Impact of Insurance Coverage for Abortion in Hawai'i on Gestational Age at Presentation and Type of Abortion, 2010-2013

Shandhini Raidoo MD, MPH; Mary Tschann PhD, MPH; Bliss Kaneshiro MD, MPH; and Tetine Sentell PhD

Abstract

Insurance coverage for abortion varies between states, and in Hawai'i most private insurance companies and state Medicaid provide coverage for abortion. Very few patients pay out-of-pocket for an abortion. Hawai'i presents a unique opportunity to describe the sociodemographic differences between women seeking an abortion based on type of insurance coverage or who self-pay, and how this coverage impacts their care. Examined here were the differences in gestational age at time of presentation for abortion and type of abortion (medical, in-office procedure, or hospital facility procedure) chosen by 1803 patients presenting to a major abortion provider in Hawai'i from 2010 to 2013 based on payment method: private insurance, state Medicaid, and self-pay. Self-pay patients were demographically similar to those using private insurance with respect to age, race, and gestational age at time of presentation. Medicaid patients were distinct. They presented for care at a gestational age 13.3 days later than private insurance or self-pay patients even when controlling for age, race, prior parity, and prior abortion. Overall, 45.3% of Medicaid patients presented at greater than 14 weeks. Types of abortion differed between the insurance category groups, however these differences were no longer significant when stratified by gestational age. State Medicaid patients present for abortion care almost 2 weeks later than those with private insurance or who pay out of pocket, increasing personal and healthcare system costs associated with the procedure. The factors that contribute to this difference should be elucidated as they have important public health implications regarding timely access to care.

Keywords

abortion, insurance, Hawai'i, Medicaid

Introduction

Approximately 1 in 4 women in the United States will have an abortion by the age of 45.[1] While abortion is a common experience for women in the United States, access to timely care is often challenging. Financial barriers are some of the most significant reasons that women experience delays in obtaining abortion care or are unable to obtain one altogether.[2] Delays in accessing abortion result in a more advanced gestational age, which affects the type of abortion a woman can have, the number of visits to a provider required to complete the procedure, and the type of anesthesia used, all of which can result in increased costs and greater risks for the patient.

Abortion procedures vary based on gestational age, and the cost increases with increasing gestational age. At 10 weeks gestation or less, most patients have an option of a medical abortion or a uterine aspiration with minimal anesthesia. Uterine aspiration in the first trimester is typically done in an outpatient setting with local anesthesia or minimal sedation. A second trimester abortion, or uterine evacuation, requires cervical preparation that can take several hours or several days. Though it may be done in an outpatient setting with minimal anesthesia, a uterine evacuation is often performed in a surgical center or hospital facility under moderate sedation or general anesthesia. The additional cost of anesthesia, equipment, and services contributes to the higher cost for a second trimester abortion compared to a first trimester abortion.[3,4] A first trimester abortion in the United States costs approximately $470 overall, but by 20 weeks gestation it may cost up to $1500.[5] An abortion in a hospital, including anesthesia and facility costs, may be as much as several thousand dollars. Although some states permit insurance coverage for abortion, the majority of women in the United States do not have insurance coverage and pay these costs out-of-pocket for their abortions. A recent publication found the average out-of-pocket cost of an abortion for a woman who did not have insurance coverage to be $575, which comprised a significant portion of most women's monthly incomes.[6]

Insurance coverage for abortion varies greatly across the United States. The Hyde Amendment is a federal legislative provision that bars the use of federal funds, including Medicaid funds, for abortion with few exceptions.[7] The Hyde Amendment disproportionately affects women of color and women of lower socioeconomic status who are more likely to be covered by Medicaid and have limited access to abortion as a result.[7] Seventeen states currently permit the use of state Medicaid funds for abortion care, although enrollment delays and low reimbursement rates can result in Medicaid-eligible women having to pay out-of-pocket for abortion care.[2,8] Seventeen states permit the use of private insurance funds for abortion, although coverage may be limited by similar factors as well as restrictions imposed by specific insurance plans.[9]

An assessment of women's use of insurance coverage for abortion in Massachusetts, where both state Medicaid and private insurance cover abortion services, demonstrated that most women have affordable and accessible abortion care, although significant delays in insurance enrollment contributed to some women paying out of pocket despite being eligible for coverage.[10] Financial strain was reported as the most common obstacle by women obtaining an abortion in South Carolina, a state in which neither public nor private insurance coverage

for abortion is available except in cases of rape, incest, and life-endangering medical conditions.[4] In the state of Hawai'i, both state Medicaid and private insurance provide coverage for abortion care with few exceptions. As a result, only women who have a federal insurance plan or no insurance need to self-pay for their abortions.

This study aims to describe how variations in insurance type impact gestational age at time of presentation for abortion and type of procedure chosen in Hawai'i, a state with broad public and private insurance coverage for these services.

Methods

A retrospective analysis of all patients seen for abortion care at the Women's Options Center, one of the major abortion providers in Hawai'i, from October 2010 to May 2013 was conducted. The Women's Options Center has 2 clinical sites where patients are referred. Approximately half of first trimester abortions and the majority of second trimester abortions in the state of Hawai'i are done through the Women's Options Center. Administrative data were manually extracted from electronic medical records. Only those patients who had a termination for an undesired pregnancy were included; those who decided to terminate for a maternal health condition, fetal condition, or other indications were excluded.

Patients were grouped into 3 categories regarding payment for abortion: "private" for those using a commercial plan; "public" for those who used Medicaid; and "self-pay" for those who paid out-of-pocket without using any form of insurance. The type of abortion that can be done varies based on gestational age, and gestational age was categorized based on these cutoffs based on the Women's Options Center practice: up to 10 weeks, during which a woman may choose a medical abortion or in-office procedure; 10 to 14 weeks, during which a woman may choose a procedure either in-office or in a hospital setting; and greater than 14 weeks, during which a woman will have a procedure in a hospital setting.

Descriptive statistics were calculated for age and race. Associations between payment type and prior parity, prior abortion, gestational age at presentation, and type of abortion were analyzed using chi-squared tests for categorical variables and ANOVA for continuous variables. Factors that were identified in univariate analysis to be significantly associated with a difference in insurance payment type were included in a linear regression to predict gestational age at time of presentation. Women reported their reasons for self-paying for their abortion, and these were recorded when available. Statistical analysis was performed using SPSS (version 24.0, SPSS, Chicago, IL). This research was conducted in accordance with the prevailing ethical principles and approved by the Western Institutional Review Board (WIRB #1143885).

Results

Of the 2003 records in the database, 1815 met criteria for study inclusion. Twelve of these were excluded due to incomplete data regarding gestational age at time of presentation. The remaining 1803 patients were included in this study. Of these, 773 (42.9%) used a private form of insurance to pay for their abortion, 929 (51.5%) used Medicaid, and 101 (5.6%) were self-pay.

Differences in demographic characteristics between the 3 groups are noted in Table 1. Patients who used a private form of insurance for abortion coverage had a higher mean age (26.8 ± 7.2 years) than those using Medicaid (25.5 ± 5.9 years) or self-pay patients (25.4 ± 6.2 years, $P < .001$). Almost half of the patients (49.1%) who used Medicaid coverage for abortion identified as Native Hawaiian/Pacific Islander, which was higher than those using private insurance (25.2%) or self-pay patients, (28.4%, $P < .001$). More than half of the patients using private insurance identified as Asian (52.9%) compared to 30.0% of Medicaid patients and 38.9% of self-pay patients ($P < .001$).

Patients using Medicaid had a significantly higher mean prior parity (1.7 ± 1.5) compared to private insurance patients (1.0 ± 1.3) and self-pay patients (0.7 ± 1.0, $P < .001$). In the private insurance and Medicaid groups, 43.2% and 54.3% of patients, respectively, had a history of at least one prior abortion, compared to only 23.8% of the self-pay group ($P < .001$).

Mean gestational age at time of presentation for abortion varied significantly between the groups. Patients who used Medicaid for insurance coverage for abortion presented at a mean gestational age of 89.7 ± 35.2 days compared to 73.8 ± 32.2 days for patients using private insurance and 74.9 ± 33.8 days for self-pay patients ($P < .001$). When stratified by gestational age categories (≤10 weeks, 10-14 weeks, and ≥14 weeks) based on eligibility for different types of abortion, 62.5% of private insurance patients and 60.4% of self-pay patients presented at ten weeks or less, compared to 40.8% of Medicaid patients ($P < .001$).

Results of the linear regression analysis to determine if payment method remained significant in predicting gestational age at time of presentation for abortion after controlling for other relevant factors, specifically age, race, prior parity, and prior abortion status are noted in Table 2. The dependent variable was gestational age measured in days. After controlling for these other variables, Medicaid insurance remained significantly associated with later gestational age at time of presentation for abortion ($\beta = 13.79$ days; 95% CI = 10.40, 17.17). Patient age, prior parity, and prior abortion were also significantly associated with an increase in gestational age at time of presentation. Neither race nor self-pay status were predictive of gestational age at time of presentation. Patient age and gestational age were negatively correlated, with a reduction of approximately one day of gestational age with each increasing year of patient age (95%

CI = -1.29, -0.72). Prior parity was associated with an increase in gestational age of 2.48 days (95% CI = 1.16, 3.81), and prior abortion with an increase of 3.12 days (95% CI: 0.99, 5.24).

Differences in type of abortion chosen are noted in Table 3. Almost half of patients using Medicaid for payment (49.9%) underwent a procedure in a hospital facility compared to 27.7% of private insurance and 20.8% of self-pay patients ($P < .001$). Self-pay patients were most likely to choose an in-office abortion procedure (48.5%) compared to 31.1% of patients using Medicaid and 42.7% of those using private insurance ($P < .001$). When stratified by gestational age categories, however, there was no significant difference noted in type of abortion based on insurance or self-pay status.

Patients' reasons for self-pay are noted in Table 4. Of these patients, 55 (54.5%) of were uninsured, 26 (25.7%) did not have insurance coverage specifically for abortion and 2 (2.0%) did not want their insurance subscriber to know about their abortion.

Table 1. Demographics and Pregnancy History for Women Receiving an Abortion at Major Provider in Hawai'i between October 2010 and May 2013

	Private (n=773)	Medicaid (n=929)	Self-Pay (n=101)	*P*-value
Demographics	**mean+SD**	**mean+SD**	**mean+SD**	
Age (years)	26.8±7.2	25.5±5.9	25.4±6.2	<.001
Race	**n (%)**	**n (%)**	**n (%)**	<.001
White	122 (16.6)	115 (12.8)	19 (20.0)	.04
American Indian/Alaskan Native	2 (0.3)	4 (0.4)	0	.70
Asian	390 (52.9)	270 (30.0)	37 (38.9)	<.001
Native Hawaiian/Pacific Islander	186 (25.2)	441 (49.1)	27 (28.4)	<.001
Black/African-American	2 (0.3)	17 (1.9)	7 (7.4)	<.001
Mixed (2 or more races)	35 (4.7)	52 (5.8)	5 (5.3)	.65
Unknown/Not reported	36	30	6	
Pregnancy Characteristics	**mean+SD**	**mean+SD**	**mean+SD**	
Prior parity	1.0±1.3	1.7±1.5	0.7±1.0	<.001
Gestational age at time of presentation for abortion (days)	73.8±32.2	89.7±35.2	74.9±33.8	<.001
Prior abortion	**n (%)**	**n (%)**	**n (%)**	<.001
Yes	334 (43.2)	504 (54.3)	24 (23.8)	
No	192 (24.8)	272 (29.3)	30 (29.7)	
Unknown	247	153	47	
Gestational Age Categories (based on eligibility for abortion type)	**n (%)**	**n (%)**	**n (%)**	<.001
≤10 weeks	483 (62.5)	379 (40.8)	61 (60.4)	
10-14 weeks	110 (14.2)	131 (14.1)	20 (19.8)	
>14 weeks	180 (23.3)	419 (45.1)	20 (19.8)	

Table 2. Linear Regression Model Predicting Gestational Age (in days) at Time of Presentation for Abortion

	Unstandardized Coefficient	95% CI	*P*-value
Constant (Intercept)	93.02		
Age	-1.01	-1.29, -0.72	<.001
Race	-0.32	-1.40, 0.77	.57
Prior parity	2.48	1.16, 3.81	<.001
Prior abortion	3.12	0.99, 5.24	.004
Insurance Status			
Private	Reference		
Public	13.79	10.40, 17.17	<.001
Self-Pay	-0.46	-7.40, 6.48	.90

CI: Confidence Interval

Table 3. Type of Abortion: Medical Abortion vs. In-Office Abortion vs Hospital Facility Abortion[a]				
	Private (n=773)	**Medicaid (n=929)**	**Self-Pay (n=101)**	***P*-value**
	n (%)	**n (%)**	**n (%)**	
Overall				
Medical Abortion	229 (29.6)	176 (18.9)	31 (30.7)	<.001
In-Office Abortion	330 (42.7)	289 (31.1)	49 (48.5)	<.001
Hospital Abortion	214 (27.7)	464 (49.9)	21 (20.8)	<.001
≤10 Weeks				
	Private (n=483)	Medicaid (n=379)	Self-Pay (n=61)	*P*=.845
Medical Abortion	228 (47.2)	176 (46.4)	31 (50.8)	
In-Office Abortion	248 (51.3)	200 (52.8)	29 (47.5)	
Hospital Abortion	7 (1.4)	3 (0.8)	1 (1.6)	
10-14 Weeks				
	Private (n=110)	Medicaid (n=131)	Self-Pay (n=20)	*P*=.081
Medical Abortion	1 (0.9)	0	0	
In-Office Abortion	82 (74.5)	89 (67.9)	19 (95)	
Hospital Abortion	27 (24.5)	42 (32.1)	1 (5)	
>14 Weeks[a]				
	Private (n=180)	Public (n=419)	Self-Pay (n=20)	N/A

[a] All abortions ≥14 weeks were hospital facility abortions, consistent with clinical practice at the Women's Options Center

Table 4. Reasons for Self-Pay Among Women Who Paid Out-Of-Pocket for Abortion (n=101)	
Reason	**n (%)**
No insurance	55 (54.5)
No insurance coverage for abortion	26 (25.7)
Patient did not want insurance subscriber to know about abortion	2 (2.0)
Unknown	16 (15.8)
Other	2 (2.0)

Discussion

This retrospective cohort study demonstrated that patients who self-pay for their abortion care were similar to patients who used private insurance for abortion coverage with respect to prior parity and gestational age at time of presentation, but that these 2 groups were different from patients who used Medicaid for abortion coverage. Women with Medicaid presented almost 2 weeks (13.79 days) later for abortion compared to the other 2 groups even after controlling for other factors. Patient age, prior parity, and having had a prior abortion were significantly associated with a difference in gestational age at time of presentation, although Medicaid insurance status accounted for the largest difference in gestational age.

Prior studies have demonstrated that more than half of women who self-pay for their abortion cite cost as a significant factor in delay to obtaining an abortion[6] and that other costs such as travel, transportation, and childcare contribute to overall financial considerations.[2] The wait time for an appointment in the Women's Options Center is typically less than 1 week, so it is unlikely that appointment scheduling contributed to this delay. In this study population where only 5.6% of patients self-paid for their abortion and where patients with Medicaid insurance have coverage for both the abortion and some associated transportation costs, it is unclear what factors contribute to the almost 2-week difference in timing of presentation for women with Medicaid.

Our findings of prior parity among women with private insurance and women with Medicaid are consistent with the fact that 59% of women in the United States who have an abortion have had at least 1 prior birth.[11] Prior parity was significantly associated with a 2.48 day increase in gestational age at time of abortion in a linear regression model, which may support our hypothesis that cost or coordination of childcare contributes to

a delay in presentation for abortion. More than half (54.3%) of the women who used Medicaid for coverage and 43.2% of women who used private insurance had a history of at least 1 prior abortion compared to 24.0% of women who self-pay, which may indicate a difference in contraceptive use or pregnancy planning between these groups. History of a prior abortion was associated with an increase of 3.12 days in gestational age at time of presentation in the linear regression model, which may be associated with negative societal attitudes towards multiple abortions and abortion patients' internalized stigma associated with multiple abortions.[12]

Self-pay patients accounted for only 5.6% of the total study population. It is notable that 44.6% of self-pay patients had some form of health insurance. Two women reported that they chose to self-pay because they did not want their insurance subscriber provider to know about their abortion, indicating that abortion stigma or privacy concerns contribute to financial decision-making about abortion.

Although type of abortion was significantly different between the groups overall, these differences were no longer significant when stratified by gestational age categories. This overall difference can be attributed to the fact that, in unadjusted analyses, patients who used Medicaid to pay presented at a gestational age 15.6 days more advanced than those using private insurance and 14.5 days more advanced than self-pay patients. The largest proportion of Medicaid patients, 45.3%, presented in the second trimester and therefore were only eligible for a uterine evacuation in a hospital facility. This later gestational age at presentation for an abortion, particularly in the second trimester, requires more healthcare and hospital resources than a first trimester abortion and contributes to higher healthcare system costs as a result.

Although these data are useful to elucidate the differences between groups of women with different types of insurance coverage, women's decision-making considerations about when to seek an abortion and the choice of type of abortion specifically in relation to finances and insurance coverage are multifactorial. Women who live in states similar to Hawai'i with state Medicaid coverage for abortion have reported that enrollment delays and concerns about privacy present additional barriers to seeking timely abortion care.[13] It is possible that the increased gestational age noted among Medicaid patients in this study population can be attributed, at least in part, to a delay in Medicaid enrollment. Additional factors other than insurance coverage likely also contribute to this delay. These include health literacy or cultural and language barriers that impact a woman's understanding of her risk for pregnancy,[14] access to abortion facilities and providers,[15] and ability to coordinate timely care. In a qualitative study of pregnancy attitudes among Native Hawaiians, who comprised 47.3% of Medicaid patients, it was noted that pregnancies are considered valuable regardless of intention or planning, and that families play an important role in supporting women through pregnancy and parenting.[16] This may contribute to the delay in timing of presentation as women consider their pregnancy options with the guidance of other family members.

This study is limited in its retrospective nature, and by the fact that data are not available about patients' socioeconomic status or income level. Data on contraceptive use prior to abortion are also limited, and this may be a useful factor in understanding risk for pregnancy and pregnancy prevention prior to an abortion. This cohort of patients was also seen at a single abortion provider group, and the patient population at this institution may be different from the patient population seen by the other abortion providers in the state of Hawai'i. Hawai'i also has a uniquely diverse racial and ethnic composition that may not be generalizable to the United States population. The distinct insurance coverage landscape present in Hawai'i also may not be generalizable but may allow us to see patterns hidden in states with more limited insurance coverage landscapes for abortion.

Abortion is an essential component of reproductive health, and it is necessary to ensure that women who need abortions do not face financial barriers that result in delays in accessing timely care. Although widespread and consistent public and private insurance coverage is necessary to improve timely abortion access, it does not entirely account for all potential differences or disparities. Identifying the reasons for delays in presentation for care for patients with public insurance coverage for abortion as well as addressing the reasons why women who do have insurance coverage for abortion may choose not to use it and self-pay instead are important components in improving access to abortion.

Conflict of Interest

None of the authors identify a conflict of interest.

Disclosures

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Authors' Affiliations:
- Department of Obstetrics, Gynecology, and Women's Health, John A. Burns School of Medicine, University of Hawai'i, Honolulu, HI (SR, MT, BK)
- Office of Public Health Studies, University of Hawai'i, Honolulu, HI (TS)

Correspondence to:
Department of Obstetrics, Gynecology, and Women's Health, John A. Burns School of Medicine, University of Hawai'i; 1319 Punahou St. Ste 824, Honolulu, HI 96826; Email: sraidoo@hawaii.edu

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