Title

Publicly Funded Family Planning: Lessons From California, Before And After The ACA's Medicaid Expansion.

Journal

Health affairs (Project Hope), 37(9)

ISSN

0278-2715

Authors

Early, Dawnte R
Dove, Melanie S
Thiel de Bocanegra, Heike
et al.

Publication Date

2018-09-01

DOI

10.1377/hlthaff.2018.0412

Peer reviewed

Publicly-funded Family Planning: Lessons from California, before and after the Affordable Care Act's Medicaid Expansion

Abstract

California has a long tradition of providing state-funded family planning services to low-income residents. The Affordable Care Act (ACA) increased contraceptive coverage in 2012, and in January 2014,extended Medicaid eligibility by (1) increasing the income cut-off from 100% to 138% of the federal poverty level (FPL) and (2) allowing childless individuals to enroll. We assessed the impact of the ACA's Medicaid expansion on low-income Californian women's receipt of health insurance, and needed health care, including contraceptive counseling, and prescription contraception, using data collected between 2013 and 2016 from low-income (<=138% FPL) Californian women aged 18-44 years (n=4,567). After the ACA expansion, the proportion of uninsured low-income women in California decreased significantly, while Medicaid enrollment increased. However, the proportion reporting use of healthcare and family planning services remained unchanged. Despite the ACA's explicit attention to contraceptive services, improvements in family planning service delivery have yet to be fully realized in California.

Introduction

In the U.S, nearly half of all pregnancies are unintended.[1] Unintended pregnancies are particularly common among low-income women,[1] who often face challenges accessing family planning services. The World Health Organization (WHO) recognizes that "family planning allows people to attain their desired number of children and determine the spacing of pregnancies" and supports that these services are fundamental to reproductive health.[2] Studies have shown that increasing access to family planning services reduces the incidence of unintended pregnancies and abortions[3] and improves birth outcomes.[4,5] As a result, states that invest in family planning services have been shown to accrue considerable cost savings, estimated as a 7 to 1 return on investment.[6,7]

State and federal policies regarding family planning services have evolved over the past five decades. In 1969, Republican President Richard Nixon wrote to Congress: "It is my view that no American woman should be denied access to family planning assistance because of her economic condition. I believe, therefore, that we should establish as a national goal the provision of adequate family planning services within the next five years to all those who want them but cannot afford them." Following this request to Congress, in 1970, President Nixon signed into law the Title X Family Planning Program under Title X

of the Public Health Service Act. For the last 48 years, the Title X program has provided grants for family planning services, training, research, and informational and educational materials. At the heart of the Title X program, and emphasized by Congress at the time, is the belief that many low-income individuals want family planning services that they are unable to afford.[8] In 1972, family planning services for low-income individuals expanded again, when Congress amended the Medicaid program, requiring that all state Medicaid programs include family planning services.[9] With this expansion, Medicaid became the nation's main funding source for family planning services for low-income individuals, funding more family planning services than the Title X program.[10]

In 1996, California further expanded provision of state-funded family planning services, with the creation of the Family Planning, Access, Care, and Treatment (Family PACT) Program, administered by California's Office of Family Planning (OFP). This limited benefit program provides low-income California residents who have no other coverage for family planning services access to a year's supply of contraception, as well as screening for and treatment of sexually transmitted infections, at no cost. Over the years, considerable attention has been paid to ensuring Family PACT provides high quality reproductive health services.[11] For instance, after demonstrating that providing a 1-year supply of oral contraceptives (instead of a 3-month supply) decreased

rates of unplanned pregnancy and abortion, this became standard practice.[3] More recently, same-day access to long-acting reversible contraceptives has been a priority.[12] Eligible individuals can enroll in Family PACT at any one of the state's thousands of participating clinics. Although Family PACT was originally funded by the California State General Fund, between December 1999 and June 2010, California received additional funding for Family PACT from the Centers for Medicare and Medicaid Services (CMS) through a Section 1115 Demonstration Waiver. In 2010, 86% of funding for family planning services in California came from the Medicaid program, 11% from the state of California, and 3% from the Title X program.[13] In Fiscal Year (FY) 2012-2013, 74% of Californian women who received publicly-funded contraceptive services were served by Family PACT, 20% were served by Medi-Cal, and 6% were served by both programs over the course of the year.[14] Although the Medi-Cal and Family PACT program formularies were aligned in 2015, these programs have a number of important differences (Exhibit 1). For example, Family PACT provides services to women and men whose immigration status precludes Medi-Cal eligibility and is limited in scope.[15]

In March 2011, as part of the Patient Protection and Affordable Care Act (ACA), California transitioned Family PACT into a Medicaid State Plan, retroactive to July 2010.[16] In January 2014, another large ACA policy change took place;

Medicaid expansion extended eligibility by (1) increasing the income cut-off from 100% to 138% of FPL and (2) allowing individuals without dependent children to enroll.[17] In California, these provisions resulted in over 4 million Californians enrolling in Medi-Cal managed care plans,[18] including some women who had previously participated in the Family PACT program. Indeed, between FY 2013-14 and 2014-15, there was a decrease in the number of Family PACT clients from 1.7 million to 1.4 million.[15,19]

Given the potential savings associated with provision of publicly-funded family planning services, the number of Californian women in need of publicly-funded contraception has previously been estimated using data from the California Health Information Survey and California Women's Health Survey. Women ages 20-44 are considered in need of publicly-funded contraception if they are at risk of unintended pregnancy (i.e., they are sexually active, able to become pregnant, and neither currently pregnant nor seeking pregnancy), and have an income at or below 200% of the FPL; adolescent females ages 15-19 are considered in need if they are sexually active, regardless of income. Unfortunately, the most recently published estimates indicate that in FY 2012-13 approximately 689,500 women, over one third of Californian women, were in need of publicly-funded contraception but received no contraceptive services.[14] As it has

been hoped that California's ACA expansion would increase access to comprehensive care, we examined the impact of the ACA's Medi-Cal expansion on low-income Californian women's receipt of health insurance, and needed health care, including contraceptive counseling, and prescription contraception.

Study Data and Methods

The California Health Interview Survey (CHIS) is a population-based telephone survey of California's residential, noninstitutionalized population, sampling over 20,000 households a year.[20] For this study, we analyzed CHIS data from 2013-2016,[21,22,23,24] limited to women of reproductive age (18-44 years) with incomes less than or equal to 138% of FPL, as specified by the 2014 ACA Medicaid Expansion (n=4,567). Although the CHIS data did not specifically sample Family PACT clients, approximately 93% of Family PACT clients have incomes less than or equal to 138% of FPL. However, some Family PACT clients are not eligible for Medi-Cal because they are undocumented immigrants.[15] Following the ACA expansion, Family PACT reported a nearly 18% decline in the number of clients served between FY 2013-14 and 2014-15 and attributed much of this decline to the ACA.[15]

Outcomes: Access to Health Care and Family Planning Services

To assess whether there was a change in low income Californian women's overall access to health care, we examined

three variables: (1) having a usual source of healthcare, (2) being able to obtain needed medical care, and (3) having timely access to prescriptions. Women were classified as having a usual source of care if they answered “Yes” to “Is there a place that you usually go to when you are sick or need advice about your health?” Women were classified as being able to obtain needed medical care if they answered “No” to “During the past 12 months, did you delay or not get any other medical care you felt you needed – such as seeing a doctor, a specialist, or other health professional?” We further examined the percent of women who reported “cost or lack of insurance” as a reason for delaying or not obtaining needed medical care.

Women were classified as having timely access to prescriptions if they answered “No” to “During the past 12 months, did you delay or not get a medicine that a doctor prescribed for you?” We identified women as having received contraceptive counseling if they reported “receiving birth control counseling or information from their doctor in the past year.” Women were classified as having received prescription contraception if they reported “receiving a birth control method or prescription from a doctor in the past year.”

Predictors: ACA Years and Receipt of Health Insurance

The prevalence of each of these outcomes in the years following implementation of the ACA Medicaid expansion (2014,

2015, and 2016) was compared to the year prior to the ACA (2013). We also examined changes in health insurance coverage, classified as uninsured, Medi-Cal, private (employment-based or privately purchased), or Other Public Program (e.g. Access for Infants and Mothers, Major Risk Medical Insurance Program, etc.).

Statistical Analysis

We calculated the proportion of low income women with health insurance coverage and access to health care and family planning services from 2013 to 2016. P-values from *t*-tests were used to test for differences in proportions between 2013 and 2016. Five models were used to examine the association between year and health insurance coverage and the five outcomes of interest (i.e. having a usual source of care, the ability to obtain needed medical care, timely access to prescriptions, receipt of contraceptive counseling, and receipt of prescription contraception). Adjusted prevalence ratios (APR) were obtained from the predicted marginals of logistic regression models[25](details shown in Appendix[26]). Each model controlled for age (categorized as 18-25, 26-29, 30-34, 35-39, or 40-44 years), race/ethnicity (categorized as Latina, non-Latina White, non-Latina Black, non-Latina Asian/Pacific Islander, Other-including multi-racial), education (less than high school, high school or GED, some college, college graduate or more), income (0-50%, 51%-100%, 101%-138% FPL), and having children (yes or no). An

interaction term was included in each adjusted model to test whether the association between year and each outcome of interest varied by type of health insurance. We also performed analyses stratified by citizenship status (US-born and naturalized citizens versus non-citizens), age (18-34 versus 35-44 years), and income (0-138% FPL versus 139-200% FPL). Analyses stratified by citizenship status were adjusted for insurance, age, education, income, and family type. Analyses stratified by age were adjusted for insurance, race, education, income, and family type. Analyses stratified by income were adjusted for insurance, race, education, age, and family type. All analyses were weighted to account for differential sampling probabilities and response rates; standard errors were adjusted for the survey design using survey specific procedures in SAS 9.4 and SAS-callable SUDAAN 11.0.1.[27,28]

Limitations

This study is limited by the fact that CHIS did not collect data on family planning service delivery prior to 2013 and has not specifically collected data on participation in Family PACT, nor women's prior or current use of contraception. Further, this study lacks information on the underlying fertility and pregnancy intentions of study participants and their partners. In addition, some less effective contraceptive methods, such as condoms and

emergency contraception, can be purchased without a prescription. However, at the population level, we expect that these factors remained stable over the study period.

Results

The demographic characteristics of low income Californian women aged 18-44 years, from 2013 to 2016, are shown in Appendix Exhibit A1.[26] In 2016, half (49.3%) of the low-income Californian women we studied were younger than 30 years, most (59.2%) were Latina, 75.5% had incomes 0-100% FPL, 55.5% had no college education, and 57.1% had children. There were no substantial changes in demographic characteristics over time.

Between 2013 and 2016, the proportion of uninsured low-income women in California declined significantly from 29% to 11% ($p<0.001$), while the percent enrolled in Medi-Cal increased from 37% to 67% ($p<0.001$) (Exhibit 2). However, the proportion of women reporting a usual source of care (77% to 83%, $p=0.09$), the ability to obtain needed medical care (82% to 85%, $p=0.31$) or prescription medication without delay (85% to 89%, $p=0.19$) increased only minimally between 2013 and 2016 (Exhibit 3). Among women who reported not being able to obtain needed medical care without delay, the percent reporting this was due to “cost or lack of insurance” declined from 66% in 2013 to 37% in 2016 ($p=0.004$). Overall, receipt of contraceptive counseling (33% to

34%, p=0.78) and prescription contraception (29% to 30%, p=0.67) remained stable between 2013 and 2016 (Exhibit 3).

After adjusting for covariates, these findings remained unchanged, with no significant difference in utilization of healthcare or family planning services in 2013 compared with 2016 (Exhibit 4). Results from the multivariable models show that neither utilization of healthcare nor receipt of contraceptive counseling or prescription contraception changed for low income Californian women of reproductive age, between 2013 and 2016.

These associations did not vary by insurance status, citizenship, or income (Appendix Exhibits A3-A6).[26] However, associations between usual source of healthcare and study year differed by age group (Appendix Exhibit A4).[26] Specifically, although there was no change between 2013 and 2016 in reporting a usual source of care among women aged 35-44 years (86% to 81%, aPR=0.90, 95% CI: 0.79, 1.04), among women aged 18-34 years an increase was seen (73% to 84%,aPR=1.09, 95% CI: 1.00, 1.19).

When we examined insurance status, we found that women with Medi-Cal, private insurance, or other public insurance were more likely to report a usual source of care compared with women who were uninsured (Exhibit 4). However, coverage by Medi-Cal or private insurance was not associated with more contraceptive counseling or receipt of prescription contraception. Women

covered by other public insurance had an increased likelihood of receiving prescription contraception compared to uninsured women.

Discussion

This analysis of population-representative data from California, collected before and after the 2014 ACA Medi-Cal expansion, shows that despite significant growth in the proportion of low-income Californian women with health insurance following this policy change, there were no significant benefits in access to health care for women of reproductive age in these initial years following ACA implementation. Specifically, after this policy change, low-income Californian women were not more likely to obtain needed medical care or prescription medication without delay. Additionally, the ACA did not increase low-income Californian women's receipt of contraceptive counseling or prescription contraceptives. Indeed, women who were uninsured were just as likely to receive contraceptive counseling and prescription contraception as women with Medi-Cal or private insurance. This is concerning given estimates that one of every three Californian women remains in need of publicly-funded contraception.[14]

The minimal changes in access to publicly-funded contraception seen in California after the ACA, may reflect California's prior investments in family planning. Prior to the

ACA, uninsured low-income women in California had less unmet need for contraception than those in other states; nationally, it is estimated that more than half of US women of reproductive age have unmet needs for contraception.[29] As such, the ACA may have greater impact on access to contraception outside of California. Nonetheless, in the 17 states including California which expanded their limited benefit family planning program into full scope Medicaid,[19,30] studies such as this that evaluate the impact of this policy are warranted.

Consistent with our findings, other studies have previously found that the ACA decreased the percent of women without insurance and increased the percent covered by Medicaid.[31,32,33] Previous studies have also shown that the ACA has increased access to care for adults overall,[34,35,36] though our study found an increase in having a usual source of healthcare for younger aged adults and not older. Differences by age in the proportion of uninsured adults prior to the ACA likely contributed to this latter finding as other studies have reported greater decreases in the percent uninsured among adults aged 18-34 than older adults.[32,37,38] Despite this, studies of low-income women of reproductive age have found little change in access to care, noting instead increases in the affordability of care,[31,39] consistent with our results. Although obtaining health insurance should increase access to healthcare it does not make it easier

to find transportation, childcare or time off work when healthcare is needed. Therefore, insurance enrollment through ACA's Medicaid expansion may not lead automatically to the use of health insurance for preventive and family planning services.

Results suggest that, overall, low-income, uninsured women who enrolled in Medi-Cal experienced minimal change in receipt of prescription contraception following the ACA's Medi-Cal expansion. We were unable to specifically examine changes in access to intrauterine contraception and subdermal contraceptive implants. However, prior work has shown that women receiving care through Medicaid family planning expansion programs are twice as likely to receive these highly effective reversible contraceptives as clients served at other clinics.[40] Despite funding included in the ACA to increase provider capacity,[41] the number of primary care providers,[42,43] and particularly primary care providers well-versed in family planning services, have not increased to match the influx of newly insured individuals post ACA.[44,45] Family planning providers in California also report facing more fiscal challenges after the ACA Medi-Cal expansion, as reimbursement through Family PACT's fee-for-service model was relatively straightforward, while participating in Medi-Cal managed care plans has required additional contracting, and often lower reimbursement rates.[30] In California, three-quarters of Medi-Cal participants are now enrolled in managed care plans.[46]

As some Medi-Cal Managed Care participants have reported being assigned to unfamiliar primary care providers, whose offices may not be accessible by public transportation,[30] the state has commissioned an access assessment[47] that is currently underway.[48] Of further concern, few primary care providers routinely assess pregnancy intentions and contraceptive need[49] and even fewer primary care providers have been trained to place intrauterine or subdermal contraception; fewer than 20% of family physicians report routinely placing or removing intrauterine or subdermal contraceptives.[50] Additional barriers to providing family planning services in Medicaid Managed Care Organizations include churning in enrollment[51] and the costs to clinics of stocking IUDs and contraceptive implants for placement when needed.[52]

In addition, some managed care organizations (MCOs) still impose forms of utilization control (e.g. only covering one implant every 3 years) inconsistent with state and federal policy.[30] Although Medicaid's "freedom of choice" provision provides coverage for out-of-network family planning providers, awareness of this provision among program enrollees and providers may be limited. This is unfortunate as studies have shown that many women, particularly low-income women, are interested in using a more effective form of contraception than they are currently using.[53]

Conclusion

In the three years following the 2014 ACA Medi-Cal expansion, low-income Californian women have experienced significant gains in insurance coverage. Although we found that the percentage of women with a usual source of care remained unchanged, overall, younger women were more likely to have a usual source of care following the ACA's Medicaid expansion. Unfortunately, these gains have not resulted in increased receipt of healthcare or family planning services by women of reproductive age. Despite the ACA's explicit attention to contraceptive services, improvements in contraceptive counseling and receipt of prescription contraception have yet to be realized in California.

Ongoing efforts to expand health insurance coverage in California must be combined with attention to clinician workforce and training as well as client education to ensure that all Californians in need of family planning services access timely and high quality care. The development of national quality measures related to contraceptive use that can be used by health plans and Medicaid programs may facilitate such monitoring. In addition, health plans must address reimbursement and other system issues that preclude some clinics from stocking all forms of contraceptive devices.

Notes

List of exhibits

EXHIBIT 1(table)

Caption: Exhibit 1. California Family Planning Programs

EXHIBIT 2(figure)

Caption: Exhibit 2. Percent of low income women 18-44 years with health insurance coverage

Source: Authors’ analysis of data from the California Health Interview Survey, 2013-2016

Notes: *p-value <0.05 from t-test testing difference between 2013 and 2016

EXHIBIT 3 (figure)

Caption: Exhibit 3. Percent of low income women 18-44 years with access to healthcare and family planning services

Source: Authors’ analysis of data from the California Health Interview Survey, 2013-2016

Notes: All p-values > 0.05 for t-test testing difference between 2013 and 2016

EXHIBIT 4(table)

Caption: Exhibit 4. Adjusted prevalence ratios (95% confidence intervals) among low income women 18-44 years, CHIS 2013-2016

Notes: Adjusted for year, health insurance, age, race/ethnicity, income, education, and family type.

* Indicates associations that were statistically significant (i.e., the 95% confidence interval does not include 1.00).

Exhibit 1: California Family Planning Programs

	Medi-Cal	Family PACT
Eligibility	• California Resident • Income for family size <138% federal poverty level	• California Resident • Income for family size <200% federal poverty level • No other coverage for family planning services with needed level of confidentiality
Exclusion	• Lacks proof of legal residence (unless pregnant)	• Pregnant • Other insurance • Unable to become pregnant
Application	• 4 pages • Cannot be completed at clinic; completed online, by mail, or at county social services office • No same-day enrollment	• 2 pages • Can be completed at clinic • Same-day enrollment
Provider Reimbursement	• Mostly (75%) Managed Care (6 different models of managed care)	• Fee-for-Service (through Office of Family Planning, California Department of Health Care Services)
Family Planning Benefits (with no out-of-pocket cost)	• All FDA classes of contraception, including female sterilization • Vasectomy • Pregnancy testing • Sexually transmitted infection testing and treatment • Cervical cancer screening • Preconception counseling, screening and	• All FDA classes of contraception, including female sterilization • Vasectomy • Pregnancy testing • Sexually transmitted infection testing and treatment • Cervical cancer screening • Preconception counseling but no

	vitamin supplements • Limited infertility services	screening or vitamin supplements • Limited infertility services
Onsite contraceptive dispensing	• No	• Yes
Onsite placement of IUD or implant	• Rare	• Fairly common
Pregnancy care	• Yes	• No
Primary and Specialty Care	• Yes	• No
Provider choice	• Provider contracted with Managed Care program (unless client invokes right to access an out of network provider for family planning services).	Any provider
Family Planning Provider Locator	• Variable	• Online web-based tool
Quality monitoring of family planning service delivery	• Variable	• Reported annually

Source: Information from Office of Family Planning, Department of Health Care Services websites (http://www.familypact.org/Get%20Covered/client-eligibility-enrollment/eligibility-criteria; http://www.familypact.org/Resources/Forms/DHCS_4461_CEC_11-1-16.PDF; http://www.dhcs.ca.gov/individuals/Pages/How.aspx)

Exhibit 4. Adjusted prevalence ratios (95% confidence intervals) among low income women 18-44 years, CHIS 2013-2016

		Access to health care			Family planning services	
		Usual source of healthcare	Able to obtain timely medical care	Able to obtain needed prescriptions	Contraceptive counseling	Prescription contraception
Year	2013	ref	ref	ref	ref	ref
	2014	0.96	1.00	1.04	0.85	1.02
	2015	0.99	0.99	1.01	0.98	1.14
	2016	1.02	1.05	1.06	1.03	1.10
Health insurance	Uninsured	ref	ref	ref	ref	ref
	Medi-Cal	1.43*	0.99	0.97	1.05	0.99
	Private	1.55*	1.02	0.99	1.00	1.00
	Other, public	1.39*	1.04	1.05	1.27	1.56*

Adjusted for year, health insurance, age, race/ethnicity, income, education, and family type

* Indicates associations that were statistically significant (i.e., the 95% confidence interval does not include 1.00).

Source: Authors’ analysis of data from the California Health Interview Survey, 2013-2016

11.Finer L, Zolna M. Declines in unintended pregnancies in the United States, 2008–2011. N Engl J Med. 2016 Mar 3; 374(9):834–852.

2.World Health Organization[Internet]. WHO. Family planning/Contraception; 2018 Feb 8 [cited 2018 Mar 1]; [about 4 screens]. Available from: http://www.who.int/en/news-room/fact-sheets/detail/family-planning-contraception

3
.Foster D, Hulett D, Bradsberry M, Darney P, Policar M. Number of oral contraceptive pill packages dispensed and subsequent unintended pregnancies. Obstet Gynecol. 2011 Mar; 117(3):566-572.

4
.Daw J, Sommers B. Association of the Affordable Care Act dependent coverage provision with prenatal care use and birth outcomes. JAMA. 2018 Feb 13; 319(6):579–587.

5
.Willhoite M, Bennert H, Palomaki G, Zaremba M, Herman W, Williams J, et al. The impact of preconception counseling on pregnancy outcomes. The experience of the Maine Diabetes in Pregnancy Program. Diabetes Care. 1993 Feb; 16(2):450-455.

6
.Frost J, Sonfield A, Zolna Z, Finer L. Return on investment: a fuller assessment of the benefits and cost savings of the US publicly

funded family planning program. Milbank Q. 2014 Dec; 92(4):696–749.

7

.Foster D, Biggs M, Malvin J, Darney P, & Brindis C. Cost-savings from the provision of specific contraceptive methods in 2009. Womens Health Issues. 2013 Jul-Aug; 23(4):265-71.

8

.Family Planning Services and Population Research Act of 1970, Pub. L. No. 91-572, 84 Stat. 1504 (Dec 24,1970).

9

.Gold RB. Stronger together: Medicaid, Title X brings different strengths to family planning effort. Guttmacher Policy Review. 2007 May 17; 10(2):13–18.

10

.Sonfield A, Alrich C, Gold R. Public funding for family planning, sterilization and abortion services, FY 1980–2006 [Internet]. New York: Guttmacher Institute; 2008 Jan [cited 2018 Mar 1]. 36 p. Report No.38. Available from: https://www.guttmacher.org/sites/default/files/pdfs/pubs/2008/01/28/or38.pdf

11

.Watts LA, Thiel de Bocanegra H, Darney PD, Hulett D, Howell M, Mikanda J, et al. In a California program, quality and utilization reports on reproductive health services spurred providers to change.

Health Aff (Millwood). 2012 Apr;31(4):852-62.

12

.Biggs MA, Harper CC, Brindis CD. California family planning health care providers' challenges to same-day long-acting reversible contraception provision. Obstet Gynecol. 2015 Aug;126(2):338-45.

13

.Sonfield A, Gold R. (2012). Public funding for family planning, sterilization and abortion services, FY 1980–2010 [Internet]. New York: Guttmacher Institute; 2012 Mar [cited 2018 Mar 1]. 20 p. Available from: https://www.guttmacher.org/sites/default/files/report_pdf/public-funding-fp-2010.pdf

14

.Cross Reidel J, Thiel de Bocanegra H. Access to publicly-funded family planning services by women in need, fiscal year 2009-10 to fiscal year 2012-13. San Francisco, CA: Bixby Center for Global Reproductive Health, University of California, San Francisco, CA, 2015. [cited 2018 June 5]. Available from: http://www.familypact.org/Research/reports/ResearchBrief_AccessFamilyPACT-Medi-Cal_11-2015.pdf

15

.California Department of Health Care Services Office of Family Planning. Family PACT program report, fiscal year 2014-2015, page 9

[cited June 5, 2018] Available from: http://www.familypact.org/Research/reports/FamPACT_AR1415_CMIOapproved_OFP_FR201415.pdf

16.Bixby Center for Global Reproductive Health. Family PACT program report, fiscal year 2013-2014 [Internet]. Sacramento, Ca: University of California, San Francisco; 2016 Jun 28 [cited 2018 Mar 1]. 47 p. Available from: https://bixbycenter.ucsf.edu/sites/bixbycenter.ucsf.edu/files/AnnualReport_2013-2014FINAL.pdf

17.Obama B. United States Health Care Reform: Progress to date and next steps. JAMA. 2016 Aug 2; 316(5):525-532.

18.California Department of Health Care Services. Medi-Cal managed care enrollment reports. [cited 2018 June 12] Available from: http://www.dhcs.ca.gov/dataandstats/reports/Pages/MMCDMonthlyEnrollment.aspx.

19.Guyer J, Osius E, Woda S, Marks J, Ranji U, Salganicoff A. Medicaid Family Planning Programs: Case studies of six states after ACA implementation [Internet]. Menlo Park, California: Kaiser Family Foundation; 2017 Apr [cited 2018 Mar 1]. 45 p. Available from:

http://files.kff.org/attachment/Report-Medicaid-Family-Planning-Programs-Case-Studies-of-Six-States-After-ACA-Implementation

20

.UCLA Center for Health Policy Research [Internet]. Los Angeles: UCLA; c2012. What is CHIS?; 2012 [cited 2012 Mar 12]; [about 3 screens]. Available from: http://healthpolicy.ucla.edu/chis/about/Pages/what-is-chis.aspx

21

.California Health Interview Survey. CHIS 2013 adult public use file. Release 1[computer file]. Los Angeles, CA: UCLA Center for Health Policy Research, Jun 2016.

22

.California Health Interview Survey. CHIS 2014 adult public use file. Release 1[computer file]. Los Angeles, CA: UCLA Center for Health Policy Research, Jul 2017.

23

.California Health Interview Survey. CHIS 2015 adult public use file. Release 1[computer file]. Los Angeles, CA: UCLA Center for Health Policy Research, Dec 2017.

24

.California Health Interview Survey. CHIS 2016 adult public use file. Release 1[computer file]. Los Angeles, CA: UCLA Center for Health Policy Research, Oct 2017.

25
.Bieler GS, Brown GG, Williams RL, Brogan DJ. Estimating model-adjusted risks, risk differences, and risk ratios from complex survey data. Am J Epidemiol. 2010 Mar 1; 171(5): 618-623.

26 To access the Appendix, click on the Appendix link in the box to the right of the article online.

27.SAS Institute, Cary NC.

28.Research Triangle Institute, Research Triangle Park NC.

29 Frost JJ, Frohwirth L and Zolna MR. Contraceptive Needs and Services, 2014 Update [Internet]. New York: Guttmacher Institute; 2016 Sep [cited 2018 Mar 1]. Available from: https://www.guttmacher.org/report/contraceptive-needs-and-services-2014-update

30.Tater M, Paradise J, Garfield R. Medi-Cal managed care: An overview and key issues. Kaiser commission on Medicaid and the uninsured March 2016. [cited 2018 June 5]. Available from: https://www.kff.org/report-section/medi-cal-managed-care-an-overview-and-key-issues-issue-brief/

[31] Shartzer A, Garro N, Pellegrini C, Long S. Changes in insurance coverage, access tocCare, and health care affordability for women of childbearing age [Internet]. Washington, DC: Urban Institute; 2015 Oct [cited 2018 Mar 1]. 12 p. Available from: http://hrms.urban.org/briefs/Changes-in-Insurance-Coverage-Access-to-Care-and-Health-Care-Affordability-for-Women-of-Childbearing-Age.pdf

[32] Jones RK, Sonfield A. Health insurance coverage among women of reproductive age before and after implementation of the affordable care act. Contraception. 2016; 93: 386-91.

[33] Charles SA, Becker T, Jacobs K, Pourat N, Ebrahim R, Kominski GF. The State of Health Insurance in California: Findings from the 2014 California Health Interview Survey [Internet]. Los Angeles, California: UCLA Center for Health Policy Research; 2017 Jan [cited 2018 Mar 1]. Available from: http://healthpolicy.ucla.edu/publications/search/pages/detail.aspx?PubID=1603

[34] Sommers B, Blendon R, Orav J, Epstein, A. Changes in utilization and health among low –income adults after Medicaid expansion or expanded private insurance. JAMA Intern Med. 2016 Oct; 176(10):1501-1509.

[35] Sommers B, Gunja M, Finegold K, Musco T. Changes in self-reported insurance coverage, access to care, and health under the affordable care act. JAMA. 2015 Jul 28; 314(4):366-374.

[36] Shartzer A, Long S, Anderson N. Access to care and affordability have improved following Affordable Care Act implementation; Problems remain. Health Aff. 2016 Jan; 35(1):161-168.

[37] Sommers BD, Musco T, Finegold K, Gunja M, Burke A, McDowell AM. Health reform and changes in health insurance coverage in 2014. N Engl J Med. 2014;371:867-74.

[38] Courtemanche, C., Marton, J., Ukert, B., Yelowitz, A., & Zapata, D. Early impacts of the Affordable Care Act on health insurance coverage in Medicaid expansion and non-expansion states. Journal of Policy Analysis and Management. 2017; 36: 178–210.

[39] Johnston EM, Strahan AE, Joski P, Dulop AL, Adams EK. Impacts of the Affordable Care Act's Medicaid expansion on women of reproductive age: Differences by parental status and state policies. Women's Health Issues. 2018; 28-2: 122-29.

[40] .Thompson KM, Rocca CH, Kohn JE, Goodman S, Stern L, Blum M, et al. Public funding for contraception, provider training, and use of highly effective contraceptives: A cluster randomized trial. Am J

Public Health. 2016 Mar;106(3):541-6.

41

.Network for Public Health Law. Primary care provider capacity and the Medicaid expansion [Internet]. St.Paul (MN): Network for Public Health Law; 2013 [cited 2016 Nov 14]. 6 p. Available from: https://www.networkforphl.org/_asset/444n0k/Medicaid-Expansion-Provider-Capacity-Issue-Brief.pdf

42

.Frisch S. The primary care physician shortage. BMJ. 2013 Nov 4; 347:f6559.

43

.Kirch DG, Petelle K. Addressing the physician shortage: The peril of ignoring demography. JAMA. 2017 Mar 20; 317(19):1947-1948.

44

.Wu JP, Gundersen DA, Pickle S. Are the contraceptive recommendations of family medicine educators evidence-based? A CERA survey. Fam Med. 2016 May; 48(5):345-352.

45

.Schubert FD, Herbitter C, Fletcher J, Gold M. IUD knowledge and experience among family medicine residents. Fam Med. 2015 Jun; 47(6):474-477.

46

.Kaiser Family Foundation. Share of Medicaid population covered under different delivery systems [Internet]. KFF; 2017 Jul [cited 2018 Mar

1]. Medicaid Managed Care Market Tracker, California. Available from https://www.kff.org/medicaid/state-indicator/share-of-medicaid-population-covered-under-different-delivery-systems/?currentTimeframe=0&selectedRows=%7B%22states%22:%7B%22california%22:%7B%7D%7D%7D&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D

47 California Department of Health Care Services [Internet]. Access Assessment; 2018[cited 2018 Mar 1]; [about 3 screens]. Available from: http://www.dhcs.ca.gov/provgovpart/Pages/mc2020accessassessment.aspx

48.Health Services Advisory Group. Access Assessment Design Outline [Internet]. California: California Department of Health Care Services; 2017 Jan [cited 2018 Mar 1]. Available from: http://www.dhcs.ca.gov/Documents/Access_Assessment_Design_Outline.pdf

49
.Thiel de Bocanegra H, McKean A, Darney P, Saleeby E, Hulett D. Documentation of contraception and pregnancy intention in Medicaid managed care. Health Serv Res Manag Epidemiol. 2018 Jan 18; 5: 1-5.

50
.Nisen M, Peterson L, Cochrane A, Rubin S. US family physicians' intrauterine and implantable contraception provision: results from a

national survey. Contraception. 2016 May; 93(5):432-437.

51

.Daw J, Hatfield L, Swartz K, Sommers B. Women in the United States experience high rates Of coverage 'churn' in months before and after childbirth. Health Aff. 2017 Apr; 36(4):598-606.

52

.Kaiser Family Foundation [Internet]. KFF; 2017 Apr 27. Medicaid family planning and maternity care services: The current landscape; 2017 Apr 27 [cited 2018 Mar 1]; [about 3 screens]. Available from: https://www.kff.org/womens-health-policy/press-release/medicaid-family-planning-and-maternity-care-services-the-current-landscape/

53

.He K, Dalton V, Zochowsk M. Women's contraceptive preference-use mismatch. J Womens Health (Larchmt). 2017 Jun 1; 26(6): 692-701.