



Reproductive healthcare denials among a privately insured population

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ABSTRACT

This study aimed to quantify and examine reproductive healthcare denials experienced by individuals receiving employer-sponsored health insurance. We conducted a national cross-sectional survey using probability and non-probability-based panels from December 2019-January 2020. Eligible respondents were adults employed by any Standard and Poor's 500 company, who received employer-sponsored health insurance. Respondents (n = 1,001) reported whether anyone on their healthcare plan had been denied a reproductive healthcare service in the past five years and details about their denials. We conducted bivariate analyses and multiple logistic regression to estimate factors associated with denials. Eleven percent of respondents (14% of women; 10% of men) reported a denial. Compared to lower-income respondents, those with income \geq \$50,000/year were less likely to experience a denial (aOR = 0.53; 95% CI 0.29–0.97). Compared to respondents who were never married, being married (aOR = 2.33; 95% CI: 1.03–5.30) or cohabiting (aOR = 2.43; 95% CI: 1.03–5.72) significantly increased odds of experiencing a denial. In 38% of cases the patient learned of the denial at a scheduled visit, while 23% learned in an emergency setting, and 13% after the encounter. Individuals covered by employer-sponsored health insurance continue to be denied coverage of preventive services. Employers and insurers can facilitate access to reproductive healthcare by ensuring that their plans include comprehensive coverage and in-network providers offer comprehensive services.

1. Introduction

Reproductive healthcare services are essential healthcare. There are approximately 3.8 million births annually in the U.S (Martin et al., 2019), and the average American woman spends 30 years of her life using some form of contraception (Sonfield et al., 2014). Reproductive healthcare comprises a variety of services, including prenatal services, labor and delivery, contraceptive care, tubal ligation and vasectomy, fertility treatment, abortion, and gender confirmation care.

The centrality of reproductive care for women's health was a key component of the 2010 Affordable Care Act (ACA) (111th Congress, 2010), which guaranteed coverage of prenatal care and women's preventive

healthcare, with regulations affirming coverage of contraceptive methods and counseling in all health insurance plans. However, subsequent successful legal challenges to these regulations resulted in exceptions allowing employers to opt out of providing insurance coverage for services based on religious objections. Reproductive healthcare denials are of particular salience in the context of Catholic-affiliated health institutions since these must follow the Ethical and Religious Directives for Catholic Health Care Services (United States Conference of Catholic Bishops, 2018), which prohibit contraception, sterilization, most fertility treatment, and abortion. In fact, even when patients have insurance that does include coverage of these services, they may still be denied care if they seek care at a Catholic-affiliated institution.

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A growing body of literature has focused on women's knowledge around religious restrictions on care (Freedman et al., 2018; Wascher et al., 2018), expectations and preferences related to care in religiously affiliated settings (Stulberg et al., 2019; Takahashi et al., 2019; Wingo et al., 2020), priorities in selecting a hospital for reproductive care (Hebert et al., 2020), and provider perspectives on reproductive care restrictions (Hasselbacher et al., 2020; Liu et al., 2019). In general, much of this work has focused on hospital refusal to provide specific services, but less is known about the role insurance plays in a patient's access to reproductive care free from religious restrictions.

In the U.S. context, health insurance plans typically offer lower premiums, co-pays, and fees for services when clients access providers and facilities within a defined network. Since the passing of the ACA, many insurance plans have used "network narrowing", reducing the number of in-network providers in their offerings, as a cost-saving strategy (Atwood and Lo Sasso, 2016; Kaiser Family Foundation, 2016; Polsky and Weiner, 2015). Though studied more extensively among health plans offered on the public exchanges (Atwood and Lo Sasso, 2016), this narrowing has also occurred in the private, employer-sponsored domain (Polsky and Weiner, 2015). Thus, while the ACA has facilitated and expanded coverage of specific services, network adequacy, i.e. the availability and number of providers in a given network who actually provide those services, is a different matter.

Half of Americans receive their health insurance through their employer (Kaiser Family Foundation, 2019). Having fewer options for in-network providers, coupled with the expansion of the Catholic healthcare market share where restrictions are prevalent (Drake et al., 2020; Uttley et al., 2016), makes it plausible that privately insured individuals may have few options and may face barriers when accessing care. According to a report by the Agency for Healthcare Research and Quality, 43% of private-sector employers who provide healthcare only offer one plan, thereby further restricting employees' network options (Agency for Healthcare Research and Quality, 2019).

In the area of reproductive healthcare services, these factors are highly relevant, as institutional policies restricting certain services filter down from the healthcare system to individual hospitals and clinicians and may coalesce to deny insured patients access to beneficial services. The purpose of this study was to estimate how many privately insured employees of Standard & Poor's (S&P) 500 companies had experienced a recent denial for reproductive healthcare, the circumstances around those denials, and factors associated with experience of a denial. Given the complexity of the healthcare landscape in the U.S., this analysis examines any denial of reproductive healthcare, including denials due to lack of insurance coverage and denials at the provider or facility level.

2. Methods

2.1. Survey development

We developed a survey instrument informed by themes from qualitative interviews with employers and the extant literature. Survey items asked about insurance features and reproductive health preferences of S&P 500 company employees with employer-sponsored health insurance. This study was granted exempt status by the University of California, San Francisco and the University of Chicago institutional review boards.

2.2. Sample, recruitment and weighting

Our survey sample drew respondents from two different sampling frames. NORC at the University of Chicago recruits and operates the AmeriSpeak Panel, which is a nationally representative, probability-based panel of noninstitutionalized civilian adults. The AmeriSpeak Panel used the 2010 NORC National Frame, which provides more than 97% sample coverage of American households. AmeriSpeak includes more than 35,000 households recruited via mail, telephone and in-

person modes with oversamples of young adults, Hispanics, and non-Hispanic African Americans. AmeriSpeak members may complete up to 3 phone or web surveys each month and receive points that can be redeemed for cash or equivalent. In addition to the AmeriSpeak sample, this study sampled from Dynata, a non-probability-based sample drawn from panels, web intercept samples and specialty lists recruited via web and email invitations. A full description of this study's methods is described elsewhere (Schueler et al., 2021).

Eligible respondents were 18 to 64 years of age, employed by an S&P 500 company and receiving health insurance through that employer, and able to complete the survey in English. NORC fielded the survey from December 19, 2019 to January 19, 2020. In total, 1,243,544 people received invitations to participate: 15,019 AmeriSpeak panel members and 1,228,525 members of the Dynata panel. Of the 4,518 AmeriSpeak panel members who completed screening questions, 447 were eligible and 425 completed the survey. Of the 7,083 Dynata panel members that completed screening questions, 666 met eligibility criteria and 576 completed the survey.

Combining eligible participants across the two samples, 1001 of the 1113 eligible respondents completed surveys, for an overall American Association for Public Opinion Research (AAPOR) completion rate of 90%.

NORC used a multi-step process to estimate sampling weights for the combined sample, first estimating weights for the AmeriSpeak respondents in order to adjust for their probability of selection, correct for bias introduced by non-respondents, and make adjustments to population benchmarks. NORC then estimated weights for the non-probability sample, using True North calibration services to account for biases introduced in that sample. As a last step, NORC used a weighted version of the AmeriSpeak sample and the calibrated non-probability sample to derive overall sampling weights for the combined sample. Similar techniques have been used in other studies that combined the AmeriSpeak sample and other non-probability-based samples (Bye et al., 2016; Gupta et al., 2019).

2.3. Survey measures

Outcomes To identify experiences of reproductive healthcare denials, the survey asked respondents "In the past 5 years, has anyone covered under your individual or family health insurance plan sought any reproductive health service that was denied?" Response options to this question were yes, no, and don't know. Among those who responded yes, the survey asked follow up questions related to who on the plan experienced the denial, what type of service was denied, whether it was a denial related to health insurance coverage or the provider network (and if network, whether related to the hospital/clinic or the clinician), and when in the process the respondent learned of the denial. Participants could report multiple denial experiences but were asked to provide denial experience details on only the most recent or most significant.

2.3.1. Covariates

Demographic measures available from both panel sources included: age, sex, race, Hispanic ethnicity, highest educational attainment, total annual household income, geographic region of country, and residence in a metropolitan area (area with a population of at least 100,000). We categorized age using four categories (18–24 years, 25–34 years, 35–44 years and 45–64 years). Because of small cell sizes associated with this relatively rare event, we collapsed race and ethnicity into white and non-white (which included Hispanic) in order to maximize statistical power. Panel questions asked respondents their sex with only male and female as response options; no gender identity question was asked. We collapsed marital status into the four categories of married, widowed/divorced/separated, never married, and cohabiting. We collapsed household income into two categories: up to \$49,999, \$50,000 or more. The survey also asked respondents who, in addition to themselves, shared the health insurance plan through their employer.

2.4. Statistical analysis

We estimated descriptive statistics to describe the study sample using proportions for categorical measures. We estimated the frequency of experiencing a reproductive health service denial and, among those who had at least one denial, we estimated descriptive frequencies for each follow-up question related to the denials. We conducted chi squared tests to evaluate associations between respondent characteristics and responses to the question about experiencing a reproductive health service denial in the past 5 years. Variables found to be significantly associated ($p < 0.05$) or marginally associated ($p < 0.10$) in bivariate analyses were included in a multivariable regression model to examine the association between respondent characteristics and experiencing a reproductive health service denial in the past 5 years. For multivariable regression, responding “yes” to the reproductive health service denial question was considered having experienced a reproductive health service denial. Respondents who answered “no” or “don’t know” were collapsed together for regression analysis.

We performed all data analysis using Stata 14 (StataCorp, College Station, TX) (StataCorp, 2015). All analyses used weighting and accounted for the complex survey design; alpha was set at 0.05.

3. Results

Descriptive statistics of the survey sample are shown in Table 1. Two thirds of respondents (67%) were male, and nearly half (47%) reported other family members covered on their health insurance plan. Fifty-two percent of respondents were 35 years or older, and 55 percent were married or co-habiting. Fifty-three percent were non-Hispanic White,

Table 1
Descriptive characteristics of the study sample, weighted.

	n (N = 1,001)	%
Sex		
Female	334	33.4
Male	667	66.6
Who is covered on insurance plan		
Only respondent	525	52.5
Partner or spouse	326	32.5
Minor children	285	28.5
Adult children 18–26 years	78	7.8
Adult children 27 years and older	4	0.4
Other dependent	8	0.8
Age group		
18–24 years	123	12.2
25–32 years	357	35.6
35–44 years	237	23.7
45 years and older	285	28.4
Marital status		
Married	437	43.7
Widowed/divorced/separated	103	10.2
Never married	344	34.4
Cohabiting	117	11.7
Race/Ethnicity		
White	527	52.6
non-White	474	47.4
Education		
High school or less	287	28.6
Some college	395	39.5
College graduate or more	319	31.9
Income		
<=\$49,999	436	43.6
\$50,000 or more	565	56.4
Residence		
Non-metropolitan	155	15.5
Metropolitan	846	84.6
Region		
Northeast	131	13.1
Midwest	202	20.2
South	441	44
West	227	22.7

and nearly one third (32%) had a college degree or higher. Over half (56%) reported a household income of at least \$50,000 annually, a majority (85%) lived in metropolitan areas, and a plurality (44%) lived in the South.

Denials of reproductive healthcare services are shown in Table 2. Eleven percent of respondents reported someone on their plan experienced a denial of reproductive healthcare in the past five years, with 82 percent reporting they had not and 7 percent reporting they did not know. Experience of a reproductive healthcare denial was significantly

Table 2
Frequency and percentages of respondents experiencing reproductive health service denials by selected characteristics, weighted.

	Yes n (%)	No n (%)	Don't know n (%)	p- value
Total	111 (11.1)	817 (82.0)	68 (6.8)	
Sex				
Male	64 (9.7)	565 (85.5)	32 (4.9)	0.0391
Female	47 (14.1)	252 (75.3)	36 (10.7)	
Who is covered				
Just myself	51 (9.6)	436 (82.9)	39 (7.5)	0.5621
Myself and others	60 (12.9)	381 (81.1)	29 (6.1)	
Age				
18–24 years	15 (11.9)	89 (72.4)	19 (15.8)	0.0402
25–34 years	55 (15.5)	274 (77.3)	26 (7.3)	
35–44 years	24 (10.2)	203 (85.8)	10 (4.0)	
45 years and older	17 (6.1)	251 (89.2)	13 (4.7)	
Marital Status				
Married	53 (12.2)	350 (80.7)	31 (7.1)	0.0881
Widowed/divorced/ separated	7 (6.5)	94 (91.7)	2 (1.8)	
Never married	29 (8.5)	282 (82.3)	31 (9.2)	
Cohabiting	22 (18.8)	92 (78.0)	4 (3.2)	
Race/ethnicity				
Non-Hispanic white	48 (9.2)	454 (86.2)	25 (4.5)	0.0628
non-white	63 (13.4)	363 (77.4)	43 (9.2)	
Education				
High School or less	33 (11.6)	225 (79.1)	27 (9.4)	0.5683
Some college	49 (12.6)	317 (80.9)	25 (6.5)	
College or more	29 (9.0)	275 (86.1)	16 (5.0)	
Income				
<=\$49,999	68 (15.8)	328 (75.5)	38 (8.8)	0.0111
\$50,000 or more	43 (7.6)	489 (87.1)	30 (5.3)	
Region				
Northeast	12 (9.4)	106 (80.9)	13 (9.7)	0.6594
Midwest	25 (12.2)	169 (83.6)	9 (4.3)	
South	41 (9.3)	367 (83.2)	33 (7.5)	
West	33 (15.0)	175 (79.0)	13 (6.1)	
Metropolitan				
Non-metropolitan	17 (10.8)	123 (79.2)	15 (10.0)	0.7008
Metropolitan	94 (11.2)	694 (82.6)	52 (6.2)	

associated with respondent sex, age, and household income, and marginally associated with race/ethnicity and marital status. Fourteen percent of women reported someone on their plan was denied reproductive care, compared to 10% of men. Younger age was also associated with experience of a denial, with 12–16% of those under the age of 35 years reporting a denial compared to 6–12% of those age 35 or older. Twelve percent of those who were married and 19% of those who were cohabiting reported experiencing a denial, compared to 7% of those widowed/divorced or separated and 9% of those who were never married. Thirteen percent of those who were not white reported a denial, compared to 9% of white respondents. Sixteen percent of those who reported a household income of less than \$50,000 a year reported a denial, compared to 8% of those who had incomes of \$50,000 or more. Education, region, and metropolitan residence were not associated with experiencing a denial.

Details about the denials experienced by respondents are shown in Table 3. Of the 111 respondents who reported denials, 90 (81%) provided additional details. The most common types of service denials were birth control services (25%), delivery of a baby (23%) and prenatal care (22%). Sixteen percent and 18% were denied tubal ligation and vasectomy services, respectively, and 9% were denied abortion care. Sixty-three percent of denials related to the respondent themselves, and 39% to a partner. A third of denials were network related, i.e. an in-network health facility or physician would not provide the service, and most of those were based on the facility rather than the clinician. In nearly 4 in 10 denials the respondent learned of the denial at the scheduled visit itself, while 23% learned in an emergency setting, and 13% after the service was received.

Adjusted odds ratios from multivariable logistic regression showing the association between characteristics significant in bivariate analysis and the odds of experiencing a reproductive health service denial in the past 5 years are shown in Table 4. Having an income of at least \$50,000 a year was associated with a 52% reduction in the odds of experiencing a denial (aOR = 0.48; 95% CI 0.25–0.93). Compared to those who were never married, being married (aOR = 2.33; 95% CI: 1.03–5.30) or cohabiting (aOR = 2.43; 95% CI: 1.03–5.72) more than doubled the odds of experiencing a denial. Age, sex, and race/ethnicity were not significantly associated with experiencing a denial in adjusted analysis.

4. Discussion

In a nationally representative survey of employees of S&P 500 employees, we found that 11% of respondents reported that someone on their healthcare plan was denied a reproductive health service in the past five years. Among women, 14% reported a denial. Likelihood of reporting a reproductive healthcare denial was associated with female sex, younger age, and lower income. Respondents reported a variety of services that were denied, with birth control, maternity care (i.e. delivery of a baby), and prenatal care the most commonly reported denials. Three quarters of respondents who reported details about their denials had only learned about the denial at or following their healthcare visit. Findings from this study suggest that recent denials related to reproductive healthcare, while not highly prevalent, are nevertheless related to a range of services, experienced by a range of individuals covered on a plan, and are most often learned of during or after a beneficiary is trying to access the service. Furthermore, despite all persons in the study having private, employer-sponsored health insurance, individuals with a lower income and those who are married or cohabiting are more likely to be denied a reproductive healthcare service.

Findings from this study indicate that having insurance does not prevent patients from experiencing gaps in coverage. Despite the ACA's standardization of what services are mandated to be covered on private, employer-sponsored plans, most notably maternity care, birth control and prenatal care (Kaiser Family Foundation, 2020a), these services were the most commonly reported denials. This contradiction suggests that S&P 500 employers, and likely others as well, are either not conforming

Table 3
Denial details among respondents reporting reproductive health service denials in the past 5 years (n = 111).

	Total	Me	My partner	My minor children	My adult children
Who experienced denial	90	70 (63.0)	43 (38.7)	23 (20.1)	6 (5.8)
Type of service sought					
Prenatal care	24 (21.7)	11 (45.5)	6 (32.2)	1 (14.9)	2 (29.7)
Delivery of a baby	26 (23.2)	5 (20.1)	5 (27.0)	4 (45.2)	3 (49.5)
Pelvic Exam	22 (19.7)	5 (19.0)	2 (12.2)	4 (45.3)	1 (16.5)
Tubal Ligation	17 (15.7)	3 (1.1)	0 (0)	1 (7.4)	0 (0)
Vasectomy	20 (17.9)	0 (0)	1 (3.9)	0 (0)	0 (0)
Transgender/Gender confirmation care	7 (5.9)	0 (0)	0 (0)	0 (0)	0 (0)
Birth Control	27 (24.5)	4 (16.3)	5 (28.6)	1 (11.2)	2 (30.4)
Abortion	10 (9.3)	1 (4.9)	0 (0)	0 (0)	0 (0)
Pregnancy complication	13 (11.7)	0 (0)	1 (4.5)	0 (0)	0 (0)
Fertility treatment	19 (17.3)	2 (6.5)	4 (25.3)	0 (0)	0 (0)
Other	18 (16.3)				
Denial Type					
Service not covered by health insurance	65 (69.4)	44 (73.5)	24 (78)	6 (34.2)	4 (100)
Any network denial	32 (33.7)	20 (32.7)	10 (31.4)	12 (66.3)	1 (28.2)
A covered/in-network hospital/clinic would not provide the service	26 (27.8)	15 (25.9)	32 (24.1)	11 (59.6)	0 (0)
A covered/in-network clinician would not provide the service	10 (10.2)	7 (11.4)	4 (12.3)	1 (6.7)	1 (28.2)
Other	1 (0.6)	1 (0.9)	0 (0)	0 (0)	0 (0)
Don't know	2 (1.6)	1 (1.6)	0 (0)	1 (3.3)	0 (0)
When did you learn that you were denied the service? (n = 90)					
During a scheduled visit	36 (38.8)	28 (46.7)	11 (36.1)	2 (13.3)	1 (23.4)
During an emergency visit	21 (22.8)	15 (25.0)	12 (38.1)	6 (34.6)	2 (43.3)
While scheduling the service	14 (14.7)	12 (20.7)	4 (12.1)	3 (15.4)	1 (28.2)
While checking insurance coverage	20 (21.2)	12 (19.6)	5 (15.1)	3 (15.5)	3 (56.7)
After receiving the service	12 (13.2)	4 (6.7)	5 (16.2)	3 (18.0)	4 (100)
Don't know	2 (2.5)	1 (2.3)	0 (0)	3 (15.8)	0 (0)
Do you know why the clinic/doctor denied the service? (n = 20)					
Yes	15 (75.5)	5 (70.0)	3 (23.8)	1 (100)	
No	4 (21.5)	2 (30.0)	7 (57.6)	0 (0)	
Don't know	1 (3.0)	0 (0)	2 (18.6)	0 (0)	

Note: All percentages shown are weighted. All data presented as n(%). Columns and rows in this table may exceed 100% and total column because participants could report multiple details and check all that applied about on multiple denial experiences, for multiple individuals covered on their plans. Conversely, rows may not add up to the total column if participants chose not to provide responses to the follow-up questions regarding who experienced a denial.

to the federal guidelines outlined by the ACA or that there are loopholes that employers and/or insurance companies are able to leverage that effectively reduce the range of services that are guaranteed/covered under women's preventive care.

While many denials reported in this study were insurance-related, a substantial proportion were related to institutional denials, whereby

Table 4

Adjusted Odds ratios from multivariable logistic regression estimating the odds of experiencing a reproductive health service denial in the past 5 years by selected characteristics, weighted.

	AOR (95% CI)
Sex	
Male	ref
Female	1.14 (0.63–2.10)
Marital Status	
Married	2.33 (1.03–5.30)
Widowed/divorced/separated	1.02 (0.33–3.12)
Never married	ref
Cohabiting	2.43 (1.03–5.72)
Age	
18–24 years	1.78 (0.44–7.19)
25–34 years	2.43 (0.97–6.10)
35–44 years	1.63 (0.63–4.17)
45 years and older	ref
Race/ethnicity	
Non-Hispanic white	ref
non-white	1.42 (0.78–2.59)
Income	
0–\$49,999	ref
\$50,000 or more	0.48 (0.25–0.93)

individual hospitals or clinicians in the insurance network denied a reproductive healthcare service. While the specific reasons for denial were outside the scope of this study, it is possible that some of these denials may have related to the religious affiliation of the hospital or even the individual clinician. This finding adds to the rich and growing body of research surrounding Catholic and other religious health care settings and the restrictions imposed in these settings on reproductive care.

That a combined three quarters of denials were learned of during or following a healthcare visit, by individuals who hold private, employer-sponsored insurance suggests that healthcare consumers consider these services basic, essential healthcare that should be covered on their plans. Comparatively, only 20% of respondents in this study learned of the denial while checking their insurance coverage. “Surprise medical bills” resulting from charges incurred when a covered individual inadvertently receives care from an out-of-network provider are a relatively common experience. In a recent analysis of medical claims data from large employer plans, the authors found that 18% of emergency room visits and 16% of in-patient admissions resulted in surprise medical charges, though these percentages varied significantly by state (Pollitz et al., 2020). Despite the efforts of the ACA, the American healthcare insurance ecology is persistently complex and likely confusing to consumers. In addition, previous research has documented the numerous work-arounds clinicians frequently employ in order to enable patients to receive certain services, such as making referrals to another office where the clinician can provide the service or documenting other symptoms in order to prescribe hormonal contraception (Liu et al., 2019). The level of denials reported in the current study may well represent a conservative estimate of the actual level of denials, since consumers may not recognize these workarounds employed in cases of denial.

Previous nationally representative studies of reproductive age women have shown that most women (>86%) would expect labor and delivery services to be offered in a hospital setting, more than 76% would expect birth control to be offered (Stulberg et al., 2019) and that 70% of women feel it is important to know about any hospital restrictions on care related to religious affiliation (Freedman et al., 2018). While only half (48%) of the American public is aware that the ACA stipulates no cost-sharing in regards to preventive services, and 38% are aware of this in regards to birth control specifically, 81% and 54% view protection of these provisions as very important. An even higher majority (89%) support the ACA’s requirement that maternity care is covered (Kaiser Family Foundation, 2020b).

Our study provides key evidence on denials of reproductive care that privately insured individuals experience. Other national reports confirm

at least one in five women paid out of pocket for preventive services in 2017, including privately insured women (Kaiser Family Foundation, 2018). In regards to contraceptive coverage, specifically, states policies that have moved beyond the ACA requirements to ensure women have access to a full range of methods have helped address some gaps (Guttmacher Institute, 2021); furthermore, women in states with these policies appear to use more highly effective methods compared to women in states that do not mandate this coverage (Atkins and Bradford, 2014). We also acknowledge, however, that denials represent only one view into gaps in insurance coverage, as denials assume that a service was sought. Policyholders and covered individuals may experience lack of coverage before even seeking a service, since they may be aware that a service is not available or covered or may not be covered for a variety of reasons; reasons may be related to their specific characteristics, including the risk factors explored here and those beyond the scope of the current analysis. While not a focus of this paper, a greater understanding of the broader landscape of insurance coverage and related gaps around preventive care is needed.

This study has a number of limitations. As noted above, health insurance is confusing for many Americans, and the estimated prevalence of denials may be biased by either recall bias or misclassification bias on the part of respondents. Recall bias is particularly an issue as respondents were reporting on others covered on their plan and may not have known exactly who was denied and for what service. In addition, we surveyed a very specific population of individuals, i.e. those employed by an S&P 500 company and receiving employer-sponsored health care; therefore the findings from this study may not be generalizable to the broader U.S. population. Third, in order to survey this specific population, we used a panel-based sample supplemented with a non-probability based sample. While the non-probability sample was calibrated and weighted to correct for differences in that sample compared to the AmeriSpeak sample, and all analyses were weighted, the low response rate from the non-probability sample and the absence of some information from respondents in that sample may have introduced some bias. Fourth, we did not ask about the sex, gender identity, or sexual orientation of the person who was denied, which would have strengthened this analysis by indicating who is most at risk of experiencing a denial. Finally, while outside the scope of this study, we did not ask about any non-reproductive health care services that participants also might have been denied, so are unable to compare to denials for other preventive services.

Reproductive health service denials are not isolated to those services considered most controversial, such as abortion or gender confirmation care. Rather, this study demonstrates that individuals covered by employer-sponsored health insurance continue to be denied coverage or access to preventive services for a variety of reproductive health needs, even those explicitly “protected” under the ACA, such as prenatal and maternity care. Increased transparency around coverage of services, and more efforts on the part of insurance companies and employers to ensure that their offered plans include facilities and clinicians that adhere to these guidelines is needed. Lastly, this study demonstrates that lower income is associated with denials of care, perpetuating inequitable access to preventive care. To address this, policymakers should hold insurers and employers accountable for covering comprehensive reproductive health services, and decision makers at policy, insurer, and employer levels should increase efforts to ensure that covered individuals have a variety of in-network options that offer these services.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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