

# Enhancing Service Delivery Through Title X Funding: Findings from California

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**CONTEXT:** The federal Title X grant program provides funding for family planning services for low-income women and men. In California, all clinics receiving Title X funds participate in the state's family planning program, Family PACT, along with other public and private providers. The relative extent to which Title X-funded clinics and other Family PACT providers have incorporated enhancements beyond their core medical services has never been studied.

**METHODS:** In 2010, a survey was sent to public- and private-sector Family PACT clinicians to assess whether funding streams were associated with the availability of special services: extended clinic hours, outreach to vulnerable populations, services for clients not proficient in English and use of advanced clinic-based technologies. Bivariate and logistic regression analyses controlling for potentially confounding factors were conducted.

**RESULTS:** Greater proportions of Title X-funded clinics than of other public and private providers had Spanish-speaking unlicensed clinical staff (89% vs. 71% and 58%, respectively) and Spanish-language signs (95% vs. 85% and 82%). Title X-funded providers were more likely than other public providers to offer extended clinic hours, provide outreach to at least three vulnerable or hard-to-reach populations, and use three or more advanced technologies (odds ratios, 2.0–2.9).

**CONCLUSIONS:** Compared with other Family PACT providers, clinics that receive Title X funding have implemented greater infrastructure enhancements to promote access and improve the quality of service for underserved populations. This may be because Title X-funded providers have more financial opportunities to provide the array of services that best respond to their clients' needs.

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In the United States, the proportion of pregnancies that are unintended is high and has remained relatively unchanged over the past decade.<sup>1–3</sup> In 2006, 49% of all pregnancies were unintended, and the proportion was particularly high among low-income women—62% among those with an income below the poverty line and 57% among those at 100–199% of poverty, compared with 34% among those with higher incomes.<sup>4</sup> These disparities have profound short- and long-term consequences for women, their children and society, as women who experience an unintended pregnancy are more likely than those with an intended pregnancy to receive inadequate or delayed prenatal care and have poor outcomes, such as preterm births and low-birth-weight babies.<sup>5–10</sup> Nationally, nearly 17.5 million women are in need of publicly subsidized family planning services.<sup>11</sup> Unintended pregnancies place a significant burden on public funds: Public costs of maternal and infant care associated with unintended pregnancies are estimated at \$9.6–12.6 billion per year.<sup>12</sup>

Fourteen percent of U.S. women in need of publicly subsidized family planning services—nearly 2.4 million—live in California, the nation's most populous state.<sup>11</sup> A cost-benefit analysis of Family PACT—California's program to provide family planning services to low-income women and men—showed that pregnancies averted among its

female clients in 2007 saved nearly \$2 billion in public expenditures for maternal and infant care through age two, and more than \$4 billion in such expenditures through age five.<sup>13</sup> Hence, the provision of family planning care is well established as a cost-effective use of public funds.<sup>14–18</sup>

Two critically important sources provide public funding for family planning services for low-income U.S. individuals: Title X and Medicaid. Title X is a federal grant program established in 1970 as part of the Public Health Service Act and is administered by the Department of Health and Human Services, Office of Population Affairs. It provides reproductive health care and contraceptive services to women and men with incomes up to 250% of the federal poverty level. Funds are distributed to grantees (typically, state health departments or regional health councils), which, in turn, award funding to providers through a grant process.<sup>19</sup> Agencies receiving Title X support are required to adhere to clinical and administrative guidelines determined by the Office of Population Affairs.<sup>20</sup> Title X funding can be used to cover clinical services for uninsured and underinsured low-income clients and to enhance access by allowing clinics to undertake such strategies as extending clinic hours, targeting hard-to-reach populations, providing bilingual or interpreter services for clients not proficient in English, and improving infrastructure (for

example, by introducing new technologies).<sup>21</sup> California is the state with the largest number of Title X–funded clinics; 23% of all Title X–funded clinics in 2010 were in California.<sup>22</sup> The Title X grant is administered by the California Family Health Council and supports more than 300 provider sites.

Medicaid is a joint federal-state program that provides reproductive health care and contraceptive services for eligible low-income individuals, and is currently the largest U.S. source of public funding for family planning.<sup>23</sup> In recent years, states have been able to extend eligibility for Medicaid coverage of family planning services through expansion programs: In 2012, a total of 31 states had such expansion programs in the form of a waiver from the federal agency that administers Medicaid or an amendment to the state's Medicaid plan, allowed under health care reform.<sup>24</sup> California's Family PACT, the nation's largest expansion program, provides services to women and men with incomes less than 200% of the federal poverty level who are at risk of becoming pregnant or causing a pregnancy, and who lack another source of coverage for family planning services. Family PACT accounted for 67% of all participants in the family planning waiver program nationwide in 2010.<sup>25</sup> Its fee-for-service structure pays for clinical reproductive health services for clients.

All Family PACT clinician providers agree to adhere to program standards and to provide all contraceptive methods approved by the Food and Drug Administration, either on-site or through referral.<sup>26</sup> The Family PACT provider network includes public- and private-sector clinician providers. The former are government and nonprofit organizations that are eligible to apply for a Title X family planning services project grant;<sup>27</sup> the latter are for-profit physician groups, solo practitioners and certified nurse practitioner practices, and are not eligible for Title X funding.<sup>20</sup> All Title X–supported providers in California participate in Family PACT.

Title X and Family PACT provide complementary funding; together, in fiscal year 2009–2010, they assured access to family planning care for more than 1.9 million male and female Californians living below 250% of the federal poverty level.<sup>22,27</sup> Because a high proportion of clinical services to these clients is reimbursed through Family PACT, providers can use Title X funding that might otherwise be used on clinical services to improve clinic infrastructure and expand accessibility and outreach.

Previous research has not examined the extent to which Title X–funded clinics have enhanced infrastructures and provide services to vulnerable populations relative to other public and private providers. Studies describing services provided by publicly funded family planning clinics usually do not include information on private providers;<sup>28,29</sup> however, private providers are an important part of the Family PACT network and care for approximately one-third of women who receive services through the program.<sup>27</sup>

To fill the gap in the literature, we conducted a survey of Family PACT providers to assess whether Title X–funded

clinics were more likely than other public and private providers to have selected features that may improve access and service provision.

## METHODS

A four-page survey was developed with input from reproductive health experts and family planning program administrators. We collected and analyzed information on extended clinic hours, outreach strategies used to inform vulnerable groups, strategies to bridge the language gap for clients not proficient in English, and use of certain clinic-based technologies or plans to implement them in the next 12 months. Additionally, we assessed provider characteristics that we hypothesized may influence health care delivery (practice type, provider specialty, clinic size and rural or urban location). The study was approved by the University of California, San Francisco, Committee on Human Research and the California Health and Human Services Agency Committee for the Protection of Human Subjects.

In 2010, we mailed the survey to all 2,237 Family PACT clinician providers who had filed at least one claim in 2008, 2009 or 2010, which represent all enrolled Family PACT providers delivering services during that time span. The survey was sent to each facility's medical director and was completed by that individual or a designee, such as a senior clinician, clinic administrator or office manager; response could be made by regular mail, fax or Internet. Nonrespondents received up to four reminders, by e-mail, mail or telephone.

A total of 1,129 surveys were returned—708 online, 139 via fax and 282 by regular mail. Incomplete or duplicate surveys were removed, resulting in a total of 1,072 completed surveys. Overall, the response rate was 48%; the rate was 47% among public providers not funded by Title X, 39% among private providers and 97% among Title X–supported providers, which the California Family Health Council made special efforts to track.

We compared clinic, client and enrollment data of respondents and nonrespondents to ascertain whether there were any inherent biases in the respondent group. Among private providers and public providers not receiving Title X funds, nonrespondents served fewer Family PACT clients, on average, than respondents. In particular, greater proportions of nonrespondents than of respondents saw fewer than 30 Family PACT clients a year (private, 24% vs. 15%; public non–Title X, 15% vs. 9%). In addition, nonrespondents were more likely than respondents to serve Hispanic Family PACT clients and individuals whose primary language was Spanish; private providers that did not respond were more likely than those that did to serve males.

## Measures

•**Provider specialty.** Providers reported a range of specialties: family planning, obstetrics and gynecology, women's health, family practice, pediatrics, and general and internal

medicine. Some worked in multispecialty practices. For our multivariate analysis, we created two categories: family planning/women’s health (consisting of the first three types of practice) and primary care/multispecialty (all others).

•**Family planning capacity.** Respondents were asked how many clinicians provided reproductive health services at the clinic and how many hours each clinician worked per week. We converted the information to full-time equivalency, and categorized a clinic’s family planning capacity as small if it had fewer than three full-time clinicians providing reproductive health services and as large if it had three or more. This indicator did not assess the proportion of clinic hours spent providing reproductive care.

•**Location.** Rural and urban designations were based on medical service study areas—the defined geographic analysis unit of California’s Office of Statewide Health Planning and Development.<sup>30</sup>

•**Clinic hours and new clients.** Respondents reported their clinic’s hours of operation and ability to accept new Family PACT clients in the next three months. We considered a

clinic to have extended hours if it was open on weekends or on more than one weekday evening.

•**Outreach.** Respondents were asked whether their clinic conducted outreach targeting one or more of nine potentially vulnerable or hard-to-reach groups (e.g., adolescents, males, the homeless). In our multivariate analysis, we considered a clinic to conduct outreach if it targeted three or more of these groups.

•**Language availability.** We asked whether any clinicians or nonclinical staff were bilingual in the most frequent languages spoken in California other than English (i.e., Spanish, Cantonese, Mandarin, Vietnamese, Korean and languages from the Philippines, as well as American Sign Language), whether any bilingual staff were trained in medical interpretation and whether the provider had ever used a telephone language line. Additionally, we asked if clinics had signage in any of these languages or in Braille.

•**Technology.** Respondents were asked whether the clinic currently used and whether it planned within the next 12 months to implement certain clinic-based technologies (e.g., electronic health records, electronic prescriptions and online communication services). In multivariate analyses, we assessed current use of three or more of these advanced technologies.

**TABLE 1. Selected characteristics of Family PACT providers, by provider type, 2010**

Characteristic	Public		Private (N=525)
	Title X (N=239)	Non-Title X (N=308)	
<b>PERCENTAGE DISTRIBUTIONS</b>			
<b>Type</b>			
Group medical	0	0*	42*
Solo medical	0	0*	58*
FQHC/rural/Indian Health Service	37	59*	0*
Planned Parenthood	40	6*	0*
Community clinic	21	31*	0*
High school/university health center	2	4*	0*
<b>Specialty</b>			
Family planning	40	8*	4*
Obstetrics-gynecology/women’s health	8	8*	38*
Family practice/primary care	33	62*	37*
Multispecialty	11	13*	4*
General/internal medicine	5	7*	13*
Pediatrics/adolescent medicine	3	2*	4*
<b>Location</b>			
Rural	14	47*	9*
Urban	86	53*	91*
<b>Clients who are Family PACT clients</b>			
Yes	38	20*	22*
No	62	80*	78*
Total	100	100	100
<b>MEANS</b>			
<b>No. of clients per week</b>	395 (10–3,000)	364 (1–10,000)	157* (0–2,000)
<b>No. of Family PACT clients per week</b>	151 (2–500)	75* (0–6,000)	34* (0–500)
<b>% of clients with limited English proficiency</b>	45 (1–100)	43 (0–100)	51* (0–100)
<b>No. of full-time clinicians who provide reproductive health services</b>	3.8 (0–15)	3.6 (0–15)	1.9* (0–15)

\*Significantly different from percentage for Title X at p<.05. Notes: Family PACT is California’s family planning program for low-income women and men. FQHC=federally qualified health center. Numbers in parentheses are ranges.

**Analysis**

We conducted descriptive analyses and chi-square tests to compare variables between Title X-funded providers and each of the other provider types (public with no Title X funding and private). In addition, because being affiliated with an umbrella organization or large network may influence the types of upgrades and services that are implemented, we compared Planned Parenthood clinics, federally qualified health centers (FQHCs) and hospital outpatient clinics by receipt of Title X support.

We used logistic regression analysis to assess associations between Title X funding and extended hours, outreach to vulnerable groups and clinic technology, controlling for provider characteristics that could impact the interest in offering and ability to offer enhanced services. Private providers were excluded from the models, because they are not eligible to apply for Title X funds. Because of reported differences among public providers funded by Title X and other public providers,<sup>31</sup> we controlled for provider specialty, family planning capacity and rural or urban location, as these variables tend to be associated with provision of reproductive health services. All analyses were performed using SAS 9.2.

We did not conduct a regression model with the presence of bilingual clinicians or clinic staff trained in medical interpretation as an outcome variable. The need for language services depends on the volume of clients not proficient in English. Some providers in rural counties did not have any such clients, whereas others providers in our sample—mainly private, bilingual providers—nearly exclusively served clients who spoke an Asian language. Hence, it was not possible to determine the adequacy of

strategies for meeting the needs of clients not proficient in English.

## RESULTS

### Clinic Characteristics

Title X–funded providers comprised nearly equal proportions of Planned Parenthood clinics (40%) and FQHCs (37%), whereas most other public providers (59%) were FQHCs (Table 1). The remaining public sites were county or city health departments, hospital outpatient clinics, community clinics, and school and university health centers. Of private providers, 58% were solo medical practices, and 42% were group medical practices, including large multispecialty medical groups.

Primary specialty varied by provider type. Large proportions of Title X–funded clinics and private providers reported family planning or women’s health as their specialty (48% and 42%, respectively). Only 16% of non–Title X public providers specialized in family planning or women’s health; the majority were family practice or primary care clinicians (62%). In addition, most Title X–supported providers and private providers were located in urban areas (86% and 91%, respectively), whereas non–Title X public providers were more evenly divided between urban and rural locations (53% and 47%, respectively). Thirty-eight percent of clients of Title X–funded clinics were Family PACT clients, compared with 20% of clients of non–Title X public providers and 22% of clients of private providers.

On average, Title X–funded clinics served 395 clients per week, 151 of whom were Family PACT clients. Non–Title X public clinics saw a comparable number of clients per week (364), but fewer Family PACT clients (75); private clinics saw fewer of both (157 and 34, respectively). The mean proportion of clients not proficient in English was similar for the two types of public clinic (Title X, 45%; non–Title X, 43%), but was greater for private clinics (51%). In all provider categories, some respondents reported that none or nearly none of their clients were not proficient in English, whereas others reported that all were not proficient. The average number of full-time equivalent clinicians who provided reproductive health services was similar for the two types of public providers (3.6–3.8), but was lower at private sites (1.9).

All Title X–funded providers responded that they could accept new Family PACT clients that month (not shown). Two non–Title X public providers and seven private providers could not accept new clients in the next three months.

### Bivariate Analysis

•**Extended hours.** Title X–funded clinics were more likely than the other provider types to offer extended hours (Table 2). Overall, 72% of Title X–funded clinics were open two or more weekday evenings, weekends or both; 46% of private providers reported offering extended hours, whereas 53% of non–Title X public providers did so.

**TABLE 2. Percentage of Family PACT providers offering selected special services, by provider type**

Service	Public		Private
	Title X	Non–Title X	
<b>Extended hours</b>			
≥2 weekday evenings and weekends	41	23*	14**
Only ≥2 weekday evenings	19	17*	10*
Only weekends	12	13**	22**
Neither	28	47**	54**
<b>Outreach</b>			
Adolescents	91	61**	38**
Males	80	49**	28**
Persons not proficient in English	73	44**	25**
Lesbian/gay/bisexual/transgender	55	31**	12**
Migrant workers	47	32	14**
Homeless persons	49	37	10**
Alcohol/substance users	44	30	9**
Refugees/immigrants	34	28	14**
Persons with disabilities	33	28	12**
All of the above	20	17**	6**
None of the above	5	32**	59**
≥3 of the above	81	53**	26**
<b>Language</b>			
<b>Spanish</b>			
Licensed clinical staff	84	81	78
Unlicensed clinical staff	89	71**	58**
Office/support staff	88	82	77**
Staff with medical interpretation training	24	25	19
Signs	95	85**	82**
<b>Asian</b>			
Licensed clinical staff	38	31	28**
Unlicensed clinical staff	23	12	12**
Office/support staff	24	14	16
Staff with medical interpretation training	8	6	6
Signs	11	12	13
Use of interpreter service/telephone language line in past six months	54	34**	10**

\*\*Significantly different from percentage for Title X at  $p < .01$ .

•**Outreach.** A greater proportion of Title X–funded clinics than of private providers conducted outreach for each of the vulnerable and hard-to-reach groups studied; greater proportions of Title X–funded clinics than of non–Title X public clinics conducted outreach to adolescents, males, individuals with limited English proficiency and those who are lesbian, gay, bisexual or transgender. In general, the level of outreach conducted by non–Title X public providers fell between that of Title X–funded providers and private providers. Twenty percent of Title X–funded providers conducted outreach to every group, compared with 17% of other public providers and 6% of private providers; 81% of Title X–funded providers conducted outreach to at least three groups, compared with 53% of non–Title X public providers and 26% of private providers.

•**Language availability.** A high proportion of providers of all types (78–84%) reported having licensed clinical staff who spoke Spanish. The proportion with Spanish bilingual office and support staff was also high for each type (77–88%), although it was significantly greater among Title X–funded providers than among private ones. In addition, a greater proportion of Title X–funded clinics than of other providers had Spanish-speaking unlicensed clinical staff (89% vs. and 58–71%) and Spanish-language

**TABLE 3. Percentage of Family PACT providers currently using selected clinic-based technologies, and percentage planning to implement them in the next 12 months, by provider type**

Technology	Public				Private	
	Title X		Non-Title X		Current	Planned
	Current	Planned	Current	Planned		
Electronic health records	32	46	22*	44	17*	38*
Electronic prescriptions to pharmacy	18	26	20	42*	17	37*
Electronic lab orders	56	23	28*	43*	17*	34*
Autoposting of lab results in chart	41	34	20*	40	13*	36
Online communication services for clients	9	18	4*	25*	8	29*
Online appointment scheduling	36	9	6*	17*	6*	24
Reminders via text/e-mail	12	20	5*	21	6*	26

\*Significantly different from percentage for Title X at p<.05.

signs (95% vs. 82–85%). No more than a quarter of providers of each type had staff with medical interpretation training in Spanish.

All three provider types had a moderate proportion of sites with licensed clinical staff who spoke Asian languages (28–38%) and unlicensed clinical staff who did so (12–23%); a greater proportion of Title X–funded clinics than of private clinics had staff of both types who spoke Asian languages. Across all three groups, only a small proportion of providers (6–8%) had staff with medical interpretation training in Asian languages.

In general, Title X–funded clinics were more likely than non-Title X public clinics and private providers to have used interpreter services or a telephone language line in the past six months (54% vs. 34% and 10%, respectively). Across the three groups, no more than 5% of providers had clinicians or staff knowledgeable in American Sign Language or signage in Braille (not shown).

•**Advanced technologies.** Title X–funded clinics generally had implemented a broader range of technological improvements than other providers (Table 3). Greater proportions of Title X–funded clinics than of non-Title X public and private providers currently used electronic health records (32% vs. 22% and 17%, respectively), had an electronic laboratory requisition system (56% vs. 28% and 17%), automatically entered laboratory results electronically into clients’ medical charts (41% vs. 20% and 13%), offered clients the ability to schedule appointments online (36% vs. 6% each) and sent clients reminders by text or e-mail (12% vs. 5% and 6%). In addition, Title X–funded clinics were more likely than other public clinics to have online communication services for clients (9% vs. 4%). Thirty-eight percent of Title X–funded providers had implemented three or more advanced technologies, compared with 18% of non-Title X public providers and 13% of private providers (not shown).

Overall, a large proportion of providers planned to improve their technological capabilities within the next 12 months. Some 46% of Title X–funded agencies, 44% of non-Title X public agencies and 38% of private providers planned to implement electronic health records; Title X–funded clinics

were more likely than private clinics to have such plans. Smaller proportions of Title X–funded clinics than of non-Title X public and private providers planned to send prescriptions to pharmacies electronically (26% vs. 42% and 37%, respectively), requisition laboratories electronically (23% vs. 43% and 34%) and communicate with clients online (18% vs. 25% and 29%); in addition, a smaller proportion of Title X–funded clinics than of other public providers planned to allow online scheduling of appointments (9% vs. 17%).

•**Provider affiliation.** Among providers affiliated with a given umbrella organization or large network, Title X–funded clinics were more likely than non-Title X clinics to offer extended hours, provide outreach to vulnerable groups and use advanced technologies (not shown).

**Multivariate Analysis**

At the multivariate level, Title X–funded clinics were more likely than other public clinics to offer extended clinic hours, provide outreach to three or more vulnerable groups and currently use three or more advanced technologies (odds ratios, 2.0–2.9; Table 4). In addition, providers specializing in women’s health or family planning were more likely than primary care or multispecialty providers to offer outreach to three or more vulnerable groups (1.7); providers with a large family planning capacity were more likely than those with a small capacity to have extended hours (3.1).

**DISCUSSION**

This study assessed the role of Title X funding in clinics’ enhanced provision of services: extended clinic hours, outreach to vulnerable populations, services for clients not proficient in English and use of advanced clinic-based technologies. If these services are deemed valuable to assure improved access to care for hard-to-reach and vulnerable populations, there may be implications for their broader utility, given that the Patient Protection and Affordable Care Act (ACA) aims to meet the needs of comparable populations as part of its mandate.

With the expansion of Medicaid under the ACA, primary care providers—including family planning providers—will likely experience increased demand for services from newly insured clients. Providers serving low-income clients will be called upon to continue offering quality reproductive health services to vulnerable populations while absorbing larger and more varied client loads. Already, existing systems have encountered clear challenges: According to a Kaiser Foundation study published in 2011, 16% of primary care providers with a high proportion of Medicaid patients in their clinic practice reported that they could not accept “all” or “most” new Medicaid patients.<sup>32</sup> Similarly, the initial increased demand for contraceptive services after the implementation of health care reform in Massachusetts caused capacity problems.<sup>33</sup>

In our survey, nearly all provider sites—including all clinics funded by Title X—reported that they could accept

new Family PACT clients. Because Family PACT providers can typically offer callers appointments or walk-in dates within four days,<sup>34</sup> they will likely play an important role in ensuring provider capacity during health care insurance expansion. Maintaining and strengthening California's family planning provider network may help to avoid delays in the provision of contraceptive services during the implementation and subsequent phases of health care reform.

The results of the present study suggest that Title X–funded clinics reduce barriers to care through a number of channels. Evening and weekend clinic hours offer access to services to low-income men and women, who may be hesitant or unable to take time off from work or other responsibilities for nonemergency health care. According to the Guttmacher Institute, 42% of employed U.S. women aged 18–34 reported that because of the 2009 recession, they worried more about missing work for care.<sup>35</sup>

In addition, outreach and marketing strategies facilitate access to care by creating awareness about the availability of no- or low-cost reproductive health care services within the community. Governmental and nonprofit providers often collaborate with community agencies to conduct health education and awareness campaigns focused on vulnerable and hard-to-reach groups. Our results show that a greater proportion of Title X–funded clinics than of other providers engaged in outreach to all of the vulnerable populations studied. The experience that Title X agencies have in serving low-income populations that previously were not eligible for Medicaid coverage (e.g., childless adults, who are now eligible up to 138% of poverty) may be useful to draw on as the ACA is fully implemented. Family planning agencies, which are already building relationships with these target populations, could well be in a strong position to help eligible clients successfully enroll and to bridge their needs for both primary and reproductive health care.

Providers in our study reported that on average, nearly half of their client population was not proficient in English. Private providers had a higher average proportion of such clients than did Title X–funded clinics, which suggests that they play a significant role in attracting these clients and meeting their reproductive health care needs. At the same time, given the large client volume at Title X–supported clinics, clients not proficient in English represent a large number of individuals. Therefore, both public and private providers still face a high demand for language services.

Overall, we found that a high proportion of Family PACT sites had Spanish-speaking clinicians and staff, and a moderate proportion had clinicians and staff who spoke Asian languages; however, across all three provider groups, the proportion of clinics with staff trained in medical interpretation was low. We did not assess whether bilingual staff are used as interpreters. Future studies should explore in more detail the association between Title X funding and the proportion of clients not proficient in English, the availability of bilingual clinicians who have been assessed

**TABLE 4. Odds ratios (and 95% confidence intervals) from logistic regression analyses assessing the association between Family PACT provider characteristics and the likelihood that providers offer selected special services**

Characteristic	Extended hours	Outreach to ≥3 groups	Current use of ≥3 technologies
<b>Type</b>			
Non–Title X public (ref)	1.0	1.0	1.0
Title X public	2.0 (1.4–3.1)	2.9 (1.9–4.4)	2.7 (1.7–4.1)
<b>Specialty</b>			
Primary care/multispecialty (ref)	1.0	1.0	1.0
Women's health/family planning	1.3 (0.8–2.0)	1.7 (1.1–2.7)	1.4 (0.9–2.1)
<b>Family planning capacity†</b>			
Small (ref)	1.0	1.0	1.0
Large	3.1 (2.1–4.5)	1.1 (0.8–1.7)	0.8 (0.5–1.1)
<b>Location</b>			
Rural (ref)	1.0	1.0	1.0
Urban	1.4 (0.9–2.1)	1.5 (1.0–2.2)	1.0 (0.6–1.5)

†Small capacity is defined as having fewer than three full-time clinicians providing reproductive health services, and large capacity as having three or more. Note: ref=reference group.

for language proficiency, staff training in medical interpretation and clinic protocols to use language lines. As 35% of California's immigrant population speak an Asian language,<sup>36</sup> it is necessary to ensure that the interpreter needs of these clients are being met.

Quality of medical care can be greatly improved through expedient and accurate transmittal of information among clinicians, laboratories and pharmacies.<sup>37</sup> Furthermore, implementation of electronic health records and other health information technologies prepares family planning clinics for the changes required by the ACA: Under health care reform, providers serving Medicare and Medicaid eligible clients will be offered incentives to update their technology, and those not meeting minimum technology requirements risk a reduction in reimbursements beginning in 2015.<sup>38</sup> We found that Title X–funded clinics had made technology improvements to a greater extent than non–Title public and private providers.

The implementation of technologies that improve client-clinic communication outside of the clinic encounter, such as Web-based appointment systems and text or e-mail appointment reminders, is still in the relatively early stages. Primary care demonstration projects show that technology-driven reminders improve medication adherence in chronic disease management.<sup>39,40</sup> Although these technologies are less often in place than internal clinic communication technologies, Title X–funded clinics were more likely than other providers to already use them.

#### Limitations

This study has several limitations. Although we could validate data on provider type, average number of Family PACT clients and client volume with the Family PACT enrollment and claims database, we had to rely on providers' own reports for most indicators. It was not possible to establish a causal link between Title X funding and improved access, outreach and clinic efficiency at a particular site. Because Title X–funded agencies had to go

through a competitive bid to qualify for funds, we cannot rule out the possibility that grantees had stronger clinic infrastructures than unsuccessful applicants or agencies that did not apply for Title X funds. Once a grant has been received, clinic efficiencies are likely to be strengthened, as grantees are closely monitored for performance measures and compliance with federal priorities, such as services for clients not proficient in English.

Planned Parenthood facilities, FQHCs and hospitals typically belong to a large network that is directing the adoption of technology; however, in those types of clinics, we found a strong association between Title X support and the existence of ancillary services and infrastructure investments. It was not possible to include provider categories such as Planned Parenthood in the multivariate analyses, because provider category and Title X funding do not provide evenly distributed comparison groups: For example, nearly all Planned Parenthood clinics receive Title X funding, compared with only one-third of FQHCs in our survey.

Private providers and many non–Title X public providers were not part of an umbrella organization that might encourage survey participation. Ensuring survey completion was labor-intensive and was stopped once a sufficient cell size for analysis was reached. Among private and non–Title X public providers, those that did not respond to the survey were more likely than nonrespondents to serve Hispanic clients and clients with Spanish as primary language. Nonrespondents may have been more likely than respondents to have bilingual clinicians or staff to meet clients' language needs, which would mean that the importance of Title X–funded clinics' provision of language services may have been overestimated. Potential extended clinic hours or outreach activities might target non–reproductive health services.

## Conclusion

In California, Title X–funded clinics have built a strong infrastructure that reduces barriers to care and facilitates access—at both traditional women's health clinics and those with a focus on primary care. The combination of Title X and the Family PACT program allows Title X–funded clinics to invest beyond core medical services in ways that improve the overall reach and quality of services to underserved populations. The California experience suggests that if health care reform provides clinical services for family planning nationwide, Title X funding could provide an opportunity to improve infrastructure and ensure the quality of safety net providers, so that they could potentially serve as the providers of choice. In addition, their valuable accumulated knowledge on how to serve special, often marginalized populations will be an important asset, no matter what health care delivery provisions eventually emerge.

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