JOURNAL OF WOMEN'S HEALTH
Volume 25, Number 1, 2016

DOI: 10.1089/jwh.2014.5116

U.S. Women's Intended Sources for Reproductive Health Care

Halley P. Crissman, MD, MPH,[1] Kelli Stidham Hall, PhD, MS,[2] Elizabeth W. Patton, MD, MPhil,[1] Melissa K. Zochowski, MBA,[1] Matthew M. Davis, MD, MPP,[3] and Vanessa K. Dalton, MD, MPH[1]

Abstract

Introduction: The current sociopolitical climate and context of the Affordable Care Act have led some to question the future role of family planning clinics in reproductive health care. We explored where women plan to get their future contraception, pelvic exam/pap smears, and sexually transmitted infection testing, with a focus on the role of family planning clinics.

Methods: Data were drawn from a study of United States adults conducted in January 2013 from a national online panel. We focused on English-literate women aged 18–45 years who answered items on intended sources of care (private office/health maintenance organization [HMO], family planning clinic, other, would not get care) for reproductive health services. We used Rao-Scott F tests to compare intended sources across sociodemographic groups, and logistic regression to model odds of intending to use family planning clinics. Probability weights were used to adjust for the complex sampling design.

Results: The response rate was 61% ($n = 2{,}182$). Of the 723 respondents who met the inclusion criteria, approximately half intended to use private offices/HMOs. Among some subgroups, including less educated (less than high school), lower annual incomes (<$25,000) and uninsured women, the proportion intending to use family planning clinics was higher than the proportion intending to use private office/HMO in unadjusted analyses. Across all service types, unmarried and uninsured status were associated with intention to use family planning clinics in multivariable models.

Conclusions: While many women intend to use private offices/HMOs for their reproductive health care, family planning clinics continue to play an important role, particularly for socially disadvantaged women.

Introduction

Inequities in reproductive health service use among women in the United States have been well documented, with lower rates of service utilization among younger, poorer, less educated, and uninsured women compared with women of social advantage.[1] Lower rates of reproductive health service use correspond with negative reproductive health outcomes, including unintended pregnancy and sexually transmitted infections (STIs).[2] Family planning clinics (e.g. Title X funded clinics and Planned Parenthood clinics) have played a key role in combatting reproductive health disparities by providing accessible care for underserved women.[3–4] Between 2006 and 2010 approximately a quarter of reproductive age women in the United States relied on sexual and reproductive health services from publically funded clinics, including family planning clinics.[4] However, in the changing landscape of U.S. health care, the future of family planning clinics in reproductive health care provision has come under question.

In recent years socially conservative politicians have lobbied for cuts to family planning funding and in some states, such as Texas, funding cuts have forced clinics to close.[5] At the same time, the Patient Protection and Affordable Care Act (ACA) has expanded health insurance coverage for reproductive health care by increasing access to affordable health plans, reducing cost sharing, and requiring coverage for core services, including contraception and screening for STIs and cervical cancer.[6,7] In the context of funding threats and increasing reproductive health insurance coverage, it is unclear what role family planning clinics will play in future reproductive health care.[8] However, experiences with health care reform in Massachusetts suggest that there is a continued need for family planning and women's health safety-net services after health insurance expansion.[9–11]

In light of concerns regarding the future role of family planning clinics, the purpose of this study was to describe where women plan to get their future reproductive health care, with a focus on the sociodemographic characteristics of women who intend to use family planning clinics. We

Departments of [1]Obstetrics and Gynecology and [3]Pediatrics and Communicable Diseases, University of Michigan, Ann Arbor, Michigan.
[2]Department of Behavioral Sciences and Health Education, Rollins School of Public Health, Emory University, Atlanta, Georgia.

hypothesized that a significant proportion of socially disadvantaged women would continue intending to use family planning clinics.

Material and Methods

Study design and sample

Data were obtained from a cross-sectional survey administered in January 2013 in the United States. The survey, conducted as part of the National Poll on Children's Health (NPCH) directed by author MMD at the University of Michigan, includes modules on a wide array of health topics for children and adults (http://mottnpch.org) and was conducted in partnership with GfK Custom Research, LLC (GfK). NPCH respondents were members of GfK's web-enabled population-based online panel, KnowledgePanel. KnowledgePanel members were selected using random digit dialing (including both landlines and cellular phones) and address-based sampling. If individuals agreed to participate in KnowledgePanel but did not have internet access, GfK provided them a laptop and internet access at no cost. All panelists provided individual and household demographic data. Panelists received unique login information for accessing online surveys, and received emails inviting them to participate in research surveys, including the NPCH survey. Survey participants are invited to answer questions without any indication of the subject matter beforehand. GfK operates ongoing modest incentive programs to encourage participation, not specific to this survey.

The NPCH survey includes an oversampling of parents, as part of a larger study on children's health issues. The NPCH survey, written in English, was sent to 3,567 KnowledgePanel members ages 18 years of age and older, 2,865 of whom had previously indicated they were the parent or legal guardian of a child 17 years old or less who lived in the same household. Three email reminders were sent to improve response rates. The participation rate was 61% ($n = 2,182$), including 1,135 women. Women older than 45 years ($n = 399$) were excluded from the present study. Respondents with missing data on all three questions regarding intended source of reproductive health care were excluded ($n = 13$), resulting in an analytic sample of 723 women.

The University of Michigan Institutional Review Board approved this study as exempt from human subjects review because it involves de-identified data from the respondents.

Measures

To explore women's intended sources of reproductive health care, survey items asked, ''In the future, where would you go if you had symptoms or needed health services?'' Specific types of reproductive health services included contraception, Pap smear and/or pelvic exam, and STI testing services. Options for sources of care included (1) private doctor's office or health maintenance organization (HMO) facility, (2) family planning or Planned Parenthood clinic, (3) community, public health, or rural health clinic, (4) hospital-based clinic, (5) chiropractor or naturopath, (6) urgent care or walk-in clinic, (7) emergency room, and (8) ''I would not get medical care for this.'' For our primary analytic variable, given the small numbers of women reporting intended use of the latter categories ($n = 34–45$ for community, public health or rural health clinic; $n = 16–23$ for hospital based clinic; $n = 1–2$ for chiropractor or naturopath; $n = 12–22$ for urgent care, walk-in clinic or emergency room), we collapsed response options 3–7 for a four-point categorical variable: (1) private doctor's office or HMO facility, (2) family planning or Planned Parenthood clinic, (3) other source of care, and (4) ''I would not get medical care for this.'' We also created a dichotomous variable (family planning clinic vs. non-family planning clinic) for regression models.

We examined a series of sociodemographic covariates that we hypothesized would be associated with women's intended sources of reproductive health care based upon our previous work.[1] Key covariates included age, educational attainment, race/ethnicity, marital status, parental status, region of the country, residence (metropolitan or nonmetropolitan), household income, insurance type, and history of medical problems. Parental status was dichotomized; respondents were considered parents if they identified as the parent, stepparent, foster parent, or legal guardian of a child 17 years of age or younger living in the parents' household. History of medical problems was dichotomized into ''yes'' or ''no,'' with the former indicating a self-reported history of being diagnosed by a doctor with at least one condition on a list of common medical problems, including, but not limited to, asthma, cancer, depression, and diabetes. We also examined women's previous sources of reproductive health services; women who had used a specific service within the past 3 years were asked where they ''go most often for these health concerns.''

Statistical analysis

Data were analyzed using STATA/SE version 13.1. A design-based analysis with probability weights was used to account for the complex survey design and bring the sample in line with national demographic benchmarks. Probability weights are study specific, developed and provided by KnowledgePanel using Current Population Survey national benchmarks. Simple design-based bivariate associations of women's intended sources of reproductive health care and all covariates, for each of the three reproductive health services, were examined using Rao-Scott F-tests.[12] Results are presented as unweighted frequencies and weighted proportions. Multivariable logistic regression modeling was then used to estimate the odds of intended use of a family planning clinic, for each service type, while controlling for covariates.[13] All available covariates were included in the multivariable models. Variance inflation factors were calculated for all models to assess for collinearity, and values less than 10 were considered acceptable.[14] *P*-values less than or equal to 0.05 were considered statistically significant. Results are presented as odds ratios with 95% confidence intervals for regression results.

Results

The median age of respondents in the specified age range (18–45 years old) was 32 years. Most respondents had at least some college education (57%); were not married (55%); were parents (54%); lived in metropolitan areas (83%); identified as white, non-Hispanic (58%); and had private health insurance (56%). Less than 50% of women who had received a specific reproductive service in the last 3 years responded

when asked where they most often received this type of service (data not shown).

Approximately half of respondents intended to use private offices/HMOs for contraception (50%), pelvic/pap (59%), and STI testing (51%) services (Tables 1–3). The second most commonly cited source for all intended service use was family planning or Planned Parenthood clinics: contraception (20%), pelvic/pap (19%), STI testing (18%) (Tables 1–3).

Intended source of reproductive health care differed by women's age, educational attainment, race/ethnicity, marital status, household income, and insurance status, across all reproductive health service types (p-values less than 0.05)

Table 1. Percentage of Weighted Target Population, Intended Source of Care for Contraception Services by Selected Demographic Variables (N=716)

Variables	*Private office, HMO*	*Family planning or Planned Parenthood clinic*	*Other source of care*[a]	*Would not get care for this*	*F test*[b]
	Weighted percent by row (unweighted n*)*				
Totals	49.7 (397)	20.2 (113)	11.5 (63)	18.5 (143)	
Age (years)					
18–24 (n=69)	33.9	23.6	38.7	3.8	$p<0.0001$
25–34 (n=228)	50.3	26.7	7.1	15.9	
35–45 (n=359)	55.7	12.0	5.1	27.2	
Education					
Less than high school (n=63)	18.0	30.7	10.0	41.2	$p<0.0001$
High school (n=182)	34.1	27.7	23.5	14.8	
Some college (n=238)	56.9	15.2	8.9	18.9	
Bachelor's degree+ (n=233)	73.9	12.3	2.7	11.1	
Race/ethnicity					
White, non-Hispanic (n=477)	63.7	15.3	5.6	15.4	$p=0.0061$
Black, non-Hispanic (n=77)	33.7	23.9	29.8	12.6	
Other, non-Hispanic (n=72)	25.3	32.5	17.4	24.8	
Hispanic (n=90)	35.0	23.1	16.1	25.9	
Marital status					
Not married (n=237)	39.0	28.6	17.0	15.5	$p<0.0001$
Married (n=479)	63.2	9.8	4.7	22.2	
Parent/guardian of child 0–17 years old					
Yes (n=640)	53.1	17.0	9.4	20.6	$p=0.4549$
No (n=76)	46.0	23.9	14.0	16.1	
Region					
Northeast (n=114)	56.7	7.0	6.0	30.3	$p=0.1575$
Midwest (n=173)	57.6	14.8	9.4	18.3	
South (n=253)	50.9	22.3	12.4	14.3	
West (n=176)	40.9	28.2	14.7	16.1	
Setting					
Nonmetropolitan (n=121)	36.4	26.0	21.5	16.1	$p=0.1576$
Metropolitan (n=595)	52.5	19.0	9.5	19.0	
Household income					
<$25k ($n$=162)	24.5	30.4	19.1	26.0	$p=0.0001$
$25–49.9k ($n$=154)	36.9	17.3	15.3	30.6	
$50–74.9k ($n$=128)	50.8	30.0	2.5	16.7	
≥$75k ($n$=272)	71.4	11.3	8.8	8.6	
Insurance type[c]					
none (n=88)	12.5	42.5	16.7	28.3	$p<0.0001$
Private (n=445)	72.4	12.1	4.2	11.3	
Medicaid and/or Medicare (n=118)	22.1	23.2	16.6	38.2	
State/govt/military/IHS/other (n=62)	35.4	23.2	34.6	6.5	
History of medical problems					
No (n=257)	44.4	16.1	18.3	21.2	$p=0.1217$
Yes (n=459)	52.5	22.3	8.0	17.1	

[a]Community, public health, rural, urgent care and hospital-based clinics, emergency departments, chiropractors, and naturopaths.
[b]Rao-Scott design-based F test.
[c]n=713 for insurance; excludes participants who did not answer question regarding insurance type.
IHS, Indian Health Services.

Table 2. Percentage of Weighted Target Population, Intended Source of Care for Pelvic Exam and Pap Smear Services by Selected Demographic Variables ($N=719$)

Variables	*Private office, HMO*	*Family planning or Planned Parenthood clinic*	*Other source of care*[a]	*Would not get care for this*	*F test*[b]
	Weighted percent by row (unweighted n*)*				
Totals	59.0 (487)	18.6 (106)	15.6 (85)	6.8 (41)	
Age (years)					
18–24 ($n=70$)	39.8	16.8	30.0	13.4	$p=0.0331$
25–34 ($n=290$)	55.8	24.7	16.5	3.0	
35–45 ($n=359$)	70.2	12.8	8.8	8.2	
Education					
Less than high school ($n=65$)	21.2	31.6	29.5	17.6	$p<0.0001$
High school ($n=182$)	40.5	27.2	24.3	7.9	
Some college ($n=238$)	73.3	11.0	13.2	2.5	
Bachelor's degree+ ($n=234$)	82.6	10.6	2.5	4.4	
Race/ethnicity					
White, non-Hispanic ($n=477$)	73.8	13.8	7.7	4.7	$p=0.0097$
Black, non-Hispanic ($n=79$)	35.3	24.8	33.3	6.6	
Other, non-Hispanic ($n=73$)	35.8	31.1	22.5	10.6	
Hispanic ($n=90$)	44.0	19.5	26.3	10.2	
Marital status					
Not married ($n=237$)	44.1	26.2	22.3	7.4	$p<0.0001$
Married ($n=482$)	77.3	9.2	7.5	6.0	
Parent/guardian of child 0–17 years old					
Yes ($n=642$)	66.7	15.6	12.0	5.7	$p=0.1754$
No ($n=77$)	50.2	22.0	8.0	8.0	
Region					
Northeast ($n=116$)	70.8	7.5	14.4	7.3	$p=0.2178$
Midwest ($n=175$)	66.2	13.1	17.2	3.6	
South ($n=251$)	60.2	21.0	8.7	10.1	
West ($n=177$)	47.7	25.2	22.1	5.0	
Setting					
Nonmetropolitan ($n=121$)	41.7	25.8	16.7	15.8	$p=0.0818$
Metropolitan ($n=598$)	62.5	17.1	15.4	5.0	
Household income					
<$25k ($n=164$)	30.1	30.9	30.9	8.0	$p<0.0001$
$25–49.9 k ($n=154$)	44.8	16.0	27.9	11.3	
$50–74.9 k ($n=128$)	69.6	26.3	3.5	0.6	
≥$75 k ($n=273$)	79.5	9.0	5.1	6.3	
Insurance type[c]					
None ($n=88$)	20.8	40.5	22.8	15.9	$p<0.0001$
Private ($n=448$)	83.4	9.7	5.5	1.5	
Medicaid and/or Medicare ($n=118$)	31.0	22.9	37.4	8.7	
State/govt/military/IHS/other ($n=62$)	36.1	24.8	19.5	19.7	
History of medical problems					
No ($n=258$)	54.2	13.7	17.5	14.6	$p=0.0073$
Yes ($n=461$)	61.5	21.1	14.7	2.8	

[a]Community, public health, rural, urgent care and hospital-based clinics, emergency departments, chiropractors, and naturopaths.
[b]Rao-Scott design-based F test.
[c]$n=716$ for insurance; excludes participants who did not answer question regarding insurance type.

(Tables 1–3). The proportion of women intending to use family planning or Planned Parenthood clinics was higher than the proportion preferring private offices/HMOs for some groups, including women with less than high school education (10%–22% higher), annual incomes less than $25,000 (1%–6% higher), and no health insurance (20%–30% higher). The proportions of women intending use of private offices/HMOs were highest among older (aged 35–45 years), non-Hispanic white, college-educated, married, higher income (greater than $50,000), and privately insured women.

In multivariable models, marital status and insurance status were predictive of intended use of family planning clinics. Women who were not married (odds ratios [ORs] range 2.99–4.06) and not insured (ORs range 3.04–6.37) experienced

Table 3. Percentage of Weighted Target Population, Intended Source of Care for STI Testing/Treatment Services by Selected Demographic Variables (N=721)

Variables	*Private office, HMO*	*Family planning or Planned Parenthood clinic*	*Other source of care*[a]	*Would not get care for this*	*F test*[b]
	Weighted percent by row (unweighted n*)*				
Totals	50.7 (422)	18.0 (91)	18.3 (90)	13.0 (118)	
Age (years)					
18–24 (n=70)	32.7	24.6	38.0	4.8	p=0.0011
25–34 (n=290)	47.9	21.8	20.5	9.8	
35–45 (n=361)	61.1	11.2	8.0	19.6	
Education					
Less than high school (n=64)	12.5	34.4	28.9	24.3	p<0.0001
High school (n=183)	34.9	24.1	32.1	8.9	
Some college (n=239)	64.5	12.1	12.5	11.0	
Bachelor's degree+ (n=235)	72.1	9.5	5.0	13.4	
Race/ethnicity					
White, non-Hispanic (n=479)	63.4	14.4	9.2	12.9	p=0.0013
Black, non-Hispanic (n=80)	27.1	17.6	28.6	26.7	
Other, non-Hispanic (n=72)	31.5	27.2	36.4	4.9	
Hispanic (n=90)	38.7	21.3	26.5	13.5	
Marital status					
Not married (n=239)	36.7	26.1	27.5	9.7	p<0.0001
Married (n=482)	68.0	8.0	7.0	17.0	
Parent/guardian of child 0–17 years old					
Yes (n=644)	56.0	14.8	11.8	17.5	p=0.0101
No (n=77)	44.6	21.7	26.0	7.8	
Region					
Northeast (n=115)	56.8	11.3	14.4	17.5	p=0.4014
Midwest (n=176)	59.3	11.6	17.8	11.4	
South (n=235)	52.0	19.5	13.2	15.3	
West (n=177)	41.8	23.5	25.8	9.0	
Setting					
Nonmetropolitan (n=120)	37.3	24.1	26.6	12.1	p=0.3000
Metropolitan (n=601)	53.4	16.8	16.7	13.2	
Household income					
<$25 k ($n$=164)	26.8	29.6	31.4	12.2	p=0.0001
$25–49.9 k ($n$=155)	33.0	11.3	28.1	27.6	
$50–74.9 k ($n$=128)	58.9	22.4	9.4	9.4	
≥$75 k ($n$=274)	71.0	12.4	9.2	7.5	
Insurance type[c]					
None (n=89)	16.3	38.9	19.8	25.0	p= <0.0001
Private (n=448)	73.3	9.2	8.5	8.9	
Medicaid and/or Medicare (n=119)	24.6	20.8	38.3	16.4	
State/govt/military/IHS/other (n=62)	27.9	28.0	37.9	6.2	
History of medical problems					
No (n=259)	46.8	12.4	20.6	20.3	p=0.0777
Yes (n=462)	52.7	20.9	17.2	9.2	

[a]Community, public health, rural, urgent care and hospital-based clinics, emergency departments, chiropractors, and naturopaths.
[b]Rao-Scott design-based F test.
[c]n=718 for insurance; excludes participants who did not answer question regarding insurance type.

higher odds of intended use of family planning clinics across all service types compared with married and privately insured women (Table 4). In the South, odds of intending to use a family planning clinic for contraception were higher (OR 5.75, 95% confidence interval [CI] 1.14–29.09) than in the Northeast, and in the West odds of using family planning clinics for contraception or Pap/pelvics were higher (OR 5.07–6.09) than in the Northeast (Table 4).

Discussion

Given the uncertainty regarding the future role of family planning clinics, our study contributes timely information regarding intended sources for reproductive health care among a national sample of reproductive age women in the United States. Family planning clinics, including Title X and Planned Parenthood clinics, have traditionally played a

Table 4. Estimated Odds Ratios and Their 95% Confidence Intervals for Univariate and Multivariable Models Predicting Intention to Use Family Planning Clinics for Reproductive Health Services

	Odds of intending to use family planning clinic vs. other sources (95% confidence interval)					
	Contraception (n = *713*)		*Pap/pelvic* (n = *716*)		*STI Testing* (n = *718*)	
Variable	*Univariate*[a]	*Multivariable*[b]	*Univariate*[a]	*Multivariable*[b]	*Univariate*[a]	*Multivariable*[b]
Age (years)						
18–24	2.26 (0.70–7.31)	1.07 (0.28–4.02)	1.37 (0.36–5.27)	0.57 (0.14–2.28)	2.57 (0.80–8.28)	1.12 (0.29–4.35)
25–34	**2.67 (1.19–6.01)**	**2.08 (1.03–4.21)**	**2.23 (0.99–4.98)**	1.65 (0.82–3.33)	2.20 (0.92–5.28)	1.68 (0.77–3.68)
35–45	Reference	Reference	Reference	Reference	Reference	Reference
Education						
Less than high school	3.16 (0.87–11.47)	1.74 (0.54–5.54)	**3.92 (1.02–14.97)**	1.98 (0.58–6.71)	**5.01 (1.24–20.27)**	1.99 (0.80–11.14)
High school	2.72 (0.88–8.43)	1.77 (0.65–4.83)	3.17 (0.95–10.60)	2.06 (0.71–5.96)	3.04 (0.82–11.22)	1.87 (0.60–5.81)
Some college	1.28 (0.46–3.56)	1.01 (0.36–2.82)	1.05 (0.35–3.17)	0.77 (0.25–2.37)	1.31 (0.39–4.42)	1.02 (0.30–3.53)
Bachelor's degree+	Reference	Reference	Reference	Reference	Reference	Reference
Race/ethnicity						
White, non-Hispanic	Reference	Reference	Reference	Reference	Reference	Reference
Black, non-Hispanic	1.74 (0.67–4.54)	0.87 (0.29–2.62)	2.06 (0.79–5.41)	1.01 (0.35–2.97)	1.27 (0.43–3.77)	0.67 (0.20–2.22)
Other, non-Hispanic	2.67 (0.90–7.93)	0.94 (0.29–3.04)	2.83 (0.92–8.69)	0.90 (0.27–2.97)	2.22 (0.70–7.02)	0.68 (0.22–2.12)
Hispanic	1.66 (0.61–4.50)	0.99 (0.32–3.04)	1.51 (0.52–4.43)	0.83 (0.25–2.78)	1.60 (0.57–4.52)	0.78 (0.20–3.10)
Marital status						
Not married	**3.66 (1.94–6.90)**	**3.35 (1.64–6.84)**	**3.53 (1.83–6.81)**	**2.99 (1.42–6.29)**	**4.06 (2.06–8.02)**	**3.36 (1.58–7.12)**
Married	Reference	Reference	Reference	Reference	Reference	Reference
Parent/guardian of child 0–17 years old						
Yes	Reference	Reference	Reference	Reference	Reference	Reference
No	1.54 (0.74–3.17)	0.84 (0.36–1.97)	1.53 (0.72–3.25)	0.91 (0.39–2.13)	1.60 (0.74–3.42)	0.78 (0.32–1.93)
Region						
Northeast	Reference	Reference	Reference	Reference	Reference	Reference
Midwest	2.31 (0.54–10.02)	4.11 (0.62–27.18)	1.86 (0.42–8.14)	2.86 (0.46–17.97)	1.03 (0.23–4.52)	1.50 (0.23–9.80)
South	**3.85 (1.12–13.21)**	**5.75 (1.14–29.09)**	**3.27 (0.99–10.76)**	4.44 (0.89–22.04)	1.89 (0.63–5.72)	2.50 (0.54–11.55)
West	**5.26 (1.52–18.13)**	**6.09 (1.37–27.03)**	**4.15 (1.25–13.74)**	**5.07 (1.17–22.01)**	2.40 (0.80–7.19)	2.81 (0.64–12.1)
Setting						
Non-metropolitan	1.49 (0.59–3.81)	1.19 (0.38–3.74)	1.69 (0.65–4.36)	1.31 (0.42–4.10)	1.57 (0.58–4.24)	1.27 (0.41–3.96)
Metropolitan	Reference	Reference	Reference	Reference	Reference	Reference
Household income						
<$25 k	**3.43 (1.16–10.08)**	1.65 (0.50–5.42)	**4.51 (1.33–15.31)**	1.96 (0.57–6.70)	**2.97 (1.05–8.42)**	1.22 (0.41–3.96)
$25_49.9 k	1.64 (0.58–4.62)	0.89 (0.27–2.91)	1.92 (0.59–6.21)	0.94 (0.27–3.20)	0.90 (0.33–2.46)	0.47 (0.15–1.49)
$50_74.9 k	3.63 (0.95–11.91)	**2.88 (1.09–7.57)**	3.9 (0.84–15.37)	2.84 (0.95–8.45)	2.03 (0.52–8.01)	1.48 (0.44–5.06)
>=$75 k	Reference	Reference	Reference	Reference	Reference	Reference
Insurance type						
None	**5.37 (2.02–14.24)**	**3.04 (1.03–8.96)**	**6.37 (2.29–17.68)**	**3.33 (1.12–9.90)**	**6.26 (2.25–17.40)**	**3.58 (1.11–11.57)**
Private	Reference	Reference	Reference	Reference	Reference	Reference
Medicaid and/or Medicare	2.19 (0.86–5.59)	1.02 (0.30–3.46)	**2.77 (1.04–7.42)**	1.12 (0.34–3.71)	2.58 (0.94–7.08)	1.19 (0.33–4.30)
State/govt/military/IHS/other	2.24 (0.44–11.46)	1.38 (0.27–7.19)	3.08 (0.62–15.40)	2.17 (0.43–10.89)	3.81 (0.85–17.15)	2.10 (0.51–8.75)
History of medical problems						
No	Reference	Reference	Reference	Reference	Reference	Reference
Yes	1.50 (0.76–2.97)	1.10 (0.48–2.54)	1.69 (0.83–3.42)	1.27 (0.54–3.01)	1.87 (0.90–3.86)	1.0 (0.63–3.58)

[a]Univariate point estimates were derived from univariate models where each individual covariate was the sole independent variable in the model for each health service.
[b]Multivariable point estimates were derived from multivariable models including all covariates as independent variables for each health service.
Bolded values are statistically significant.

critical role in providing access to reproductive health services for underserved women, and our findings suggest that women continue to see family planning clinics as a key reproductive health service source.[3]

While many women in our study intended to use private offices or HMOs for reproductive health care services, 18%–20% of women 18–45 years old in the United States, an estimated 10.6–11.8 million individuals,[15] intended to use family planning clinics as their source of care for contraception, Pap/pelvic exam, and STI services. Moreover, we found that important subgroups of women intended to use family planning clinics for their future reproductive health services over private offices/HMOs—including women who were uninsured, unmarried, less educated, or low income.

As expected based on the historic role of family planning clinics as a safety net service, the odds of intending to use family planning clinics compared with other sources were high among uninsured women. While some of these women will obtain health insurance through forthcoming phases of ACA implementation—which may or may not change their reproductive health service source intentions—more than 30 million people are expected to remain uninsured after the full implementation of the ACA, in part due to state-to-state variability of Medicaid expansion.[16] For uninsured women, family planning clinics are likely to continue to play an important role in reproductive health service provision.

Our findings also suggest that women in the South and West have higher odds of intending to use family planning clinics for some services compared with women in the Northeast. Intention to use family planning clinics in the South and West is likely in part a reflection of higher poverty rates in the South and West compared with the Northeast and Midwest.[17] Socially conservative political efforts to defund family planning clinics in the South and Central West create a concerning conflict between women's intended service sources and the future of family planning clinic availability. It is unclear where and whether women will receive reproductive health care if their intended source of care is unavailable, particularly if they are of limited means.

Several limitations of our study are noteworthy. Although we used a national panel and survey weighting analytic techniques, findings may be biased by nonresponse of some groups and oversampling of parents. Moreover, our percentage of U.S. women intending to use family planning clinics for reproductive health services is likely an underestimate given the exclusion of two groups of women who have traditionally relied heavily on family planning clinics—minors and non-English-speaking women.[3,4] This may include undocumented residents who are ineligible to purchase health insurance through the exchanges created by the ACA.[18] Our models were also limited by relatively small subsample sizes in some sociodemographic groups. Additionally, while this study provides important preliminary insights into women's intended reproductive health service use during the early phase of ACA rollout, our study did not specifically ask women about the ACA and was not an evaluation of the effect of the ACA on reproductive health service utilization. Future research is needed to understand the impact and long-term implications of the ACA on women's intended reproductive health service use.[19] In particular, work is needed to understand how state differences in Medicaid expansion and family planning policies correlate with intentions and use of reproductive health care sources. Assessment of the roles of ''medical homes'' and coordinated primary care (which we did not measure in our survey) in reproductive health care is also needed. Finally, our survey did not include a comprehensive set of covariate measures, such as relevance of services to women sampled (e.g., contraception for a woman intending to get pregnant, in female–female relationship, or status post hysterectomy) or religious affiliation and had poor response to questions regarding previous source of care, which may be correlated with source of care intentions and are important considerations for future research.

Conclusion

This study captures a snapshot of U.S. women's intended use of reproductive health service sources, with a focus on women who intend to use family planning clinics, at a time when the role of family planning clinics has come under question. Our findings suggest that family planning clinics continue to be an important source for reproductive health care, particularly for certain subgroups of women including uninsured and unmarried women. Continued support and funding of family planning clinics services, as well as efforts to further expand access to health insurance, are needed to ensure that all women, including socially disadvantaged women, have access to quality reproductive health services. Additional research is needed to understand the impact of the full ACA implementation on women's reproductive health service use patterns and the complex factors influencing women's intentions for and use of different reproductive health services sources.

Acknowledgments

This work was supported by a National Institute for Child Health and Human Development Building Interdisciplinary Careers in Women's Health K-12 Career Development grant #K12HD001438 (KSH), the Robert Wood Johnson Clinical Scholars Program/Department of Veterans Affairs (EWP), and the Program on Women's Health Care Effectiveness Research in the Department of Obstetrics and Gynecology at the University of Michigan (VKD, director). The authors would also like to thank the team of the National Poll on Children's Health (MMD, director), which is sponsored by the University of Michigan Health System.

Author Disclosure Statement

No competing financial interests exist.

References

1. Hall KS, Moreau C, Trussell J. Determinants of and disparities in reproductive health service use among adolescent and young adult women in the United States, 2002–2008. Am J Public Health 2012;102:359–367.
2. Hall K, Moreau C, Trussell J. Discouraging trends in reproductive health service use among adolescent and young adult women in the United States: An analysis of data from the National Survey of Family Growth, 2002 to 2008. Hum Reprod 2011;26;254–2548.
3. Fowler CI, Gable J, Wang J, McClure E. Family planning annual report: 2012 Annual summary. Research Triangle Park, NC: RTI International, 2013.
4. Martinez G, Chandra A, Febo-Vazquez I, Mosher W. Use of family planning and related medical services among

women aged 15–44 in the United States: National Survey of Family Growth, 2006–2010. National Health Statistics Reports, No. 68. Hyattsville, MD: National Center for Health Statistics, 2013.
5. Hasstedt K. Title X: An essential investment, now more than ever. Guttmacher Policy Rev 2013;1648–55.
6. Finer LB, Sonfield A, Jones RK. Changes in out-of-pocket payments for contraception by privately insured women during implementation of the federal contraceptive coverage requirement. Contraception 2014;89:97–102.
7. Weisman CS, Chuang CH. Making the most of the Affordable Care Act's contraceptive coverage mandate for privately insured women. Womens Health Issues 2014;24: 465–468.
8. Salganicoff A, Ranji U, Beamesderfer A, Kurani N. Women and health care in the early years of the Affordable Care Act: Key findings from the 2013 Kaiser Women's Health Survey. Menlo Park, CA: Henry J. Kaiser Family Foundation, 2014.
9. Clark CR, Soukup J, Riden H, et al. Preventive care for low-income women in Massachusetts post-health reform. J Womens Health 2014;23:493–498.
10. Carter M, Desilets K, Gavin L, Moskosky S, Clark J. Trends in uninsured clients visiting health centers funded by the Title X Family Planning Program- Massachusetts, 2005–2015. MMWR Morb Mortal Wly Rep 2014;63:59–62.
11. Gold RB. Family Planning Centers Meet Health Care Reform: Lessons from Massachusetts. Guttmacher Policy Rev 2009;12:2–10.
12. Rao JNK, Scott A. The analysis of categorical data from complex sample surveys: Chi-squared tests for goodness of fit and independence in two-way tables. J Am Stat Assoc 1981;76:221–230.
13. Heeringa SG, West BT, Berglund PA. Applied Survey Data Analysis, 1st ed. Boca Raton: Taylor & Francis, 2010.
14. Hair JF, Anderson RE, Tatham RL, Black WC. Multivariate data analysis, 3rd ed. New York: Macmillan, 1995.
15. United States Census Bureau. 2010. Annual estimates of the resident population by single year of age and sex for the United States: April 1, 2010 to July 1, 2013. Available online at: http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk Accessed October 11, 2014.
16. Congressional Budget Office (CBO). 2013. CBO's Estimate of the net budgetary impact of the Affordable Care Act's health insurance coverage provisions has not changed much over time. Available online at: www.cbo.gov/publication/44176 Accessed October 11, 2014.
17. Bishaw A, Fontenot K. Poverty: 2012 and 2013, American community survey briefs. Washington, DC: U.S. Census Bureau, 2014.
18. Sonfield A, Pollack HA. The policy and politics of reproductive health, the Affordable Care Act and reproductive health: Potential gains and serious challenges. J Health Polit Policy Law 2013;38:373–391.
19. Hall KS, Fendrick AM, Zochowski M, Dalton VK. Women's health and the Affordable Care Act: High hopes versus harsh realities? Am J Public Health 2014;104:e10–e13.

Address correspondence to:
Halley P. Crissman, MD, MPH
Department of Obstetrics and Gynecology
University of Michigan
1500 East Medical Center Drive
Ann Arbor, MI 48109

E-mail: hcrissma@med.umich.edu

This article has been cited by:

1. Ashlee N. Sawyer, Melissa A. Kwitowski, Eric G. Benotsch. 2017. Are You Covered? Associations Between Patient Protection and Affordable Care Act Knowledge and Preventive Reproductive Service Use. *American Journal of Health Promotion* **97**, 089011711773609. [Crossref]
2. Katherine Simmonds, Caroline M. Hewitt, E. Angel Aztlan-James, Emily Skinner. 2017. Pathways to Competence in Sexual and Reproductive Health Care for Advanced Practice Nurses. *Journal of Obstetric, Gynecologic & Neonatal Nursing* . [Crossref]