

# Visits to Registered Nurses

## *An Opportunity to Increase Contraceptive Access in California*

Emese C. Parker ▼ Kevin Kong ▼ Leslie A. Watts ▼ Eleanor B. Schwarz ▼ Philip D. Darney ▼  
Heike Thiel de Bocanegra

**Background:** In 2013, California passed Assembly Bill (A.B.) 2348, approving registered nurses (RNs) to dispense patient self-administered hormonal contraceptives and administer injections of hormonal contraceptives. The Family Planning, Access, Care and Treatment (Family PACT) program, which came into effect in 1997 to expand low-income, uninsured California resident access to contraceptives at no cost, is one program in which qualified RNs can dispense and administer contraceptives.

**Aims:** The aims of this study were to (a) describe utilization of RN visits within California's Family PACT program and (b) evaluate the impact of RN visits on client birth control acquisition during the first 18 months after implementation of A.B. 2348 (January 1, 2013 to June 30, 2014).

**Methods:** A descriptive observational design using administrative databases was used. Family PACT claims were retrieved for RN visits and contraception. Paid claims for contraceptive dispensing and/or administration visits by physicians, nurse practitioners, certified nurse midwives, and physician assistants were compared before and after the implementation of A.B. 2348 at practice sites where RN visits were and were not utilized. Contraceptive methods and administration procedures were identified using Healthcare Common Procedure Coding System codes, National Drug Codes, and Common Procedural Terminology codes. Claims data for healthcare facilities were abstracted by site location based on a unique combination of National Provider Identifier (NPI), NPI Owner, and NPI location number.

**Results:** RN visits were found mainly in Northern California and the Central Valley (73%). Sixty-eight percent of RN visits resulted in same-day dispensing and/or administration of hormonal (and/or barrier) methods. Since benefit implementation, RN visits resulted in a 10% increase in access to birth control dispensing and/or administration visits. RN visits were also associated with future birth control acquisition and other healthcare utilization within the subsequent 30 days.

**Discussion:** RN visits, though underutilized across the state, have resulted in increased access to contraception in some communities, an effect that may continue to grow with time and can serve as a model for other states.

**Key Words:** California • contraception • nursing • public policy

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Pregnancy planning is associated with numerous maternal and infant benefits, including decreased pregnancy and birth-related morbidity and mortality, and reduced

preterm birth and low-birth weight infants (Kavanaugh & Anderson, 2013). However, based on 2010 estimates, 45% of U.S. pregnancies are unplanned; the proportion in California has been reported to be even higher (Finer & Zolna, 2016; Guttmacher Institute, 2017c; Kost, 2015). Unintended (mistimed or unwanted) pregnancies are two to three times more common among women who are poor, less educated, or cohabitating, and the consequences of births from such pregnancies carry numerous biopsychosocial risks and costs to these women, their children, and to society at large (Finer & Zolna, 2011, 2016). From a fiscal perspective, births, abortions, and miscarriages resulting from unintended pregnancies cost the U.S. federal and state governments \$21 billion in 2010 (Sonfield & Kost, 2015). In California, unintended births cost state and federal governments \$1.8 million. Since 64% percent of unintended births were estimated to be funded by public insurance (e.g., Medicaid), much of the cost is taxpayer-financed (Sonfield & Kost, 2015). For all these reasons, decreasing unintended pregnancies is not only one of the *HealthyPeople 2020* family planning objectives but also one of the Centers for Disease Control and Prevention's (CDC) (2017) top six targeted priorities (HealthyPeople.gov, 2017).

**Emese C. Parker, RN, NP, MPH**, is Family Planning Specialist, Bixby Center for Global Reproductive Health and Department of Obstetrics, Gynecology, and Reproductive Sciences, University of California, San Francisco.

**Kevin Kong, MPH**, was Senior Statistician, Bixby Center for Global Reproductive Health, University of California, San Francisco, at the time the study was completed. He is now Analyst, Kaiser Permanente, Oakland, California.

**Leslie A. Watts, MS, CPC**, is Analyst, Bixby Center for Global Reproductive Health and Department of Obstetrics, Gynecology, and Reproductive Sciences, University of California, San Francisco.

**Eleanor B. Schwarz, MD, MS**, is Professor, Department of Internal Medicine, University of California, Davis.

**Philip D. Darney, MD, MSc**, is Distinguished Professor, Department of Obstetrics, Gynecology, and Reproductive Services, and Director, Bixby Center for Global Reproductive Health, University of California, San Francisco.

**Heike Thiel de Bocanegra, PhD, MPH**, is Associate Professor, Bixby Center for Global Reproductive Health and Department of Obstetrics, Gynecology, and Reproductive Sciences, University of California, San Francisco, and Director, Family Planning Research Program, Obstetrics and Gynecology, University of California, Irvine.

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Various legislative initiatives provide funding for services that help women and partners plan pregnancies. In California, initiatives have included the 1997 implementation of the Family Planning, Access, Care and Treatment (Family PACT) program to expand low-income, uninsured residents' access to contraceptives at no cost, the 2013 provision of Food and Drug Administration (FDA) mandated over-the-counter emergency contraceptives (EC) for women of all reproductive ages, the 2013 pharmacist-prescribed and dispensed self-administered contraceptives (S.B. 493), and the 2013 Registered Nurse (RN)-dispensed and/or administered hormonal contraceptives (FDA, 2013; Guttmacher Institute, 2017b; Pharmacy Practice, 2013; Registered Nurses: Dispensation of Drugs, 2012, Assembly Bill [A.B.] 2348; State of California Department of Health Care Services [DHCS], 2017). These laws aim to expand client access to timely contraception, especially in communities where it is difficult because of limited number of healthcare providers, such as physicians, nurse practitioners (NPs), certified nurse midwives (CNMs), and physician assistants (PAs; California Legislative Information, 2012). (In the United States, RNs have graduated with associate or bachelor's degrees in nursing from a state-approved program and passed the NCLEX-RN exam. Advanced practice nurses (APNs; e.g. NPs and CNMs), having completed graduate education, focus on health promotion and disease prevention, and are qualified to diagnose and manage health problems, order lab tests, and prescribe within their scope of practice after successfully passing certifying exams (American Association of Nurse Practitioners, 2012; APRN Joint Dialogue Group Report, 2008).

Specifically, a hallmark of A.B. 2348 (California Business and Professions Code [BPC] § 2725.2) is to increase women's access to birth control at public clinics via RN (non-APN) dispensing of self-administered hormonal contraceptives and/or the administration of hormonal contraceptive injections (Registered Nurses: Dispensation of Drugs, 2012). A.B. 2348 identifies public facilities in which RN visits may occur, including licensed primary care clinics, nonprofit community and free clinics, federally affiliated clinics, and student health centers at public institutions of higher education (State of California Health and Safety Code § 1204 (a) and § 1206 (b), (c), (h), and (j)). Dispensing refers to the handing out of a medication or device to a client for future use, whereas administering indicates giving a client an oral, topical, or injectable medication (State of California Department of Consumer Affairs, 2004). Both of these activities are contingent upon a California RN having received a specific healthcare provider's "order" or authorization to do. When this is done by a physician or surgeon, it is called "prescribing" whereas "furnishing" refers to an order given by an APN. The difference in terminology reflects the current scope of practice where APNs legally order using standardized procedures since in California they still practice under the oversight of physicians

(State of California Department of Consumer Affairs, 2011a, 2011b). The Institute of Medicine (2010) recommended that these scope-of-practice barriers be removed across the country to allow full-scope NP practice).

FDA-approved contraceptives can be categorized by effectiveness into three tiers (Hatcher et al., 2011). Tier 1 methods are most effective at preventing pregnancy (99% effectiveness, with fewer than 1 pregnancy per 100 women in a year) and include long-acting reversible contraceptives (LARC; intrauterine device [IUD] and implant) and sterilization (Hatcher et al., 2011). Tier 2 methods (pill, patch, ring, injectable, and diaphragm) provide moderate effectiveness with typical use (88–94%; 6–12 pregnancies per 100 women in a year). Tier 3 methods (condoms, sponge, spermicide, and withdrawal) are the least effective with typical use (<82%, 18 or more pregnancies per 100 women in a year). A.B. 2348 involves dispensing and/or administering Tier 2 hormonal methods, as well as EC, which can be used to prevent pregnancy if used within 5 days of unprotected intercourse.

Prior to the September 22, 2012 passage of A.B. 2348, RNs (non-APNs) could dispense clinic-supplied medications to clients only after receiving a physician's or surgeon's prescription. With A.B. 2348, RNs may also receive orders from NPs, CNMs, and PAs (BPC § 2725.1) and also may function more independently in family planning using standardized procedures (BPC § 2725.2; Registered Nurses: Dispensation of Drugs, 2012). Standardized procedures are policies, procedures, and protocols developed by a health facility legally authorizing RNs to perform specific activities that have traditionally fallen under the scope of medical practice (State of California Department of Consumer Affairs, 2011a). RNs perform a nursing assessment (e.g., blood pressure, weight, review client's medications, medical and family history), identify safe hormonal methods for the client based on U.S. Medical Eligibility Criteria for Contraceptive Use (U.S. MEC), provide client education, dispense or administer contraceptives and supplies, and make appropriate referrals to physicians, NPs, CNMs, or PAs as needed for clients with hormonal contraceptive contraindications (BPC § 2725.2; Curtis et al., 2016).

To legally dispense and administer birth control, RNs working under A.B. 2348 must have met minimum and ongoing training requirements and demonstrated competence in areas such as client birth control education and counseling, as well as the determination of safe birth control options for people with various medical conditions (Curtis et al., 2016; Registered Nurses: Dispensation of Drugs, 2012). With A.B. 2348, California is 1 of 16 states allowing RNs (non-APNs) to dispense some sort of medication (including birth control) with four and six states limiting dispensing to contraceptives/sexually transmitted infection treatment and contraceptives only, respectively (Guttmacher Institute, 2017b).

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was proposed out of concerns for women having insufficient access to birth control (California Legislative Information, 2012). However, the California Nurses Association, California Association of Nurse Practitioners, and American College of Obstetrics and Gynecology opposed the bill over concerns about RN qualifications to provide quality family planning care, limits to specific clinic sites, as well as women potentially receiving less effective birth control and possibly forgoing other important women's health services (California Legislative Information, 2012). Additional reasons clinics may choose to not implement RN family planning visits include competing primary care clinic priorities, lack of adequate RN staffing or time, and lack of legislation awareness.

In 2013, after the passing of California's A.B. 2348, three Common Procedural Terminology (CPT) codes for RN family planning office visits became reimbursable benefits by California's publicly funded family planning programs Family PACT and California's Medicaid program (California DHCS, 2013, 2014). Specifically, Evaluation & Management (E&M) visit reimbursement for new client visits (99201-TD, 10 minutes) and established client visits (99211-TD, 5 minutes; 99212-TD, 10 minutes) came into effect retroactively January 1, 2013, after established client visits became a reimbursable benefit on November 1, 2013 (California DHCS, 2013, 2014). These RN visits are reimbursed to the clinic by the State of California on par with contraceptive administration and/or dispensing visits by physicians, APNs, and PAs.

## Purpose

The aims of this study were to (a) describe utilization of RN visits within California's Family PACT program and (b) evaluate the impact of RN visits on client birth control acquisition during the first 18 months after legislation implementation of A.B. 2348 (January 1, 2013 to June 30, 2014).

## METHODS

### Design

To estimate the impact of RN visits on birth control access, RN visit utilization for new and established female clients across the state was assessed with an observational design using administrative databases (paid claims data generated January 1, 2013 to June 30, 2014, as A.B. 2348 became law September 22, 2012, whereas the RN visits retroactively became reimbursable benefits January 1, 2013). Claims 6 months prior to reimbursement implementation (July 2012 to December 2012) were compared to the 6-month period 1 year after implementation (January 2014 to June 2014) using E&M codes 99201-TD, 99211-TD, and 99212-TD.

### Setting

California is the most populous state in the United States, with 39 million people (U.S. Census Bureau, n.d.). Half of

the population is female, 39% are White, 38% are Latino, 13% are Asian, and 27% are foreign-born. Ninety-five percent of the population lives in urban settings, and 15% in poverty (U.S. Census Bureau, n.d., 2012). Common occupations include education, healthcare service, high-tech, manufacturing/construction, and trade (e.g., agriculture; Lewis & Burd-Sharps, 2014).

## Data Source

Data were obtained from the claims, clients, and provider administrative databases of Family PACT, State of California DHCS. The analysis was performed as part of a comprehensive program evaluation contract that had institutional review board approval by the University of California, San Francisco and by the California Protection of Human Subjects Committee, Office of the Statewide Health Planning and Development.

## Sample

A total of 1,411,770 reproductive age female clients were enrolled in Family PACT in fiscal year (FY) 13-14 and were potentially eligible for RN visits. To be Family PACT eligible, clients must have been California residents in need of family planning, had an income for family size at or below 200% of the federal poverty guidelines, and had no other family planning healthcare coverage (Bixby Center for Global Reproductive Health, 2016).

Any Medi-Cal healthcare facility in California is eligible to become a Family PACT provider if they elect to enroll and adhere to program standards. All 1,073 public Family PACT healthcare facilities throughout California were eligible for implementing such RN visits.

## Variables

We analyzed RN visits (total and monthly paid claims, provider facility characteristics of those with and without RN visit claims), clients seen (total, new or established, race/ethnicity, age), and contraceptives dispensed (paid claims, type of contraceptive, contraceptive dispensed day of visit or at pharmacy within 30 days of RN visit). Provider characteristics included clinic type (public, private), Planned Parenthood affiliation, county location, number of RN visit claims, and total reimbursement.

## Data Analysis

**Utilization of RN Visits** Family PACT RN visits and clients seen at RN visits were identified using claims data. Healthcare facility claims were abstracted per site location based on a unique combination of National Provider Identifier (NPI), NPI Owner, and NPI location number. A thematic map of California by county was created using ArcGIS ArcMap software version 10.4 by Esri.

**Impact of RN Visits on Contraceptive Acquisition** Claims for Family PACT RN visits (99201-TD, 99211-TD, 99212-TD) with contraceptives dispensed (day of visit or by a pharmacy

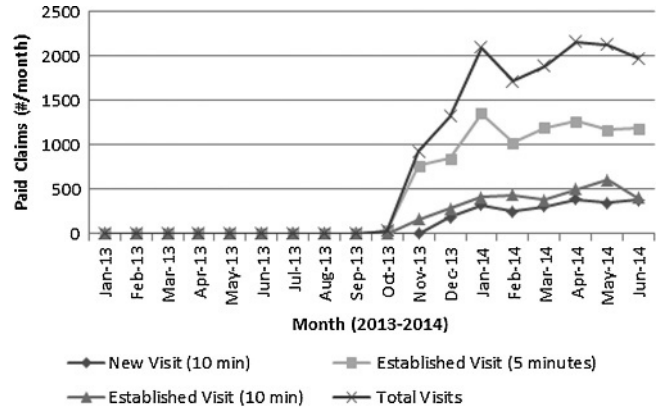
within 30 days) were retrieved using DHCS claims and administrative databases. Contraceptive claims were identified using the following Healthcare Common Procedure Coding System (HCPCS) codes: pills (X7706, S4993), patch (X7728, J7304), ring (X7730, J7303), depot medroxyprogesterone acetate (DMPA) injection (J1050, J1055, and J3490-U8), IUD (58300), subdermal implant (11981), EC pills (X7722, J3490-U5, J3490-U6), male condom (A4267), female condom (A4268), spermicides (gel/jelly/foam/cream: A4269-U1; suppository: A4269-U2; vaginal film: A4269-U3; sponge: A4269-U4), diaphragm/cervical cap fitting (57170), and other barrier methods (X1500).

E&M paid claims 6 months prior to benefit implementation were retrieved (July 2012 to December 2012) and counted; the number was compared to the 6-month period 1 year after implementation (January 2014 to June 2014) for those Family PACT sites where RN visits were and were not utilized throughout California. E&M visits performed by physician/NP/CNM/PA for birth control dispensing or administration were identified using the following criteria: a paid claim with birth control dispensing without any additional family planning-related services billed in the same fiscal year (99211, 99212, and 99201, with no modifier [physician performed], U7 [PA performed], SA [NP performed] or SB [CNM performed]). Healthcare facility characteristics offering RN visits were abstracted and then aggregated from claims and NPI data.

**RESULTS**

**RN Visit Utilization**

**Family PACT RN Visits** The first claim for an RN visit was paid in October 2013, and in the next 18 months 14,272 RN (non-APN) visits were paid for clients seen under Family PACT (Table 1). On average, there were 1,586 RN visits per month, resulting in 2,118 paid contraceptive claims monthly. RN visits have steadily increased since October 2013 with 2,127 RN visits in May 2014 (Figure 1).



**FIGURE 1.** Family PACT RN visits by month, fiscal year 13–14 (following implementation of A.B. 2348 legislation). Based on paid E&M claims for RN visit (and not method dispensed). No RN paid claims were found prior to October 2013. RN visit E&M reimbursements were as follows: 99201 (-TD) for new clients (10 minutes); 99211 (-TD) and 99212 (-TD) for established clients (5 minutes and 10 minutes, respectively). E&M = Evaluation & Management; PACT = Planning, Access, Care, and Treatment; RN = registered nurse.

**Provider Sites** A total of 74 provider sites out of California’s 1,073 public Family PACT sites (7%) implemented RN visits. Most RN visits occurred in Northern California and the Central Valley (73%), particularly in Santa Clara (30%), Fresno (16%), Sacramento (10%), and Butte (10%) counties (Figure 2). However, nearly half of California’s 58 counties did not have any RN visits (*n* = 28) or so few that they fell below 1% of total paid claims (total of 10 counties; Figure 2). Fifty-five percent of claims submitted for RN visits were from public facilities, such as Federally Qualified Health Centers, Rural Health Centers, Indian Health Services, community and women’s specialty clinics; 45% worked for Planned Parenthood.

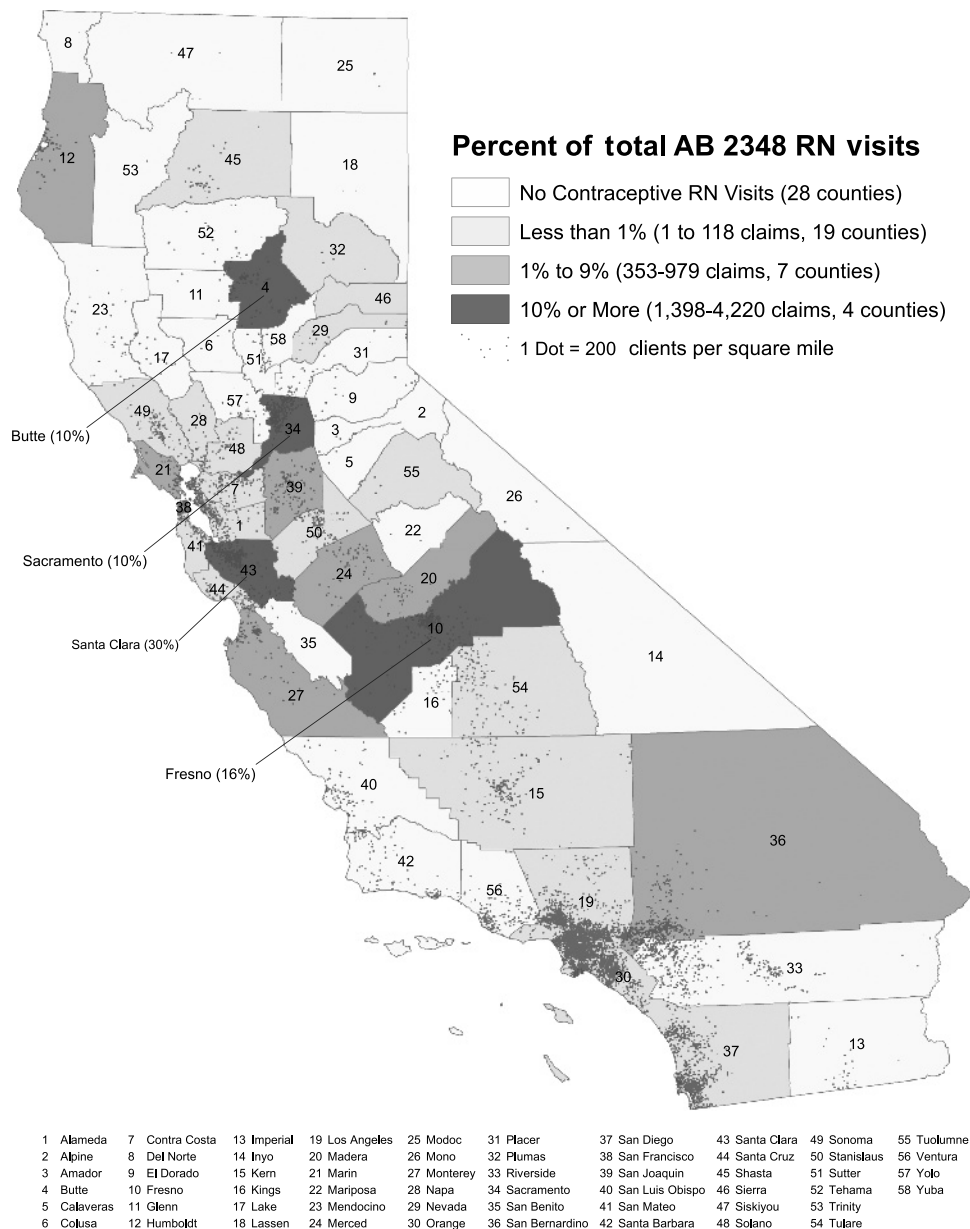
**Clients** A total 13,410 Family PACT clients were served by RN visits. Clients were mostly established in the clinic (62%) (Table 2). More than half were younger than age 25 (57%), and 23% were between 26 and 34 years old. Most were either Latino (46.5%) or White (35.5%) with a lower proportion of Asian/Pacific Islander/Filipino (10%) and Black (4.5%). Regardless of E&M coding, clients between the ages 18 and 25 were

**TABLE 1. Family PACT RN Visit Utilization and Paid Claims Before and After A.B. 2348**

RN visit site	MD/NP/CNM/PA visit claims		RN visits <sup>a</sup>			
	Before	After	Code	Claims	Clients	Δ Access (%)
Yes	17,721	9,311				+10
			99201(-TD)	2,211	2,211	
			99211(-TD)	8,862	8,365	
			99212(-TD)	3,199	172	
No	49,301	30,968		n/a		-37
Total	67,022	40,279		14,272	10,088	

Note. A.B. = Assembly Bill; CNM = certified nurse midwife; MD = medical doctor; NP = nurse practitioner; PA = physician assistant; PACT = Planning, Access, Care, and Treatment; RN = registered nurse. <sup>a</sup>One year after A.B. 2348 (January 2013-June 2014).





**FIGURE 2.** Family PACT RN visit utilization following implementation of A.B. 2348, fiscal year 2013–2014. (A.B. 2348 authorizes RNs [non-APNs] to dispense self-administered hormonal contraceptives and/or administer hormonal contraceptive injections to clients). Percentage of total RN visits is represented by shading, with darker areas indicating greater proportions of RN visits. On the basis of Family PACT enrollment and paid claims data for RN visits, E&M codes, and dates of service from January 1, 2013, to June 30, 2014. RN visit E&M reimbursements were as follows: 99201 (-TD) for new clients (10 minutes); 99211 (-TD) and 99212 (-TD) for established clients (5 minutes and 10 minutes, respectively). APN = advanced practice nurse, such as nurse practitioner or certified nurse midwife; E&M = Evaluation & Management; PACT = Planning, Access, Care, and Treatment; RN = registered nurse.

most commonly seen (new client visits: 54%, established client visits: 56%–64%), with teens under the age of 18 years more likely to be new clients (27% vs. established clients: 9%–11%).

**Impact of RN Visits on Client Contraceptive Acquisition**  
**RN Birth Control Dispensing and/or Administration at Visit** California reimbursed a total of 14,882 claims for RNs dispensing and/or administering birth control at Family PACT RN

visits (Table 1). Out of a total 14,272 RN visits, 71% ( $n = 10,088$ ) dispensed and/or administered both hormonal methods and barrier methods; 46% ( $n = 6,528$ ) had only hormonal methods dispensed and/or administered, 25% ( $n = 3,569$ ) had only barriers dispensed, and 29% ( $n = 4,184$ ) had no dispensing and/or administration.

Tier 2 methods were most frequently dispensed in established client visits, whereas Tier 3 barrier methods were

**TABLE 2. Client Birth Control Acquired at RN Visits or Dispensed by Pharmacy After RN Visit**

RN or pharmacist	Tier	RN visit code		
		99201TD	99211TD	99212TD
		<i>n</i>	<i>n</i>	<i>n</i>
RN	2	485	4,990	1,745
	3	1,401	3,967	1,111
	EC	141	888	154
Pharmacist	2	46	249	692
	3	1	2	10
	EC	3	28	306
	Type	(%)	(%)	(%)
RN	Injection	(7.0)	(17.0)	(22.0)
	Pills	(9.2)	(22.0)	(25.0)
	Patch	(4.4)	(6.0)	(4.0)
	Ring	(3.3)	(6.0)	(7.0)
	Barriers	(69.1)	(40.0)	(37.0)
	EC	(7.0)	(9.0)	(5.0)

Note. EC = emergency contraceptive; 99201(-TD) = new client visit, 10 minutes; 99211(-TD) = established client visit, 5 minutes; 99212(-TD) = established client visit, 10 minutes.

dispensed most often among new client visits (Table 2). Established client visits were more likely to result in birth control or EC pick-up at the pharmacy within 30 days of the RN visit than new client visits (Table 2). Established clients were also more likely to get an IUD or implant inserted within 30 days of the RN visit. Overall, condoms were dispensed approximately one third to three fourths of RN visits, with 55% of clients leaving without additional dispensing or administration of hormonal methods.

**RN Visit and Subsequent Birth Control Acquisition** RN visits were associated with client receipt of pharmacy dispensed birth control methods (Table 2). A total of 651 clients picked up Tier 2 or Tier 3 birth control methods at the pharmacy within 30 days of their RN visit; among these, most did not receive a method at their RN visit ( $n = 630$ ).

RN visits also may have facilitated access to highly effective Tier 1 methods. Within 30 days of the RN visit, a total of 120 clients went on to have an IUD (89%) or implant (11%) inserted by a physician, NP, CNM or PA. Most of these clients ( $n = 114$ ) left their RN visit without a hormonal or barrier method dispensed. (Of note, clients rarely saw another clinician after their RN visit and before their pharmacy dispensing or LARC insertion visit).

### **RN Visits: Potential Impact on Birth Control Access**

There were a total of 67,022 paid claims for physician, NP, CNM, or PA contraception dispensing and/or administration visits prior to A.B. 2348 and 40,279 paid claims after A.B. 2348 (Table 1). Regardless of whether RN visits were implemented, paid claims for birth control dispensing and/or administration decreased between pre- and post-legislation

implementation at all Family PACT sites. However, at those sites where RN visits were utilized, paid claims for birth control dispensing and/or administration increased, overall.

## **DISCUSSION**

### **RN Visit Utilization**

In California, A.B. 2348 has given Californian family planning providers the option of having RNs play a more active role in providing contraceptive care. Since it became a benefit, RN visits have become increasingly utilized across the state by Family PACT providers. RNs have served over 13,000 Family PACT clients, mostly in Northern and Central Valley facilities, such as Federally Qualified Health Centers, Rural Health Centers, Indian Health Services, community and women's specialty clinics, as well as Planned Parenthood health centers. Specifically, RN visits were mostly used for clients who have already been seen before at the clinic. These early adopter clinic sites could have many reasons for implementing RN visits, such as expanding available clinicians in clinics with staffing shortages or enhancing capacity and client flow in high volume Title X funded women's health clinics (Bixby Center for Global Reproductive Health, 2011).

However, in many places, RN visits remained an untapped resource for increasing contraceptive access. Within 18 months of the opportunity to do so, only 7% of public Family PACT providers had implemented RN visits. Counties with the largest Family PACT client densities in urban areas, such as Los Angeles and San Francisco, had yet to offer widespread RN visits. This is an opportunity for nursing family planning advocates to raise employer awareness of this new legislation and its ability to expand the RN's clinic role while assuming some of the workload from providers.

### **Clients Demographics and Client Volume**

Age and race/ethnicity distribution of those seen at RN visits were similar to overall public Family PACT trends across the state. RNs saw a large percentage of clients of ages 18–25 years who were at high risk for unintended pregnancies. This age distribution is consistent with female clients seen in Family PACT by public providers, where the average age is 28 years and adolescents comprise 15% of clients (Bixby Center for Global Reproductive Health, 2016).

### **Contraceptive Effectiveness**

In general, most of the RN visits provided clients with hormonal and/or barrier methods at the visit. Interestingly, the most commonly dispensed methods were male and female condoms, which effectively reduce sexually transmitted infection risk but are less effective for pregnancy prevention than other contraceptive options (Hatcher et al., 2011). Oral contraceptives were the next most frequently dispensed method; however, methods that do not require daily use

(e.g., DMPA ring, patch) were not infrequently provided. Overall, RN birth control dispensing and/or administration yielded a similar method mix to those found in the Family PACT program-at-large in FY 13–14 (Bixby Center for Global Reproductive Health, 2016). RN visits may thus be an effective way to provide access to birth control methods in times of increased demand for primary healthcare services.

RN visits may also have resulted in placement of highly effective contraception by physicians, NPs, CNMs, and PAs within 30 days of the RN visit. Since in most of these cases, clients did not have visits with other clinicians during this 30-day period, RN visits may have been what contributed to client receipt of Tier 1 methods. Further studies are needed to explore whether enhanced provision of Tier 2 methods through RN visits substitutes dispensing of Tier 1 methods.

Visits with established clients resulted in more onsite, same-day birth control dispensing, as well as pharmacy pick-up and LARC insertion within 30 days. Some of these clients may already have been on a birth control method at the time of the RN visit and thus simply picked up condoms and birth control refills at the RN visit or returned for an IUD or implant insertion. Interestingly, new client visits resulted in more Tier 3 than Tier 2 dispensing and/or administration, as well as less birth control pharmacy pick-up or LARC insertions within 30 days of the RN visit. Since adolescents under the age of 18 years are more likely to be new clients, it is necessary to ensure that adolescents use methods consistently and switch to more effective methods at least, until they return for a follow-up visit with the RN, physician, NP, CNM, or PA. According to the 2011 Family PACT Medical Record Review report, prior to A.B. 2348, 55% of new clients under the age of 20 relied on Tier 3 barrier methods, and 31% used no method upon arrival to their new client visit. Although by the end of the visit, there were statistically significant increases in clients selecting Tier 2 methods, nearly half left with either only barrier methods or no method (Thiel de Bocanegra, Watts, Menz, Rao, & Darney, 2013).

### **RN Visits: Increasing Birth Control Access**

A conservative estimate of the impact of RN visits on birth control access calculated from only those RN visits that resulted in birth control dispensing and/or administration at the visit yielded an increase in contraceptive visits after legislation implementation. Without RN visits, paid birth control claims decreased at sites with and without RN visits, pre- and post-legislation. The sites without RN visits would have needed to generate close to 23,000 paid birth control visit claims to see a similar 10% increase in birth control claims as was seen at sites implementing RN visits.

All Family PACT providers saw a decrease in client volume during the study period, as a large proportion of women transitioned from Family PACT to Medi-Cal due to the implementation of the Patient Protection and Affordable Care Act

of 2010. Nevertheless, the decrease of women receiving family planning services was lower for women seen at clinics that implemented RN visits.

### **RN Visits: A Legislative Opportunity?**

RNs have the legal authority to dispense certain medications in outpatient settings in only 16 states (Guttmacher Institute, 2017a). This means California's A.B. 2348 and implementation of reimbursement for RN visits can serve as a model for other states seeking policies to potentially reduce unintended pregnancy rates while providing clients with quality family planning services.

### **Limitations**

Claims data do not capture services that were never billed and exclude a small number of erroneously paid claims to male clients (e.g., if wrong billing codes were submitted by clinics). No paid claims for RN visits were found before October 2013, even though benefits were made retroactive to January 1, 2013. The impact of RN visits on contraceptive access was only assessed for the following 30 days and not after, and birth control acquisition is not necessarily equivalent to actual initiation of contraceptive use. RN visits do not equal the number of clients since clients may have had multiple RN visits. It was also possible that clients had other family planning visits prior to the RN visit that could have resulted in birth control pharmacy pick-ups within 30 days of the RN visit. Lastly, because of the fact that results were based on paid claims data and not medical chart review, it was not possible to determine details of the visits, such as the quality of contraceptive counseling or reasons behind contraceptive method choices (e.g., hormonal birth control contraindication, existing birth control use).

### **Conclusion**

California A.B. 2348 provided legislation necessary for RNs to increase access to contraception, potentially reducing rates of unintended pregnancy. RN visits can also facilitate a multi-disciplinary team approach to healthcare and expand RN scope of practice. Although RN visits remain an untapped resource in busy provider practices, Family PACT RN visit trends demonstrated a positive uptake of RN visits for administration and/or dispensing of hormonal methods and a 10% increase in access to contraception following implementation of A.B. 2348. RNs dispensed Tier 2 and Tier 3 methods to clients and facilitated client interactions with the healthcare system via pharmacy Tier 2 and Tier 3 prescription pick-up and possibly Tier 1 insertions. Further research is needed to understand issues such as barriers and facilitators to implementing RN visits at health clinic facilities, RN views of the opportunity and training needs for providing family planning RN visits, and staff and client views of and satisfaction with RN visits. Overall, the



passage of A.B. 2348 serves as an opportunity for family planning RNs to advocate for implementation of RN visits at their practice sites in California and the passage of RN contraceptive and/or medication dispensing legislation in other states. The California experience provides a model for other states to expand RN responsibility as a way to increase access to contraceptive services and, thus, contribute to the reduction of unintended pregnancies nationwide.

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Corresponding author: Emese C. Parker, RN, NP, MPH, Bixby Center for Global Reproductive Health (in Obstetrics, Gynecology and Reproductive Sciences), University of California, San Francisco, 3333 California St, Suite 335, San Francisco, CA 94118 (e-mail: emeseparker@gmail.com).

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*Nursing Research* invites papers reporting findings of original research across the scope of **health equity**. Topics include but are not limited to (a) research implications of definitions, concepts, and measurement of health equity; (b) cross-cultural and longitudinal validity of health equity indicators; or (c) using toolkits and other technical resources to support community capacity building, and models for describing, guiding and testing progress towards health equity.

Topics related to interventions are especially welcome, such as (a) how to effectively build community capacity to implement, evaluate and sustain programs and policies to promote health equity; (b) how to reduce persistent, population-specific health disparities using a health equity framework; (c) designing and testing culturally-tailored interventions for high-risk communities; (d) how to address social determinants of health in an intervention framework; and (e) using culturally appropriate evaluation strategies for targeted interventions to establish best practices and support evidence-based approaches to reduce health disparities and achieve health equity.

Understanding determinants of health disparities and achieving health equity among vulnerable, high-risk, underserved populations is central to the call for papers. Individual, family, community, national or global perspectives in biopsychosocial-systems (health services, political, and economic) frameworks may be used. Research on comparative health and social policy including economic approaches is relevant to the call. Findings from studies focused on research capacity building to facilitate integration of health equity into programs of research for beginning and seasoned investigators are encouraged, as are papers reporting new methods for studying health equity.

Papers may be prepared as original articles or brief reports. Accepted papers will be marked with a banner for the "Health Equity Research Series." The call is on-going; there is no deadline for submission.

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