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Hospital bans on trial of labor after cesarean and antepartum transfer of care

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Abstract

Background: Hospital policies restricting access to trial of labor after cesarean (TOLAC) are prevalent. Many women with a previous cesarean delivery are affected by these bans, but there are limited data on the effect of these bans and whether women would consider changing delivery hospitals in the setting of a real or hypothetical TOLAC ban.

Methods: This was a survey of TOLAC-eligible women receiving prenatal care at 4 hospitals where TOLAC is available, and 1 non-TOLAC site. Participants were asked about their likelihood of switching hospitals to pursue TOLAC if it were unavailable. Women at the non-TOLAC site had their medical records reviewed to ascertain final location and approach to delivery.

Results: 297 women were interviewed, 48 from the non-TOLAC site. 162 (54%) participants indicated they would transfer care if TOLAC were unavailable. Among women at the non-TOLAC site, 57% who indicated an intention to switch hospitals did so. In a multivariable logistic regression model, variables associated with transferring care included race/ethnicity other than Latina aOR 25.20 (95% CI 2.23 – 284.26), being unaware of the TOLAC ban 19.81 (1.99 – 196.64), and perceiving that a close friend/relative thought they should TOLAC 17.31 (1.70 – 176.06).

Conclusions: More than half of women with prior cesarean would consider transferring care if TOLAC became unavailable, and more than 1/3 of women at a non-TOLAC site transferred care.

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More research is needed on the impact of TOLAC bans and how to facilitate transfer for those who desire TOLAC.

Keywords

Vaginal birth after cesarean (VBAC); trial of labor after cesarean (TOLAC); hospital policy

Introduction:

The rate of vaginal birth after cesarean (VBAC) in the US continues to be low, most recently 12.4% in 2016¹. The main driver of this trend is a decrease in the frequency of trial of labor after cesarean (TOLAC) attempts, rather than any change in VBAC success². Many women choose elective repeat cesarean delivery due to concern for fetal well-being and fear of failed TOLAC attempt, among other reasons.³ Both those who choose either repeat cesarean or TOLAC report also being influenced by the opinions of their medical providers⁴. On the system level, it has also been shown that lack of access to planned TOLAC either at the hospital or provider level is a known contributor to the low TOLAC rate^{5 6 7 8 9}.

With primary cesarean delivery rates in nulliparas approximately 25%, 15% of US deliveries occur in women with a history of a prior cesarean.¹⁰ Even though multiple NIH Consensus Conferences and American College of Obstetricians and Gynecologist Practice Bulletins clearly state that TOLAC is “a reasonable and safe choice” for most women with a prior cesarean, and that TOLAC should be offered to these women, access to TOLAC is limited in many areas.^{11–13} Almost half of women with a prior cesarean who were interviewed in the Listening to Mothers survey were interested in VBAC, but only half of those interested were given this option.¹⁷ In California, for example, only 43% of maternity hospitals offer planned TOLAC⁸, and only 41% of counties in New Mexico have a maternity hospital where planned TOLAC is available.⁹ This lack of access is most pronounced in rural areas, where access to obstetric services is already limited¹⁴. This decrease in access is thought to be due to liability concerns, hospital requirements for in-house anesthesia or OB providers in order to offer TOLAC, and reimbursement issues.^{7,15 16} There already exist racial/ethnic disparities in VBAC rates, and this lack of access may exacerbate this inequitable care.¹⁸

If planned TOLAC is not available at a given hospital where the preferred provider has delivery privileges, a pregnant woman with a prior cesarean and no contraindications to vaginal delivery has two choices – she can either stay with her provider at that hospital and have a repeat cesarean, or, depending on her location and the availability of TOLAC at nearby facilities, she can transfer her care. A small but growing population may choose to have a home birth.¹⁹ Little is known about how women feel about the experience of decreased access to TOLAC, or about the frequency and characteristics of women who would transfer their care for a planned TOLAC. Exploring the desire to switch providers to access TOLAC, either hypothetically or in actuality, may provide insight into regional planning efforts and approaches to expansion of options for women who desire TOLAC.

Methods:

This was a prospective study of women with a single prior cesarean delivery done to evaluate factors associated with TOLAC and VBAC. Participants, who were interviewed between Dec 2014 and March 2016, were recruited at between 20–32 weeks of gestation by research staff who approached potential subjects at a prenatal visit. Those who agreed to participate signed an informed consent document and then immediately completed an in-person interview during which they were asked to report their demographic characteristics, as well as their planned approach to delivery. All recruitment materials and questionnaires were available in English and Spanish.

This study was initially designed to identify factors that influence preferences and attitudes about TOLAC and elective repeat cesarean delivery where both options were available; therefore recruitment primarily occurred at 4 hospitals where TOLAC was available, representing the West (San Francisco Bay Area, 2 sites), Midwest (Chicago), and Northeast (Boston). One additional site, a community hospital with a TOLAC ban located in San Francisco (non-TOLAC site), was included to more fully elucidate the preferences and attitudes of women delivering at a location where TOLAC was not available.

All women were asked a question about whether they would consider transferring care if TOLAC were not available but the questions were worded slightly differently at the TOLAC and non-TOLAC sites (Figure 1). Responses were coded as “would switch” if women at the TOLAC sites responded “yes” to a question asking if they would switch hospitals or providers if TOLAC became unavailable, and responses from women at the non-TOLAC site were coded “would switch” if they responded they would “definitely” or “probably” switch hospitals if TOLAC was unavailable. All women were asked about what they thought their health care provider and an important friend or relative thought they should do regarding method of delivery.

At the single site where TOLAC was unavailable (“non-TOLAC site”), we asked if participants knew their hospital’s TOLAC policy, and queried their familiarity with TOLAC bans in general and the importance they placed on continuity of care with providers from their first birth (Figure 1). It was the general policy for providers at the non-TOLAC site to be notified by their prenatal care provider early in prenatal care that the hospital did not provide TOLAC, and patients were given the opportunity to transfer if desired. However, we do not have direct data on how often this notification was performed. We obtained the delivery location and approach for women getting prenatal care at the non-TOLAC site to determine who eventually transferred care for delivery.

Potential confounders for the analysis included demographic characteristics, geographic location (San Francisco Bay Area vs. Chicago vs. Boston), type of prenatal care provider (midwife vs. physician), mode of delivery preference at the time of the interview, and the perceived opinions with regard to TOLAC of both the participant’s provider and someone else important to the participant. Bivariable analyses were performed using chi-square and t-tests, while multivariable logistic models including potential confounders were created using backwards variable selection as follows: variables with p-values of 0.1 or less in the

bivariable analyses were included in the first multivariable model, and the final model was created by sequentially removing variables with the highest p-value until the model included only variables that were independently associated with the outcome. The final parsimonious model was then compared with the model including all variables using the likelihood ratio test to confirm goodness of fit. A p-value of 0.05 was used to define statistical significance. Odds ratios and 95% CI were reported for bivariate analyses and also for the factors included in the multivariable analyses. All models were two sided and statistical analysis was performed using Stata 12 (College Station, TX). IRB approval was obtained by all sites prior to initiation of the study and all participants provided written informed consent.

Results:

Three hundred and forty women were approached, of which 299 (88%) agreed to participate and were interviewed that same day. Fifty women from the non-TOLAC site were initially enrolled, but since the site began offering TOLAC at the end of the study period, two women who had the option of TOLAC at their site were excluded from the final analysis. Of 297 women who were interviewed and whose data were analyzed, 48 (16%) were receiving prenatal care at a non-TOLAC site, while the rest (n=249) were receiving care at TOLAC sites. When asked if they would change hospitals if TOLAC were unavailable, 162 (54%) of the participants indicated that they would transfer their care, while 78 reported that they would stay (26%) and 59 (20%) were unsure. This percentage was similar among the subset of women receiving prenatal care at the non-TOLAC site (56% would change, 32% would stay, 12% unsure for women at the non-TOLAC site, compared with 54%, 25%, and 21% at the TOLAC sites, p=0.28).

We examined the characteristics among women who said they would change care vs. stay vs. unsure. Women who thought they would change hospitals in order to attempt TOLAC were more likely to be receiving prenatal care from a midwife, more likely to state that they were definitely or probably planning a TOLAC, and that both their close friends/relatives as well as their providers endorsed TOLAC (Table 1). A multivariable logistic regression model demonstrated that definitely or probably planning to attempt TOLAC, receiving midwifery-led care, and thinking that a close friend/relative endorsed TOLAC remained associated with considering transferring care if TOLAC were not available (Table 2).

Among the 48 women interviewed at the non-TOLAC site, the actual location and approach of delivery were analyzed (Figure 2). Of these 48 women, eighteen (38%) transferred care to a TOLAC hospital, while 30 (63%) delivered at the non-TOLAC hospital where they began their prenatal care. Of the 26 women who indicated at the time of the interview that they would transfer to a TOLAC hospital, 16 (62%) followed through on that stated intention and transferred care. Of the women who ultimately transferred their care, all but one pursued TOLAC, while the remaining woman who transferred decided on repeat cesarean at the TOLAC site.. Of the 16 women who indicated that they would stay at their non-TOLAC hospital, 15 women (94%) did not transfer and chose repeat cesarean. One of the 6 (16%) who was unsure of her willingness to transfer care pursued TOLAC elsewhere.

Compared to the participants who stayed at the non-TOLAC hospital, women who transferred care were more likely to be of a racial/ethnic group other than Latina and to have attended at least some college (Table 3). In addition, women who preferred TOLAC or who perceived that their provider or close friend/relative thought they should attempt TOLAC were more likely to switch. At the time of the interview, only 69% (n=33) of women were aware that their hospital did not offer TOLAC. Women who were unaware of their hospital's TOLAC ban at the time of the third-trimester interview were more likely to transfer care (87% vs. 39%, $p<0.001$).

In a multivariable logistic regression model, variables that were associated with transferring care included race/ethnicity other than Latina (aOR 25.20, 95% CI 2.23 – 284.26), being unaware of the TOLAC ban (aOR 19.81, 95% CI 1.99 – 196.64), and perceiving that a close friend/relative felt that they should undergo TOLAC (aOR 17.31, 95% CI 1.70 – 176.06). (Table 4)

Ten of the 48 women at the non-TOLAC site (21%) said they knew someone who had wanted TOLAC but had been unable to attempt it because of a provider or hospital ban, while 7 participants (15%) knew someone who had transferred their care in order to pursue TOLAC. The frequencies of these personal experiences did not differ among the women who transferred care and those who stayed.

Discussion:

In this geographically and racially/ethnically diverse sample of TOLAC-eligible women, we found that access to TOLAC is valued, with over half of the participants indicating that they would consider transferring their care to another hospital if TOLAC were not available where they were currently planning to deliver. Not surprisingly, participants who indicated a preference for TOLAC were more likely to express a willingness to transfer care.

Among women receiving prenatal care at a non-TOLAC offering site, over one-third delivered at a different hospital. We do not have follow-up data on the experience of the women who transferred care, but switching from one health system to another can require making changes to insurance coverage, dealing with difficulties in getting new appointments and ensuring that all medical records have been transferred. Women value continuity of care with their providers; 62% of multiparous women surveyed in *Listening to Mothers* chose their prenatal care provider because the provider cared for them in a previous pregnancy, and 58% chose their delivering hospitals because it is where they delivered before.²⁰ Evidence from European countries suggests that leaving one health system for another can be both logistically and emotionally difficult²¹. However, many women who valued TOLAC and for whom TOLAC was not available at their site were willing to make this change, underscoring the value that women place on having options regarding approach to delivery.

While to our knowledge, this is the first study to document the frequency with which TOLAC-eligible women transfer care in order to pursue TOLAC, the results cannot be generalized to areas of the country where TOLAC is unavailable, as many hospitals with TOLAC bans are not located close to a hospital where TOLAC is available, or insurance

coverage may restrict delivery location.^{8,9} In addition, while official TOLAC bans are prevalent in many hospitals, much of the decreased access to TOLAC is at the provider level, where providers decline to offer TOLAC to their patients, or strongly discourage this option.⁶ Because the current model of reimbursement for prenatal care includes the final delivery, there could be a financial disincentive for private practice providers to encourage this type of switching.²² Decreased TOLAC access may further exacerbate racial/ethnic disparities in VBAC rates, as our results suggest that Latina ethnicity was associated with decreased frequency of transferring care.^{18,23}

Among all women interviewed, the perception that a close friend or relative felt that the participant should undergo TOLAC rather than ERCD was associated with a willingness to transfer care, independent of the desire to pursue TOLAC. This speaks to the importance of social norms that influence women's behaviors regarding delivery planning.^{24 18 25} The perceived preference of friends and relatives is important to women making a difficult decision to transfer care, even in the absence of personal experience with others who have done the same. Professional opinions are also valued, as most women who indicated a willingness to transfer care thought that their care providers endorsed TOLAC over ERCD. Midwifery-led care was also a predictor of a willingness to transfer care. Midwifery care values vaginal birth and patient autonomy and this orientation may have influenced women to be willing to transfer care²⁶.

One surprising finding was that 31% of women attending prenatal care at the non-TOLAC site were unaware of the TOLAC ban, which is a similar percentage to the frequency of women at Catholic hospitals who were unaware of the religious restrictions affecting their care.²⁷ This finding has important clinical and policy implications; even if providers attempt to disclose the TOLAC ban, it may be difficult for women to understand how their delivery choices will be affected by hospital policy. If TOLAC bans persist, it is important that women affected by these bans are made aware of the options available to them at their planned delivery location, and of where else they can go if their preferred approach is not available. An even more patient-centered approach would for specialty societies, hospital associations, and public health departments to discourage the existence of TOLAC bans, as TOLAC is considered an appropriate option to offer at all maternity hospitals capable of performing cesarean deliveries, including Level I (Basic Care) hospitals²⁸

Strengths of this study include a relatively large, geographically and racially/ethnically diverse population for the survey component, and complete follow up. Limitations include having only one non-TOLAC site, a population (largely Hispanic) and set of options (located in a city with many other delivery locations) that may not be generalizable elsewhere. The policy at the non-TOLAC site was to notify patients about the TOLAC ban early in prenatal care, and likely some patients who wanted TOLAC switched to a different facility before the interview; this could bias our sample and lead to an underestimate of the number of women who transferred care in order to access TOLAC, or enrich the sample for women who did not understand the TOLAC ban or who preferred repeat cesarean. Nonetheless, even with this small sample size, we were able to identify factors associated with transferring care to a TOLAC-offering site. Further research should also focus on the qualitative experiences of women denied TOLAC and how their birth experiences and sense of autonomy was affected.

Successful implementation of ACOG's guideline that each woman should be able to decide her mode of delivery after a prior cesarean may require better facilitation of inter-hospital transfer for women who desire TOLAC, and further expansion of TOLAC services.²⁹.

Acknowledgments

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Questions asked of all women at all sites:	
<p>We'd like to ask you a couple of questions about the delivery approach other people think you should have. First, we'd like you to think about your health care provider. What do you think your health care provider thinks you should do?</p> <p><input type="checkbox"/> Definitely have a trial of labor</p> <p><input type="checkbox"/> Probably have a trial of labor</p> <p><input type="checkbox"/> I don't think my provider has an opinion about what my delivery approach should be</p> <p><input type="checkbox"/> Probably have a scheduled C-section</p> <p><input type="checkbox"/> Definitely have a scheduled C-section</p> <p><input type="checkbox"/> Not sure/don't know</p>	<p>Now we want you to think about the person other than your health care provider whose opinion matters most to you when thinking about your delivery. What do you think that person thinks you should do?</p> <p><input type="checkbox"/> Definitely have a trial of labor</p> <p><input type="checkbox"/> Probably have a trial of labor</p> <p><input type="checkbox"/> I don't think my provider has an opinion about what my delivery approach should be</p> <p><input type="checkbox"/> Probably have a scheduled C-section</p> <p><input type="checkbox"/> Definitely have a scheduled C-section</p> <p><input type="checkbox"/> Not sure/don't know</p>
Question regarding intention to switch hospitals if TOLAC was not available:	
<p><i>At TOLAC sites:</i></p> <p>At your hospital, women can choose either to have a trial of labor or a scheduled C-Section but this is not true at all hospitals. We would like you to think about what you would do if you did not have these options. Would you switch to a different provider or hospital to deliver your baby if your current hospital would not allow you to have a trial of labor?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Not sure/don't know</p>	<p><i>At non-TOLAC site:</i></p> <p>If your hospital won't allow you to try to have a VBAC, how likely are you to switch to another hospital to try to have a VBAC?</p> <p><input type="checkbox"/> Definitely switch to a new hospital</p> <p><input type="checkbox"/> Probably switch to a new hospital</p> <p><input type="checkbox"/> Not sure/don't know</p> <p><input type="checkbox"/> Probably stay at my current hospital</p> <p><input type="checkbox"/> Definitely stay at my current hospital</p>
Questions asked only of women at non-TOLAC site	
<p>Is this the same provider (or group of providers) you had for your last delivery?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p>	<p>How important is it to you to have the same provider (or group of providers) for this delivery that you had for your last one?</p> <p><input type="checkbox"/> Very important</p> <p><input type="checkbox"/> Somewhat important</p> <p><input type="checkbox"/> Not important</p> <p><input type="checkbox"/> Not sure/don't know</p>
<p>Do you plan to deliver in the same hospital where you had your last delivery?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Not sure/don't know</p>	<p>How important is it to you to deliver this baby in the same hospital where you had your last one?</p> <p><input type="checkbox"/> Very important</p> <p><input type="checkbox"/> Somewhat important</p> <p><input type="checkbox"/> Not important</p> <p><input type="checkbox"/> Not sure/don't know</p>
<p>Do you know if the hospital where you plan to deliver will allow you to try to have a VBAC?</p> <p><input type="checkbox"/> Yes, my hospital will allow me to try to have a VBAC</p> <p><input type="checkbox"/> No, my hospital will not allow me to try to have a VBAC</p> <p><input type="checkbox"/> I don't know whether my hospital will allow me to try to have a VBAC or no</p>	<p>Do you know anyone who wanted to try to have a VBAC but her provider or hospital didn't let her?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Not sure/don't know</p>
<p>Do you know anyone who switched to a different provider or hospital so she could try to have a VBAC?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Not sure/don't know</p>	

Figure 1: TOLAC Access Questionnaire with questions asked of the entire cohort and of the women getting prenatal care at a hospital where TOLAC is banned (“non-TOLAC site”) (Multi-center study, n=297, 2014–2016)

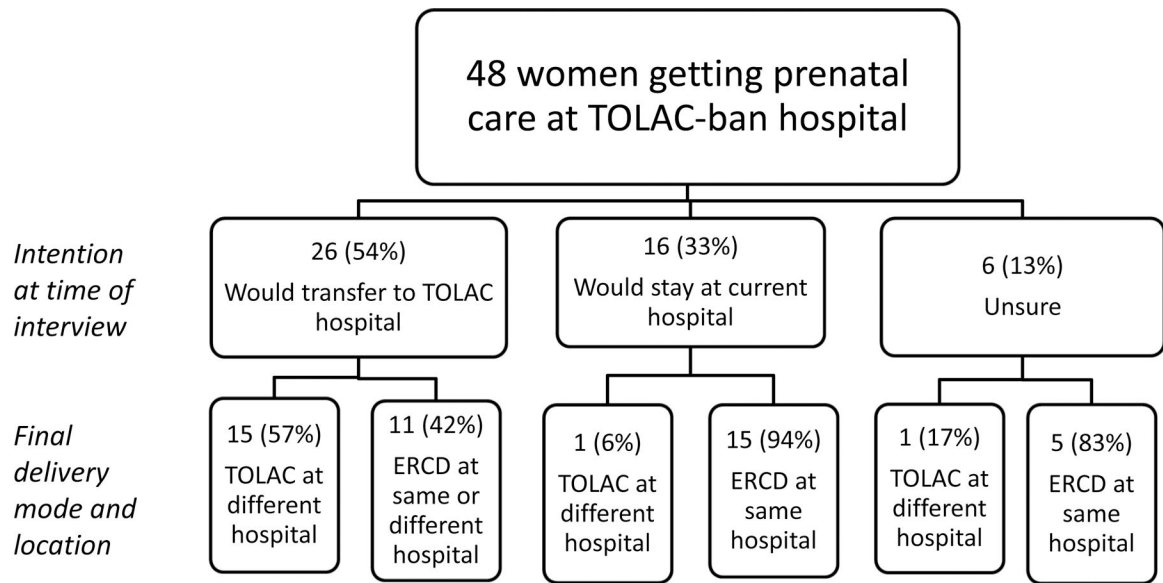


Figure 2: Flowchart of participants getting prenatal care at a hospital where TOLAC is banned (“non-TOLAC site”) with respect to intended and actual location of delivery and method of delivery, San Francisco, 2014–2016 (n=48). ERCD=elective repeat cesarean delivery

Table 1:

Characteristics of women regarding their intentions to change delivery hospital in the setting of a hypothetical or real TOLAC ban, San Francisco, Chicago, and Boston, United States, 2014–2016

CHARACTERISTICS	Would Change (N=162) N(%) or Mean±SD	Unsure (N=59) N(%) or Mean±SD	Would stay (N=78) N(%) or Mean±SD	p value
Age	33.6±4.2	33.8(±4.3)	33.7±5.2	0.94
18 to 34 yrs	95 (59)	31 (53)	41 (53)	0.5
35 to 46 yrs	67 (41)	28 (47)	37 (47)	
Relationship status				0.39
Married/living together	146 (90)	56 (95)	65 (83)	
Significantly involved but not living together	9 (6)	2 (3)	6 (8)	
Single/not significantly involved	6 (4)	1 (2)	5 (7)	
Race/ethnicity				0.96
Non-Hispanic White	74 (46)	29 (49)	36 (46)	
African American/Black	17 (10)	6 (10)	9 (12)	
Asian/Pacific Islander	25 (15)	6 (10)	9 (12)	
Latina/Hispanic	34 (21)	15 (25)	20 (26)	
Mixed/Other/Missing	12 (7)	3 (5)	4 (5)	
Language for interview				0.84
English	141 (87)	50 (85)	66 (85)	
Spanish	21 (13)	9 (15)	12 (15)	
Annual household income				0.31
< \$25,000	24 (15)	5 (9)	7 (9)	
\$25,000 - \$50,000	17 (11)	11 (19)	11 (14)	
\$50,000 - \$100,000	29 (18)	10 (17)	10 (13)	
\$100,000	83 (51)	33 (56)	45 (58)	
Education				0.038
High school	25 (15)	9 (15)	15 (19)	
Some college	29 (18)	11 (19)	7 (9)	
College graduate	63 (39)	15 (25)	20 (26)	
Post-graduate degree	45 (28)	24 (41)	36 (46)	
Insurance Type				0.08
Public	49 (30)	9 (15)	20 (26)	
Private or Other	113 (70)	50 (85)	58 (74)	
Prenatal Care Provider				0.031
Obstetrician	130 (80)	53 (90)	71 (91)	
Midwife	29 (18)	4 (7)	4 (5)	
Other/Unsure	3 (2)	2 (4)	3 (4)	
Recruitment Region				0.099
San Francisco Bay Area	75 (46)	18 (31)	28 (35)	

CHARACTERISTICS	Would Change (N=162) N(%) or Mean+-SD	Unsure (N=59) N(%) or Mean+-SD	Would stay (N=78) N(%) or Mean+-SD	p value
Chicago	53 (33)	29 (49)	28 (36)	
Boston	34 (21)	12 (20)	22 (28)	
What do you think your provider thinks you should do?				<0.001
Definitely or probably have a TOLAC	89 (55)	20 (34)	24 (31)	
Definitely or probably have a RCD	26 (16)	17 (29)	29 (37)	
They have no opinion or unsure	47 (29)	22 (37)	25 (32)	
What does a friend or relative whose opinion you value think you should do?				<0.001
Definitely or probably have a TOLAC	76 (47)	14 (24)	16 (21)	
Definitely or probably have a RCD	36 (22)	26 (44)	49 (63)	
No opinion or unsure	50 (31)	19 (32)	13 (17)	
What delivery approach would you like to have?				<0.001
Definitely TOLAC	77 (48)	17 (29)	7 (9)	
Probably TOLAC	36 (22)	13 (22)	13 (17)	
Probably RCD	18 (11)	8 (14)	20 (26)	
Definitely RCD	30 (19)	21 (36)	38 (49)	

Table 2 –

Logistic regression model evaluating factors associated with intention to switch hospitals (compared with intention to stay or unsure) in the setting of a hypothetical or real TOLAC ban, San Francisco, Chicago, and Boston, United States, 2014–2016 (n=297)

CHARACTERISTICS	Unadjusted OR (95% CI)	Adjusted OR*** (95% CI)
Definitely or probably want a TOLAC	3.67 (2.17 – 6.21)	2.52 (1.42 – 4.46)
Midwife-led prenatal care	3.52 (1.55 – 7.98)	2.71 (1.08 – 6.77)
Friend/relative thinks I should have a TOLAC*	3.15 (1.89 – 5.24)	2.22 (1.21 – 4.07)
Provider thinks I should have a TOLAC**	2.57 (1.60 – 4.14)	

* Answered “definitely or probably have a TOLAC to the question”: “What do you think the person other than your health care provider whose opinion matters most to you thinks you should do?”

** Answered “definitely or probably have a TOLAC” to the question: “What do you think your health care provider thinks you should do?”

*** Multivariable model created using backwards selection, and adjusted for variables where aOR provided

Table 3

Characteristics of women receiving prenatal care at a hospital that does not offer TOLAC, San Francisco, United States, 2014–2016

CHARACTERISTICS	Stayed at non-TOLAC hospital (N=30) N(%) or Mean+-SD	Transferred care to TOLAC hospital (n=18) N(%) or Mean+-SD	p value
Age	32.5 ±1.2	34.1±0.9	0.3
Gestational Age at time of interview			
Married/living together	23 (77)	14 (78)	0.971
Race/Ethnicity			0.006
Latina/Hispanic	27 (90)	8 (44)	
Non-Hispanic White	1 (3)	5 (28)	
Asian/Pacific Islander	1 (3)	1 (6)	
Mixed/Other/Missing	1 (3)	4 (22)	
At least some college	10 (33)	12 (67)	0.025
Public insurance	24 (80)	10 (56)	0.071
Provider thinks I should have a TOLAC*	8 (27)	13 (72)	0.002
Friend/relative thinks I should have a TOLAC**	6 (20)	10 (56)	0.011
I would like to have a TOLAC	13 (43)	16 (89)	0.002
First baby with this hospital or provider	15 (50)	9 (50)	1
No importance placed on keeping the same hospital as the last delivery	12 (40)	11 (61)	0.3
No importance placed on keeping the same provider as the last delivery	11 (37)	9 (50)	0.4
Aware of TOLAC ban	26 (87)	7 (39)	0.001
Know someone who wanted a TOLAC but couldn't have one because of hospital or provider ban	7 (23)	3 (17)	0.58
Know someone who switched hospitals or providers in order to have TOLAC?	4 (13)	3 (17)	0.75

* Answered “definitely or probably have a TOLAC” to the question: “What do you think your health care provider thinks you should do?”

** Answered “definitely or probably have a TOLAC” to the question: “What do you think the person other than your health care provider whose opinion matters most to you thinks you should do?”

Table 4 –

Logistic regression model evaluating factors associated with switching hospitals for delivery among women receiving prenatal care at a hospital that had a TOLAC ban, San Francisco, United States, 2014–2016 (n=48)

CHARACTERISTICS	Unadjusted OR (95% CI)	Adjusted OR ^{***} (95% CI)
Not Latina [‡]	11.25 (2.47 – 51.04)	25.20 (2.23 – 284.26)
I would like to have a TOLAC	10.46 (2.03 – 53.81)	
Unaware of TOLAC ban	10.2 (2.47 – 42.11)	19.81 (1.99 – 196.64)
Provider thinks I should have a TOLAC [*]	7.15 (1.93 – 26.52)	
Friend/relative thinks I should have a TOLAC ^{**}	4.99 (1.37 – 18.16)	17.31 (1.70 – 176.06)
At least some college	4.00 (1.15 – 13.82)	
Private insurance	3.20 (0.88 – 11.63)	

[‡]73% Latina, 6% White, 10% Mixed/Other/Missing, 4% Asian/Pacific Islander

^{*} Answered “definitely or probably have a TOLAC” to the question: “What do you think your health care provider thinks you should do?”

^{**} Answered “definitely or probably have a TOLAC” to the question: “What do you think the person other than your health care provider whose opinion matters most to you thinks you should do?”

^{***} Multivariable model created using backwards selection, and adjusted for variables where aOR provided.