

## Original Research Article

## Patient-reported experience with discussion of all options during pregnancy options counseling in the US South

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## ABSTRACT

**Objective:** To estimate the association between discussion of all options (adoption, abortion, and parenting) in pregnancy options counseling and patient-reported experience with counseling.

**Study Design:** Patients ( $n = 316$ ) who received a positive pregnancy test Oct 2018–June 2019 at one of 14 randomly selected clinics in a southern US publicly funded family planning system participated in an anonymous digital survey about their experience with counseling. The survey assessed which options (parenting, adoption, abortion) they discussed with their provider and how they rated their counseling experience using a 20-item scale based on validated measures of patient reproductive health counseling experience. We used Poisson regression to estimate the prevalence ratio for discussing all pregnancy options and rating their provider with a perfect score.

**Results:** Approximately 10% of patients reported their provider discussed all options. After adjustment for patient, provider, and clinic characteristics, patients were approximately 80% more likely to rate their counseling as “excellent” on all analyzed scale items when their provider discussed all options compared to when they did not (adjusted prevalence ratio [aPR] = 1.80, 95% CI: 1.43, 2.28). Discussion of all pregnancy options was associated with a more positive patient-reported experience among patients who planned to continue their pregnancy (aPR = 1.82, 95% CI: 1.37, 2.42) and among those who did not (aPR = 1.62, 95% CI: 1.08, 2.44). Patients whose provider had received options counseling training were more likely to report all options were discussed.

**Conclusion:** Discussion of all options during pregnancy counseling is associated with a more positive patient experience. These findings indicate patient preference for supportive, nondirective counseling on all pregnancy options.

**Implications:** Our study’s findings support nondirective discussion of all pregnancy options (including parenting, abortion and adoption) as a best practice, and stand in contrast to regulations that restrict discussion of all options.

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## 1. Introduction

Patient-centered care, defined as “care that is respectful of and responsive to individual patient preferences, needs, and values and ensuring that patient values guide all clinical decisions” [1], is a central tenet of health care reform in the United States (US) and is articulated in national standards [2]. Medical and professional or-

ganizations have long recommended a patient-centered approach for pregnancy options counseling that includes informing patients about all options available to them, including parenting and adoption (requiring prenatal care), and abortion (requiring abortion care) [3–5]. These recommendations are incorporated into the 2014 Quality Family Planning Recommendations developed by the Centers for Disease Control and Prevention and the US Office of Population Affairs [6]. However, providers often refer clients exclusively to prenatal care [7], and approximately one-third of providers indicate that they do not discuss or refer for abortion [8–11]. Federal regulations implemented in 2019 eliminated the requirement for sites funded by Title X (the only federal program in the US speci-

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cally dedicated to supporting the delivery of family planning care) to provide pregnancy counseling on all options [12]. These regulations also prohibited staff at Title X sites from providing abortion referrals, instead requiring them to provide referrals for prenatal services for all pregnant patients.

Research that examines what patients prefer in regard to discussion of pregnancy options has mainly been limited to small qualitative studies. These studies have found that discussing pregnancy options with a trusted provider in a family planning setting is viewed as a positive experience [13,14], and that most patients are “open” to provider-initiated discussion about pregnancy options, even in primary care and prenatal settings [15,16]. Discussing pregnancy options can reduce patients’ psychological distress [17] and help them overcome obstacles to care [18–20]. However, patients will often not disclose an intention to have an abortion if they anticipate a negative response from their provider [14,21], possibly to avoid the emotional consequences of experiencing stigma [22–24].

Building on a recent assessment of gaps in our knowledge of patients’ preferences that called for more robust attention to be paid to patients’ actual experience of options counseling [25], our study quantitatively assesses the association between discussion of all pregnancy options and patient experience with the visit.

## 2. Material and methods

### 2.1 Data source

This study used data from a 2018 to 2019 cluster randomized trial, The Client Experience Study, conducted by Provide Incorporated [26], a key aim of which was to evaluate Provide’s professional development training services on pregnancy options counseling and referral practices (details at <https://providecare.org/on-site-training/>). The objective of the present study was to estimate the association between discussion of all options in pregnancy options counseling and patient experience with visit. The Institutional Review Board (IRB) of Advarra (then Chesapeake) approved the evaluation study data collection protocol and analysis. Deidentified data were used by the University of Southern Maine for the secondary analyses contained herein, which the IRB determined to be nonhuman subjects research.

### 2.2. Site selection

In the Client Experience Study, 14 sites within a publicly funded family planning system in a Southeastern state were randomly assigned to either provider training ( $n = 7$  intervention group) or no provider training ( $n = 7$  control group). Each clinic is part of a county health department that offers prenatal and reproductive health care, but not abortion services. Providers included in the study were primarily nurses.

### 2.3. Subject selection

Providers at study clinics were asked to approach all patients immediately following their counseling for a positive pregnancy test result, assess the patient’s eligibility (at least 18 years old and English-speaking), and offer eligible patients the study consent form to review on an iPad. Patients were free to decline. If they consented to participate, they completed a Client Experience survey on the iPad while their provider stepped out of the room. Patients with positive pregnancy tests included those who were unaware of their pregnancy, as well as those who were aware and seeking reproductive or prenatal services; pregnancy awareness was not collected as part of the study.

### 2.4. Survey instruments

The Client Experience survey captured a broad range of patient experiences related to pregnancy options counseling and referrals, including which pregnancy options were discussed and what patients’ experience was with the counseling they received. Patient-reported experience with counseling was measured using a 20-item pregnancy options counseling experience scale with items adapted from the Interpersonal Quality of Family Planning Care scale [27,28], the Shared Decision-Making Questionnaire [29], and the Quick Investigation of Quality instruments [30], in addition to original questions based on the foundational relationship-building elements described in the Quality of Contraceptive Counseling Framework [31]. The scale was revised based on feedback from 10 cognitive interviews conducted with patients of a site from the same organization that was not part of the study. The scale asks patients to rate each aspect of their options counseling experience according to a 5-point Likert scale from 1=“poor” to 5=“excellent” (Supplemental Table 1).

The provider answered several questions at the beginning of the Client Experience Survey to assess whether the patient encountered a trained or untrained provider, the clinic where the patient was seen, and the eligibility status of the patient. Provider training status was assessed this way because several providers worked at multiple clinical sites, which resulted in some crossover ( $n = 53$  patients) between intervention and control sites.

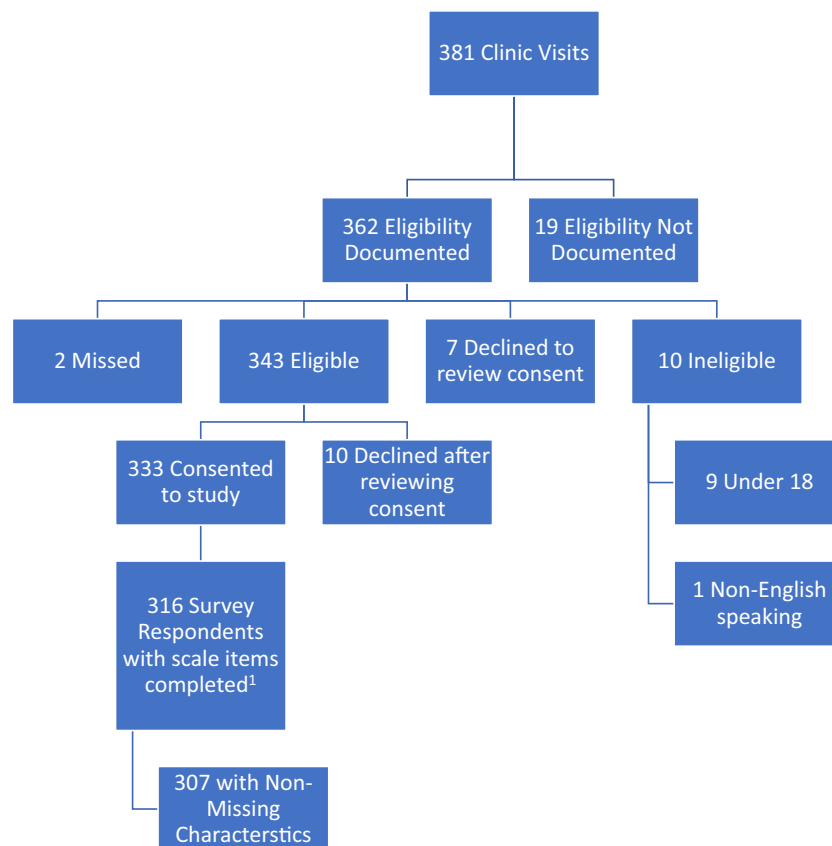
Patient characteristics were also captured in the Client Experience survey, and clinic characteristics were collected separately. Patient characteristics included the patient’s age, race/ethnicity, education, and how they paid for their clinical visit (public insurance, private insurance, other). At the end of the survey, patients were asked about their current plans for continuing their pregnancy. Clinic characteristics included the percentage of residents in the county where the clinic was located who lived in areas designated as rural by the 2010 Census [32] and the average number of pregnancy tests per month in the year before the study began (year 2017), which was a proxy for the volume of pregnancy options counseling performed at the clinic. The average percentage of rural residents (65%) and the average number of monthly pregnancy tests ( $n = 30$ ) was assigned to each patient missing clinical site information ( $n = 15$ ).

### 2.5. Measures

As part of the survey, patients were asked if they discussed each of their three pregnancy options with their provider (abortion, adoption, parenting), and patients who responded affirmatively to all three were categorized as having discussed all pregnancy options.

To inform our analytic approach, we conducted an exploratory factor analysis to examine the factor structure of the counseling experience scale, using Cronbach’s alpha to assess internal consistency reliability [33]. As a result of this analysis, we decided to omit one scale item (“The provider gave me the results of the pregnancy test in a way that didn’t assume how I felt about being pregnant”) based on its dominant factor load value being less than 0.5. Cronbach’s alpha was calculated at 0.98 for the scale.

As a general measure of *patient-reported experience*, we combined the rated items into a mean score. Responses were excluded from participants who skipped more than one scale item. We then created a dichotomous patient experience measure, “perfect score” vs “not-perfect score”, with the perfect score reflecting a rating of 5=“excellent” for all items rated by the patient. This dichotomization is consistent with how client experience has previously been analyzed using the Interpersonal Quality of Family Planning Care scale [28].



**Fig. 1.** Flow chart of patient selection into study population. <sup>1</sup>Completed at least 18 of the 19 items analyzed from the patient experience scale.

## 2.6. Analysis

We first examined the patient and clinic characteristics across all patients, and by whether or not all pregnancy options were discussed with the provider at the clinic visit. We compared categorical variables using the Chi-square or Fisher's Exact test (depending on frequency distribution) and compared continuous variables using t-tests. We also used t-tests to compare the overall mean patient-report experience score between these groups, as well as the mean score for each of the individual scale items.

We used Poisson regression to estimate the prevalence ratio for discussing all pregnancy options and rating their provider with a perfect score, with sandwich estimators used to compute standard errors (as recommended) [34]. As a secondary analysis, we estimated the association between discussing all pregnancy options at visit and mean patient-reported experience score using linear regression. In this analysis, we did not transform the patient experience score in an attempt to have residuals follow a normal distribution because our sample size was large enough (at least 10 observations per parameter) for linear regression to be a valid model without normally distributed residuals [35]. Both types of models were initially unadjusted, and then adjusted for patient and clinic characteristics to account for potential confounding by these factors. We also conducted stratified analyses, examining survey responses by patient's provider training status and by whether or not they were planning to continue their pregnancy. As a sensitivity analysis, we accounted for clustering by clinic site using generalized estimating equation models and examined how the findings changed. We used SAS 9.4 statistical software for data management and regression analysis, and Stata for factor analysis.

## 3. Results

Out of 381 clinic visits recorded during the study period from October 2018 to June 2019, Providers documented study eligibility for 362 (95 Exactly 343 (95%) were eligible; 10 patients were ineligible, 7 declined to review the consent, and 2 patients were missed (Fig. 1). Of the 343 eligible patients who were approached for the study, 333 (97%) consented to participate after reviewing a digital consent form on an iPad before they exited the clinic. Of these patients, 316 (95% of those who consented) completed the survey's patient experience scale items used for this analysis; another 3 patients completed fewer than 18 scale items and were excluded from the analysis along with those who provided no responses to the scale items ( $n = 14$ ).

Exactly 310 (98%) patients reported that parenting was discussed, 35 (11%) reported that adoption was discussed, and 37 (12%) reported that abortion was discussed (not mutually exclusive); 32 (10%) reported that all pregnancy options were discussed during their pregnancy options counseling visit and 284 (90%) reported that all pregnancy options were not discussed. Of the 284 with all pregnancy options not discussed, 273 reported that parenting only was discussed. Patient characteristics were similarly distributed by whether or not all pregnancy options were discussed during their pregnancy options counseling visit, with the exception of race/ethnicity (non-Hispanic white: 63% [discussed group] vs 39% [not discussed group],  $p < 0.01$ ), pregnancy plans (planning to have an abortion: 63% vs 31%,  $p < 0.01$ ), and provider attended training (78% vs 41%,  $p < 0.01$ ) (Table 1). Approximately 4% (7/173) of the patients seen by a provider who did not receive training reported discussing all pregnancy options, as compared to 18% (25/141) of patients seen by a trained provider.

**Table 1**

Characteristics of adult patients at publicly funded family planning clinics in a US Southern state by discussion of all pregnancy options during pregnancy options counseling (N = 316)

Characteristics	All pregnant patients (N = 316, 100.0%) n	Discussed all pregnancy options with provider (n = 32, 10.1%) %	Did not discuss all pregnancy options with provider (n = 284, 89.9%) %	p-value <sup>1</sup>
Patient				
Age <sup>2</sup>				>0.99
18–29	250	81.3	79.2	
30–39	63	18.7	20.1	
40 or older	2	0	0.7	
Payment for visit <sup>2</sup>				0.09
Public	77	15.6	25.8	
Private	35	21.9	10.0	
Other <sup>3</sup>	199	62.5	64.2	
Race/ethnicity				<0.01
NH White	131	62.5	39.1	
NH Black	174	28.1	58.1	
Other <sup>4</sup>	11	9.4	2.8	
Education <sup>2</sup>				0.20
Some high school	56	12.5	18.4	
High school	119	28.1	39.0	
Some college	96	46.9	28.7	
College	43	12.5	13.8	
Pregnancy plans				<0.01
Continuing	209	37.5	69.4	
Abortion	107	62.5	30.6	
Provider Training <sup>2</sup>				<0.01
Trained	141	78.1	41.1	
Not trained	173	21.9	58.9	
Clinic				
Rural percentage <sup>2</sup> (mean)	301	67.3	62.0	0.22
Average number of pregnancy tests per month in 2017 <sup>2</sup> (mean)	301	28.2	31.1	0.40

NH, non-Hispanic.

<sup>1</sup> p-value from Chi-Square, Fisher's Exact Test, or t-tests, depending on variable type and frequency distribution.

<sup>2</sup> The following characteristics were missing for some patients: age (n = 1), how they paid for visit (n = 5), education (n = 2), provider training (n = 2), and clinic characteristics (n = 15).

<sup>3</sup> Other was primarily no insurance, but also included "other" and "payment plan."

<sup>4</sup> Other race included Hispanic, non-Hispanic multiracial, Native American, Asian, and missing.

The average patient-reported experience score was higher among patients who reported all pregnancy options were discussed compared with patients who did not report all options were discussed (5-point Likert scale from 1="poor" to 5="excellent"; mean: 4.92 vs 4.64, difference=0.28,  $p < 0.01$ ) (Fig. 2, Supplemental Figure 1). For each individual scale item, the score was higher in the group where all pregnancy options were discussed as compared with the group where they were not all discussed ( $<0.01$ ) (Fig. 2).

The percentage of patients who rated their counseling visit with a perfect score was also higher among those who reported discussing all pregnancy options as compared to those who did not (84% vs 51%, difference=33%) (Table 2). The corresponding prevalence ratio (PR) was 1.65 (95% confidence interval [CI]: 1.36, 1.99), therefore the prevalence of a perfect score rating was 65% higher (relatively) in the group that discussed all pregnancy options. This prevalence ratio remained elevated after adjustment for patient and clinic characteristics, and provider training (PR = 1.80, 95% CI: 1.43, 2.28). Estimates were similar to the overall results when analyses were stratified by provider's training status and whether or not the patient planned to continue her pregnancy.

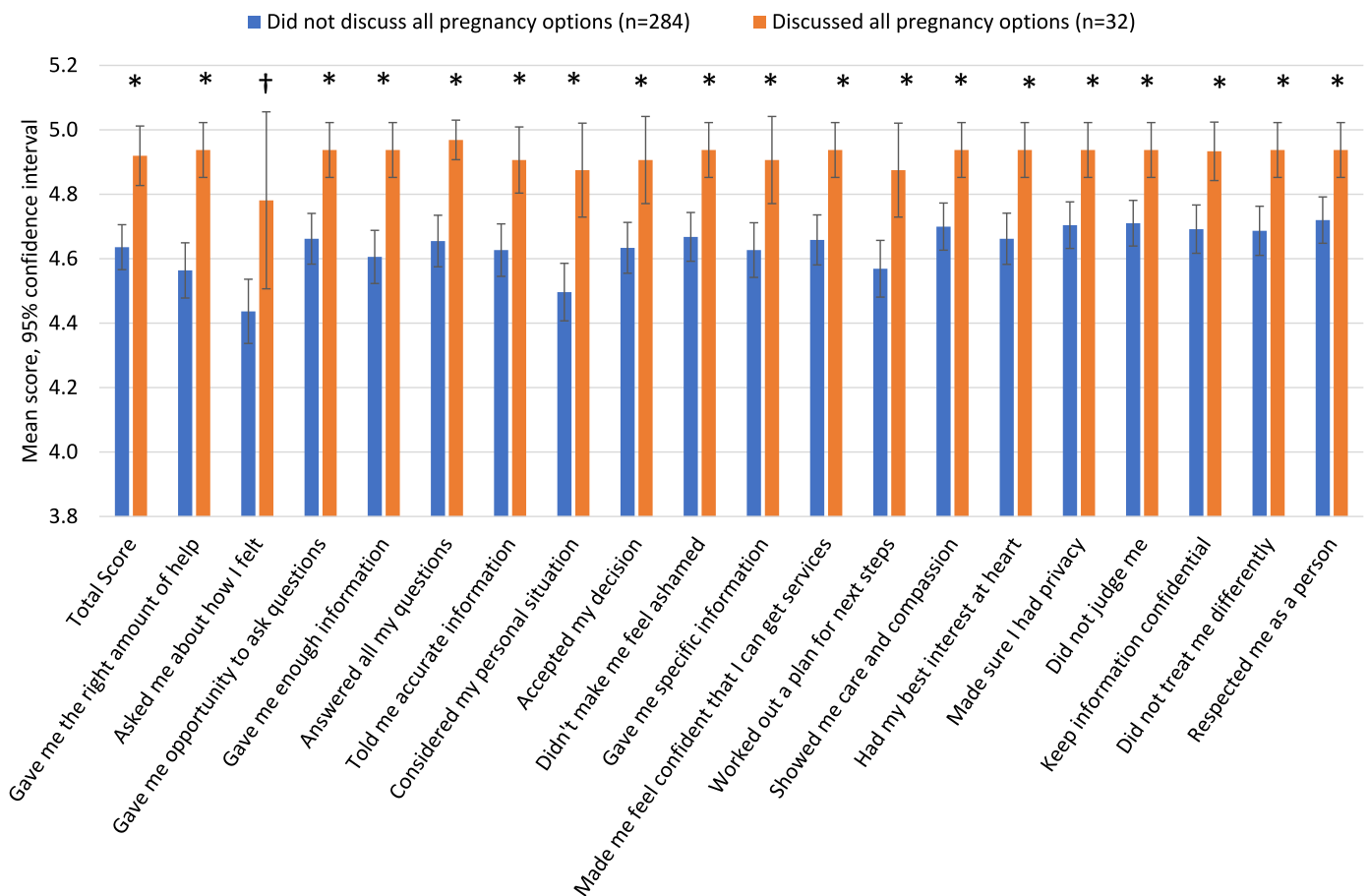
In our secondary analysis we found the average patient-reported experience score remained higher in the group where all pregnancy options were discussed, after adjustment for patient and clinic characteristics, and provider training status (Supplemental Table 2). Findings were similar by whether or not the patient's provider was recently trained in patient-centered options counseling, and whether or not the patient planned to continue their pregnancy.

In our planned sensitivity analysis, accounting for clustering within clinic site, the estimates remained the same but the standard errors became smaller.

#### 4. Discussion

This study found that in the context of a clinical setting where nearly half of the providers had been recently trained in pregnancy options counseling and referral, patients had significantly higher patient-reported experience with their counseling when their provider discussed all pregnancy options (parenting, adoption, abortion). After adjustment for patient, provider, and clinic characteristics, patients whose provider discussed all options were approximately 80% more likely to rate their provider as "Excellent" on all patient experience scale items included in our analysis. The association of all-options discussion with a more positive patient experience was observed regardless of whether or not patients intended to continue their pregnancy.

Only 4% of the patients seen by a provider not trained recently in patient-centered options counseling reported discussing all options with their provider, as compared to 18% of patients seen by a trained provider. Since training was randomized, this difference in all-options discussion rates by training status is likely attributable to training. Trained providers may have been more willing to initiate discussion about abortion and adoption or have communicated in ways that made patients feel more comfortable broaching these topics. The small number of patients who saw an untrained provider and reported all options were discussed (n = 7) limited our power to detect an association between options coun-



**Fig. 2.** Patient-reported experience ratings for each item by whether or not all pregnancy options were discussed during pregnancy options counseling at publicly funded family planning clinics in a US Southern state (N = 316).

<sup>1</sup>Some individual scale items were rated by fewer than 316 patients (ranged from 309 to 315).

\*p-value <0.01 for t-test comparison between groups.

†p-value = 0.03 for t-test comparison between groups.

**Table 2**

Association between discussing all pregnancy options during pregnancy options counseling at clinic visit and reporting a perfect score for patient-reported experience with counseling at publicly funded family planning clinics in a US Southern state,<sup>1</sup> (n = 307)

Study population	Perfect score %	Model 1 PR	95% CI	Model 2 PR	95% CI	Model 3 PR	95% CI
All patients (n = 307)							
All options discussed	84.4	1.65	(1.36, 1.99)	1.78	(1.44, 2.21)	1.80	(1.43, 2.28)
Not all options discussed	51.3	Referent		Referent		Referent	
Trained provider (n = 138)							
All options discussed	88.9	1.84	(1.45, 2.34)	1.92	(1.44, 2.56)		
Not all options discussed	46.9	Referent		Referent			
Nontrained provider (n = 169)							
All options discussed	71.4	1.33	(0.81, 2.17)	1.44	(0.83, 2.51)		
Not all options discussed	53.7	Referent		Referent			
Planned to continue pregnancy (n = 202)							
All options discussed	91.7	1.72	(1.39, 2.14)	1.84	(1.41, 2.40)	1.82	(1.37, 2.42)
Not all options discussed	53.2	Referent		Referent		Referent	
Did not plan to continue pregnancy (n = 105)							
All options discussed	80.0	1.70	(1.24, 2.33)	1.58	(1.10, 2.27)	1.62	(1.08, 2.44)
Not all options discussed	47.1	Referent		Referent		Referent	

CI, confidence interval; PR, prevalence ratio.

Model 1: Unadjusted

Model 2: Adjusted for patient characteristics (age, race/ethnicity, education, payment for visit) and clinic characteristics (percent rural, average number of monthly pregnancy tests) and planning to continue pregnancy (if not stratified by this variable)

Model 3: Adjusted for all characteristics in model 2 plus provider training status

<sup>1</sup> A perfect score means a rating of 5-“excellent” for all patient experience scale items included in score. Nine patients were excluded from this analysis because of missing information for age, how they paid for visit, education, and/or provider training.

selling and patient experience in this group. However, we found that among trained providers who had been recently coached on how to manage a discussion about pregnancy options in an empathetic, patient-centered manner, discussion of all options was significantly associated with a more positive patient experience.

The scale we used to measure patient experience with pregnancy options counseling was developed using validated measures of the degree to which patients' preferences and autonomy are centered in patient-provider interactions in reproductive health care [27–31]. Our finding that all options counseling was associated with better patient experience corroborates prior qualitative research that indicated patients prefer all-options counseling. For example, a study of patients entering prenatal care found that a broad majority of patients were open to discussing pregnancy options, whether or not their pregnancy was intended [36]. Another qualitative study of options counseling preferences, which included both patients in prenatal care and women seeking abortion services, found patients preferred that providers: (1) respect patient autonomy, (2) avoid assumptions about patients' desired pregnancy outcomes, and (3) consider the needs of the patient beyond her pregnancy [16]. Interviews with abortion-seeking patients in Norway similarly observed that patients who were ambivalent about their pregnancy preferred to have health personnel engagement when providers supported patients' ability to make decisions in accordance with their own values [37].

Our study findings may not be generalizable to settings where all or no providers have received options counseling training, or to settings with different social norms and attitudes regarding pregnancy. In addition, our independent variable (all-options counseling) was observed and not randomly assigned for ethical reasons. This leaves open the possibility that the association we found between discussion of all options and a more positive patient-reported experience was due to underlying counseling skill, with better quality of counseling leading to a higher likelihood of discussing all options rather than vice-versa.

Strengths of this study include the collection of information using anonymous digital patient surveys, which were unseen by providers (thus possibly affording greater patient privacy and disclosure), and the random selection of the study's 14 sites from a pool of over 50 sites across an entire statewide family planning organization. Random selection of study sites for training helped ensure that providers did not self-select into this group, and that any effects of training are likely representative of how such a training would affect pregnancy options counseling delivered by family planning providers in other settings, particularly in southern US states. The use of cognitive interviews to revise the pregnancy options counseling experience scale helped ensure that scale questions were mutually distinct and that they were clear to the study population.

Nondirective pregnancy options counseling and referral has been described as essential for informed consent in reproductive health care [38] and as a service that should be available to all pregnant individuals seeking pregnancy-related resources in health care settings [6]. However, the stigma associated with deciding not to parent impacts both providers' [10] and patients' [21] willingness to discuss alternatives. Unpublished qualitative data from interviews with attendees of Provide's training programs indicates that the most common reason providers do not offer all options is because they prefer for the client to broach the topic of abortion or adoption first, or to "express despair" about the pregnancy before offering alternatives. Patients, meanwhile, are reluctant to disclose an intention not to parent because they anticipate and fear negative judgment, particularly around seeking an abortion [23]. The results of this study suggest that providers who overcome this impasse by managing to discuss all pregnancy options on average achieve higher levels of patient-reported positive experience. The

relationship between discussion of all options and a more positive patient experience was particularly strong among providers who had recently received training in patient-centered options counseling, suggesting that training can further support a provider's ability to address this topic in a way that is positively received by patients.

In conclusion, we found greater patient-reported experience with pregnancy options counseling if the discussion included all pregnancy options, particularly when conducted by providers trained to approach this discussion without judgment and in a way that centers the preferences and autonomy of the client. Our study's findings support professional guidelines recommending comprehensive pregnancy options counseling as a best practice, and stand in contrast to federal regulations implemented in 2019 that eliminated long-standing requirements for Title X sites to provide nondirective pregnancy options counseling on all options [12].

### Declaration of Competing Interest

Kristin Nobel is Senior Director of Program Evaluation at Provide, an organization that offers pregnancy options counseling and referral training to health and social service providers. Amy Handler was, during the data collection phase of this study, Program Evaluation Manager at Provide.

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### Supplementary materials

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