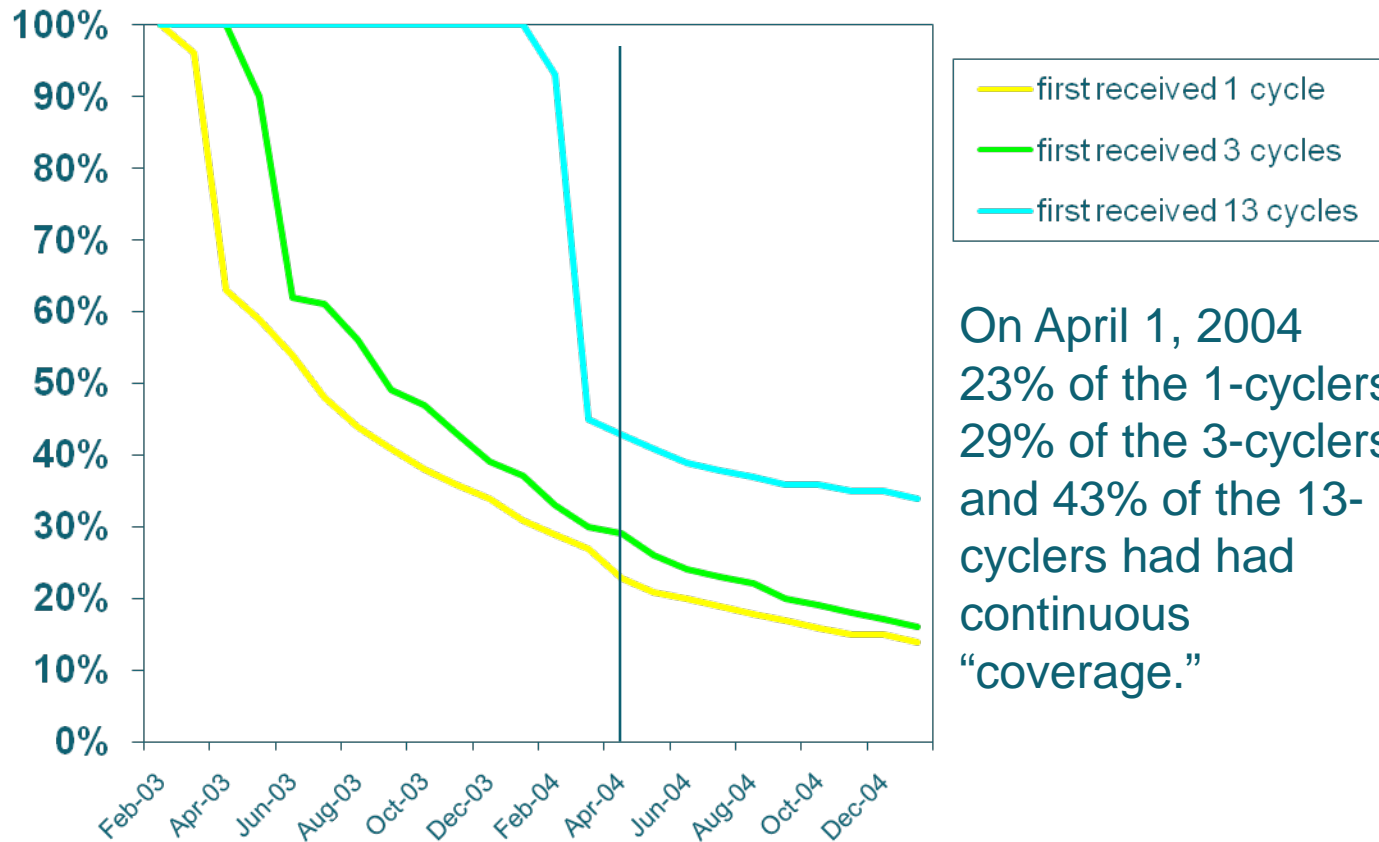
Dispensing a whole year's supply of oral contraceptive pills at a family planning clinic visit can be cost effective and result fewer gaps in coverage than dispensing only one or three cycles.

Foster DG, Parvataneni R, Thiel de Bocanegra H, Lewis C, Bradsberry M, Darney P. Number of Oral Contraceptive Pill Packages Dispensed, Method Continuation, and Costs. *Obstetrics & Gynecology* 2006; 108: 1107-1114.



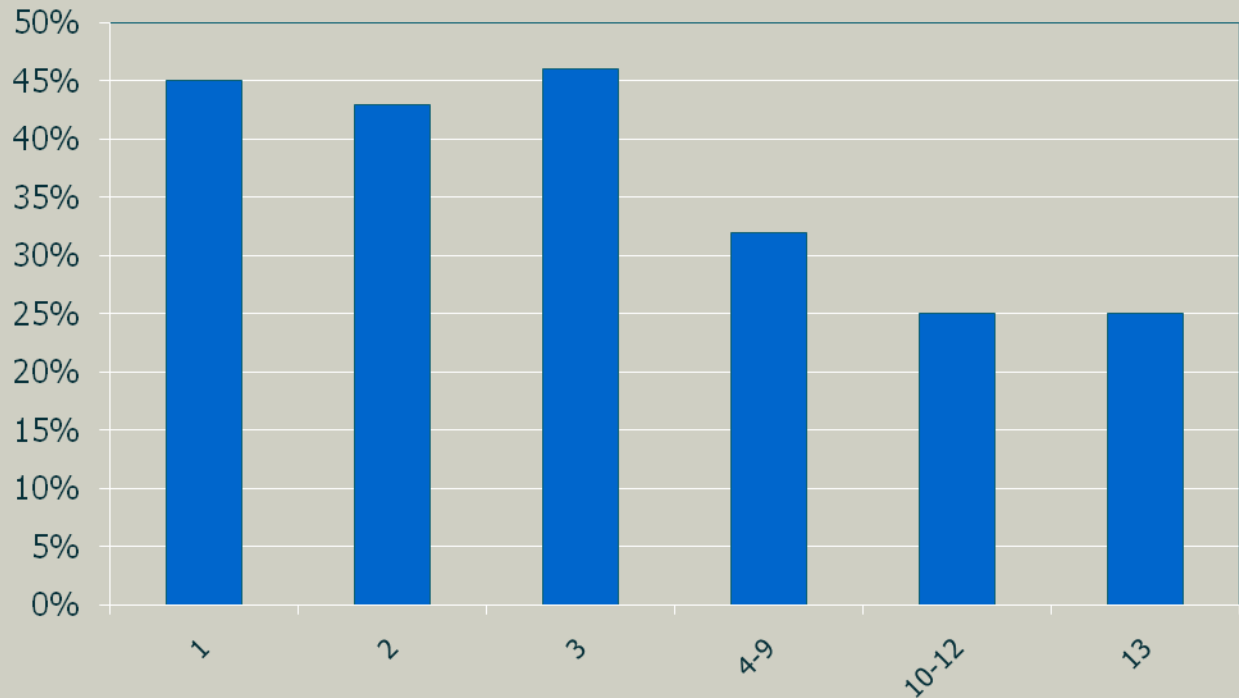
Previous work: Continuous Coverage

(Among women dispensed pills in January 2003)



Previous work: Pregnancy tests

Percentage of women receiving at least 1 pregnancy test



The selection effect

Previous work did not randomize women to receive one, three or thirteen cycles and more experienced pill users may have received a greater number of cycles of pills

- **Women who get a year's supply may be more likely to be experienced OCP users**
- **Women who get few cycles may be planning a pregnancy**
- **Approaches**
 - Look for situations where the number of cycles was not related to patient characteristics
 - Look at abortion rates



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Methodology

Using claims data from the California State family planning program and matched claims for birth and abortion in the Medi-Cal program, we examined incidence of abortion and births conceived in the subsequent year by the number of pill packs dispensed.



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Sample #1: All of Family PACT

An overview of dispensing and pregnancies for the whole Family PACT Program

Total: 84,562 women receiving oral contraceptives in January 2006



Sample #2: *Natural Experiment* Stocking problems - all get 1 pack

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In September 2004 one set of clinics only dispensed one cycle of pills to all clients due to stocking problems.

Compare pregnancy rates to women receiving pills 2 months later (November 2004).



Sample #3: *Natural Experiment* **Clinics increase the percentage of women getting a year's supply**

Between June 2004 and June 2005 another set of clinics changed its policy and increased the percentage of women getting a full year's supply of pills.

Compare pregnancy rates to women receiving pills one year apart.

Sample 1: Pregnancies by Family PACT clients receiving oral contraceptives in January 2006, by number of cycles dispensed

	no pregnancy	delivery	ectopic	miscar-riage	abortion	Total	N
1	92.2%	6.1%	0.1%	0.5%	1.2%	100%	16,516
3	92.1%	6.3%	0.1%	0.6%	0.9%	100%	49,072
13	97.1%	1.9%	0.0%	0.2%	0.7%	100%	7,949
other	95.3%	3.7%	0.0%	0.2%	0.8%	100%	11,025
Total	93.0%	5.5%	0.1%	0.5%	0.9%	100%	84,562

Note: only pregnancies with outcomes paid by Medi-Cal are included.



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Sample 2: Clients and pregnancy rates by number of cycles dispensed for Family PACT clinics with a stocking problem in September 2004

	September 2004		November 2004	
	Clients	Pregnancy rate	Clients	Pregnancy rate
1 cycle	97%	4.0%	10%	3.1%
3 cycles	2%	12.5%	44%	4.6%
13 cycles	0%	--	19%	1.7%
Other cycles	1%	--	27%	3.8%
total	100%	4.2%	100	3.7%
N	1,179		1,253	

Note: only pregnancies with outcomes paid by Medi-Cal are included.

Sample 3: Clients and pregnancy rates by number of cycles dispensed for Family PACT clinics which increased the proportion of clients receiving 13 cycles between 2004 and 2005

	June 2004		June 2005	
	Clients	Pregnancy rate	Clients	Pregnancy rate
1 cycle	16%	5.4%	9%	5.7%
3 cycles	28%	4.1%	7%	3.6%
13 cycles	13%	0%	61%	2.1%
Other cycles	33%	1.5%	24%	2.7%
total	100%	2.9%	100%	2.7%
N	819		783	

Note: only pregnancies with outcomes paid by Medi-Cal are included.

Conclusions

- **Preliminary evidence shows a modest reduction in the pregnancy rate of providing a year's supply of OCPs**
- **Abortion is undercounted in these data.**
 - Our Medi-Cal data is incomplete (missing presumptive eligibility).
 - Women may be paying out of pocket for abortion procedures.



Next steps

- **Include presumptive eligibility (~25% more abortions)**
- **Limit analysis to women who received their oral contraceptive pills from a provider who provides Medi-Cal funded abortions to exclude women who may be more likely to pay cash**
- **Tie in OCP method continuation and switching to explain observed effect**





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- All analyses, interpretations, or conclusions reached are those of UCSF, not the State of California.



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