California Health Care Foundation

Listening to Mothers in California:

Results from a Population-Based Survey of Women's Childbearing Experiences

Data Snapshot

September 2018

Executive Summary

With half a million babies being born in California every year, childbirth is the number one reason for hospitalization in the state. Yet little is known about women's childbearing experiences, outcomes, and preferences. *Listening to Mothers in California* survey aims to fill these knowledge gaps and identify opportunities for improving the experience and outcomes of pregnancy and childbirth.

Listening to Mothers in California is the first fielding of the national *Listening to Mothers* survey at a state level and in Spanish. It included California women who gave birth to a single infant in a hospital in 2016. *Listening to Mothers in California: Results from a Population-Based Survey of Women's Childbearing Experiences* reports selected findings from this survey and highlights important differences by race, ethnicity, and insurance coverage (Medi-Cal, California's Medicaid program, pays for nearly half of California births).*

Key findings:

- While the vast majority of women used an obstetrician for their prenatal care and births, over half of women said they would definitely want (17%) or would consider (37%) a midwife for a future pregnancy.
- Three-quarters of California's childbearing women agreed that childbirth is a process that should not be interfered with unless medically necessary. Black and Latina women, and women with Medi-Cal coverage held this belief most strongly.
- Four in 10 women reported that a health professional tried to induce their labor (starting labor before it started on its own). Three-quarters of women who felt pressured by a health professional to have their labor induced had the intervention.
- Only 1 in 7 women with a prior cesarean had a vaginal birth after cesarean (VBAC), despite nearly half of women with repeat cesareans reporting interest in VBAC. Women with prior cesareans reported that providers disproportionately focused discussions and recommendations on having a repeat cesarean birth.
- One in 5 California women reported symptoms of anxiety, and 1 in 10 reported symptoms of depression during pregnancy. Across race/ethnicity groups, Black women were on the high end of the range for symptoms of anxiety and depression, during and after pregnancy.

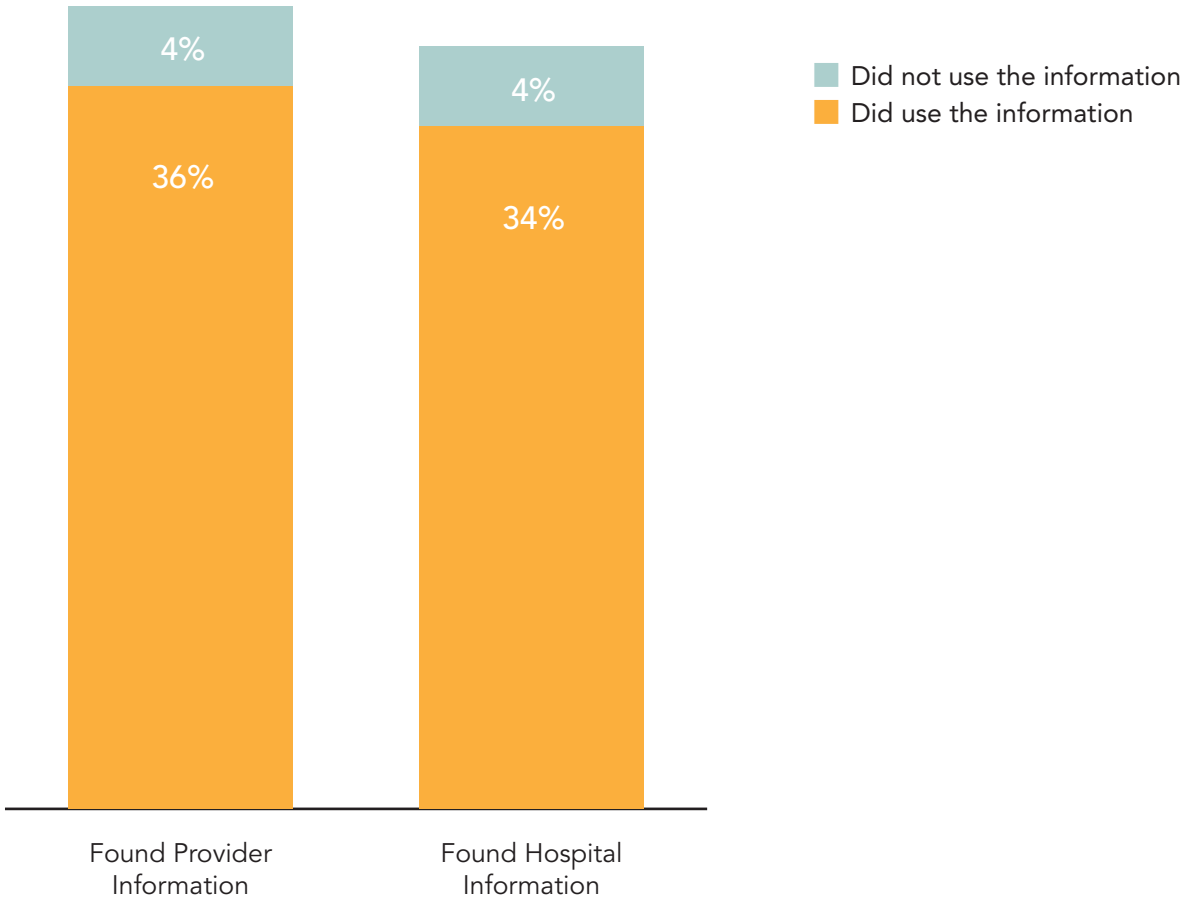
*Survey questionnaire, full survey report, and other resources available at www.chcf.org/listening-to-mothers-ca and www.nationalpartnership.org/ltmca.

Contents

Finding and Using Information About Quality

Maternity Care Provider and Hospital, California, 2016

BASE: WOMEN WHO FOUND COMPARATIVE QUALITY INFORMATION (*n* = 1,309)



Notes: "Not sure" and "did not find any information" not shown. Not all eligible respondents answered each item.

Source: *Listening to Mothers in California* (statewide survey of 2,539 women who gave birth in California hospitals in 2016), National Partnership for Women & Families, 2018.

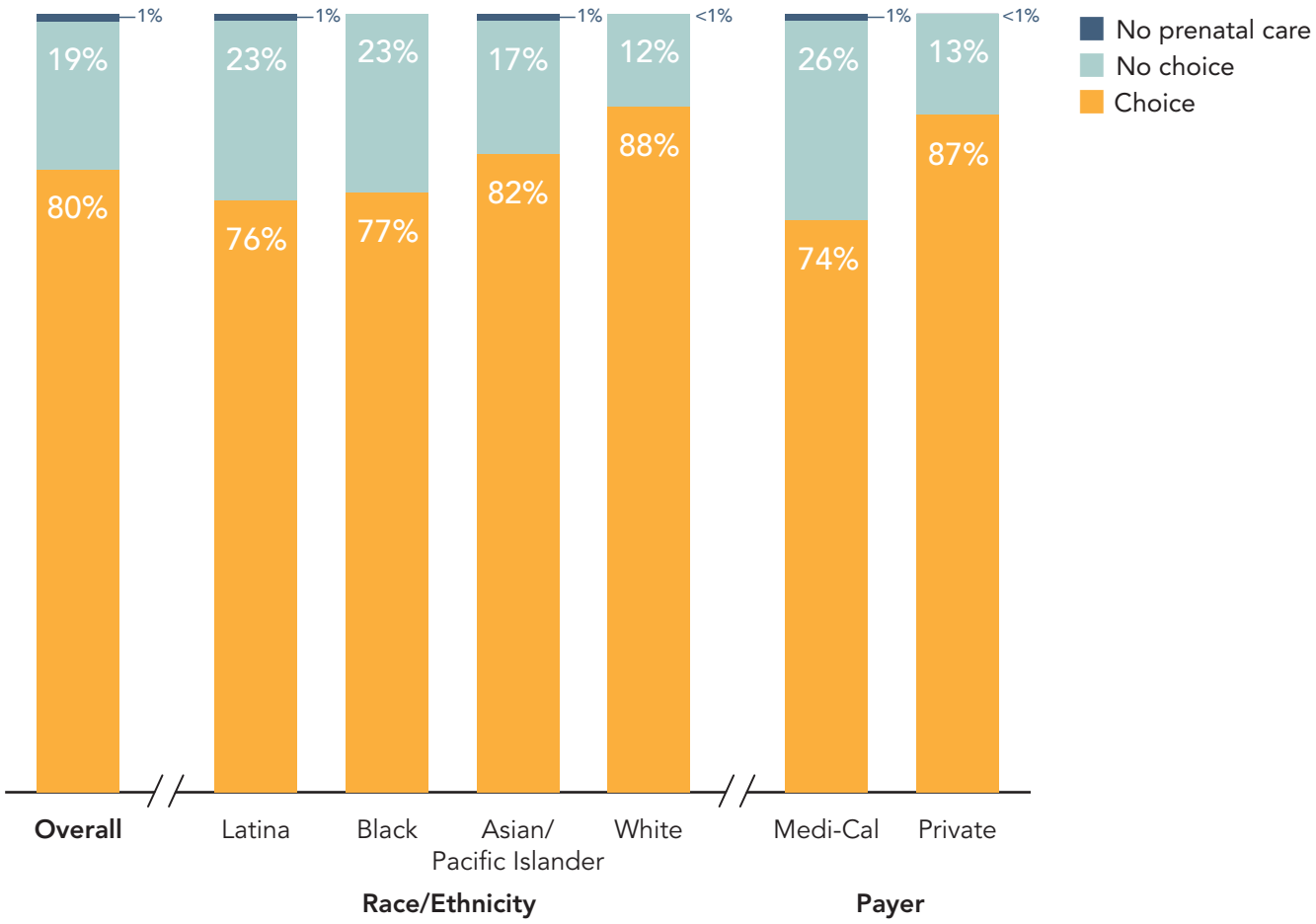
Care Team and Place of Birth

Over the last decade, more information about the quality of health care has become publicly available. Many expectant women sought and found quality information about prospective maternity care providers (40%) and prospective hospitals for giving birth (38%). Nearly everyone who found this information used it to help decide which prenatal care providers and hospitals to use. At the same time, only one in three women correctly understood that quality of maternity care varies across obstetricians and across hospitals (not shown).

Choice of Prenatal Care Provider

by Race/Ethnicity and Payer, California, 2016

BASE: ALL WOMEN WHO ANSWERED THIS QUESTION (*n* = 2,513)



Notes: Not all eligible respondents answered each item. Medi-Cal respondents were identified based upon a Medi-Cal record of a paid 2016 childbirth claim. Privately insured respondents self-identified in the survey. $p < .01$ for differences by race/ethnicity and by payer. Segments may not total 100% due to rounding.

Sources: *Listening to Mothers in California* (statewide survey of 2,539 women who gave birth in California hospitals in 2016), National Partnership for Women & Families, 2018; California Department of Health Care Services MIS/DSS Data Warehouse.

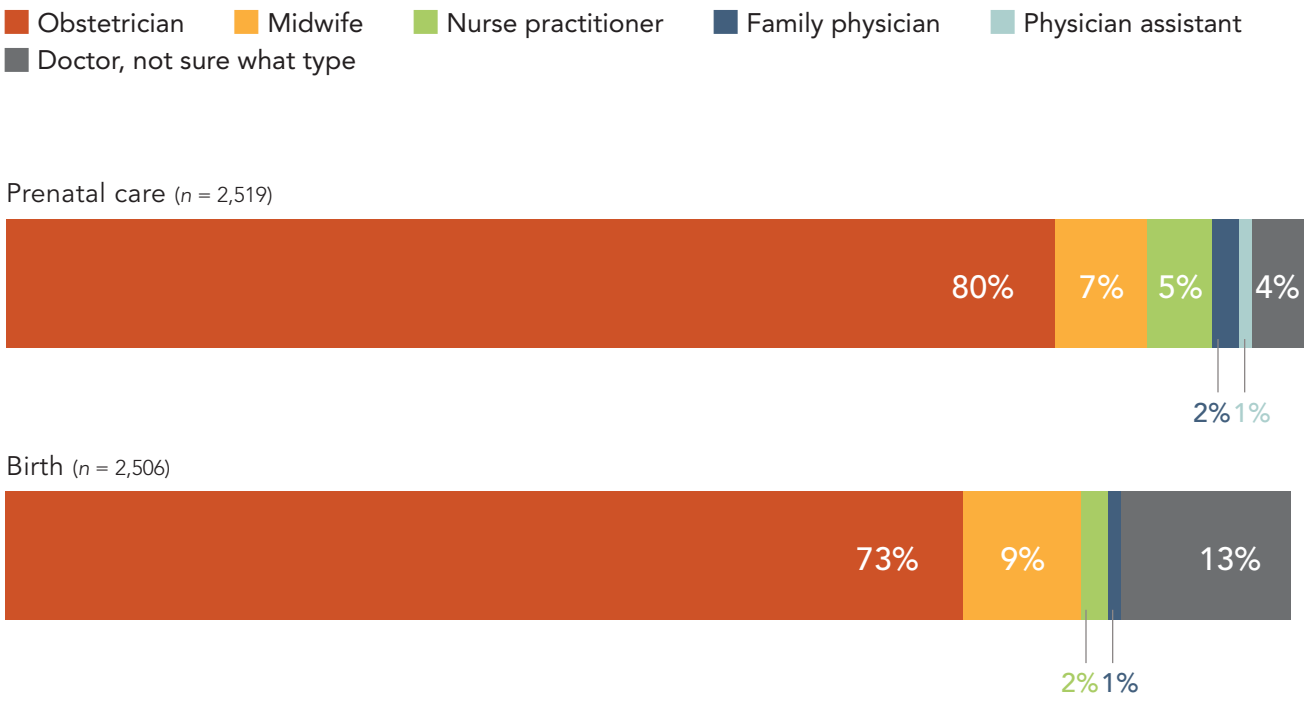
Care Team and Place of Birth

Overall, 80% of women had a choice of providers for prenatal care; however, only 76% of Latina and 77% of Black women did. Compared with women with private insurance, those covered by Medi-Cal were also less likely to have a choice and were twice as likely to have their prenatal care provider assigned to them. Many expectant mothers appreciate the opportunity to choose a prenatal provider who matches their needs and preferences. Just a fraction of survey participants received no prenatal care.

Maternity Care Provider Type

Prenatal Care and Birth, California, 2016

BASES: ALL WOMEN WHO ANSWERED THIS QUESTION



Notes: Not all eligible respondents answered each item. "Other" not shown. *Prenatal care* is the provider most often providing care during pregnancy. *Birth* is the provider who delivered the baby. Segments don't total 100% due to rounding.

Sources: *Listening to Mothers in California* (statewide survey of 2,539 women who gave birth in California hospitals in 2016), National Partnership for Women & Families, 2018.

Care Team and Place of Birth

Obstetricians were by far the most common type of maternity care provider for prenatal care and childbirth. While midwives are the most commonly used maternity care provider in high-income countries with favorable maternal health outcomes* (not shown), only 7% of California mothers used midwives as their main prenatal care providers and 9% as their birth attendant. Midwifery care has consistently been found to be safe and effective, and to result in high satisfaction scores.*

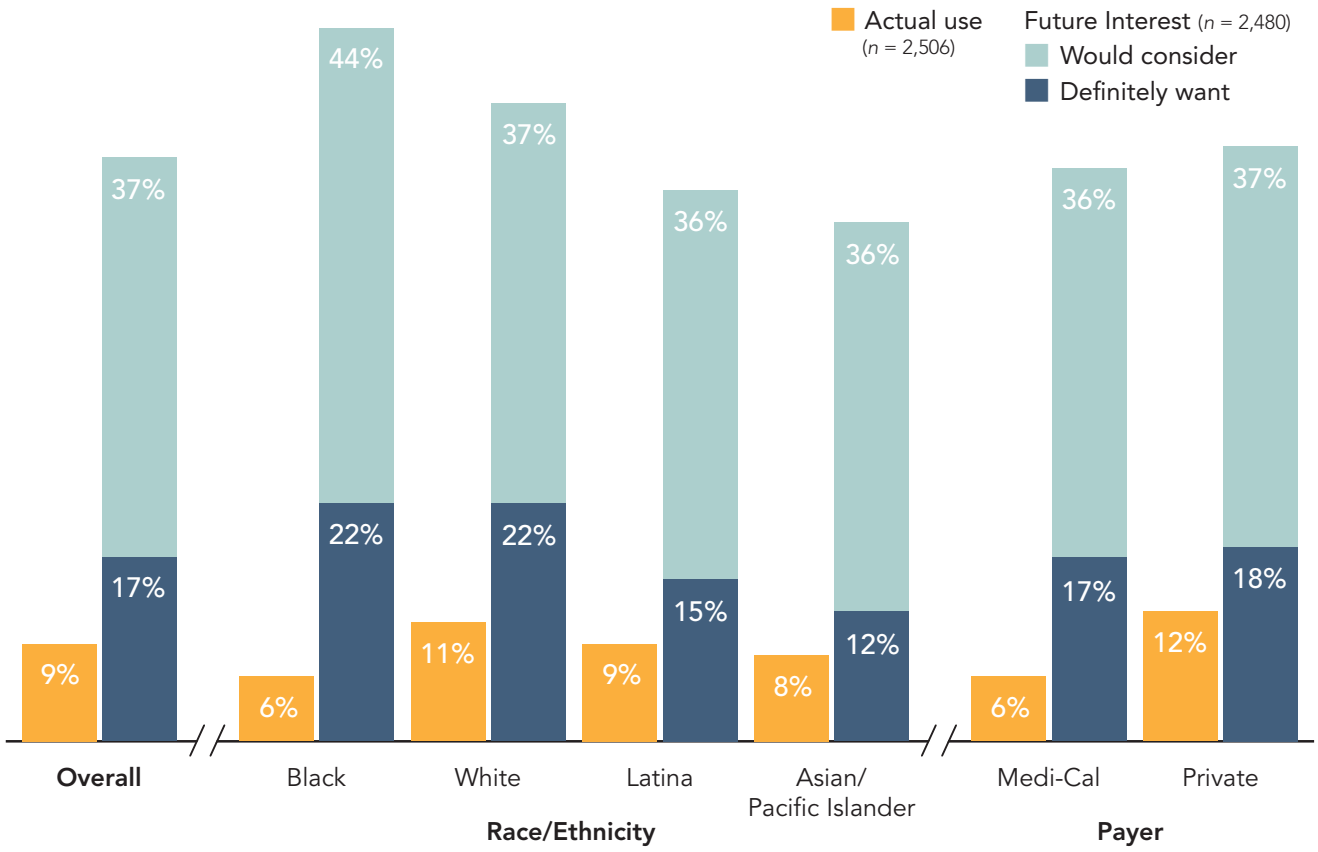
*Dorothy Shaw et al., "Drivers of Maternity Care in High-Income Countries: Can Health Systems Support Woman-Centred Care?," *The Lancet* 388, no. 10057 (Nov. 5, 2016): 2282–95, doi:10.1016/S0140-6736(16)31527-6.

Midwife Use: Actual and Future Interest

by Race/Ethnicity and Payer, California, 2016

BASES: ALL WOMEN WHO ANSWERED THIS QUESTION

If you have a future pregnancy, how open would you be to having a midwife as your maternity care provider (with doctor care, if needed)?



Notes: Data shown for use of midwife as birth provider. Midwives were the main prenatal care providers for 7% of survey participants (not shown). Not shown: "Would definitely not want this" and "not sure." Not all eligible respondents answered each item. Medi-Cal respondents were identified based upon a Medi-Cal record of a paid 2016 childbirth claim. Privately insured respondents self-identified in the survey. Differences within groups were not significant.

Sources: *Listening to Mothers in California* (statewide survey of 2,539 women who gave birth in California hospitals in 2016), National Partnership for Women & Families, 2018; California Department of Health Care Services MIS/DSS Data Warehouse.

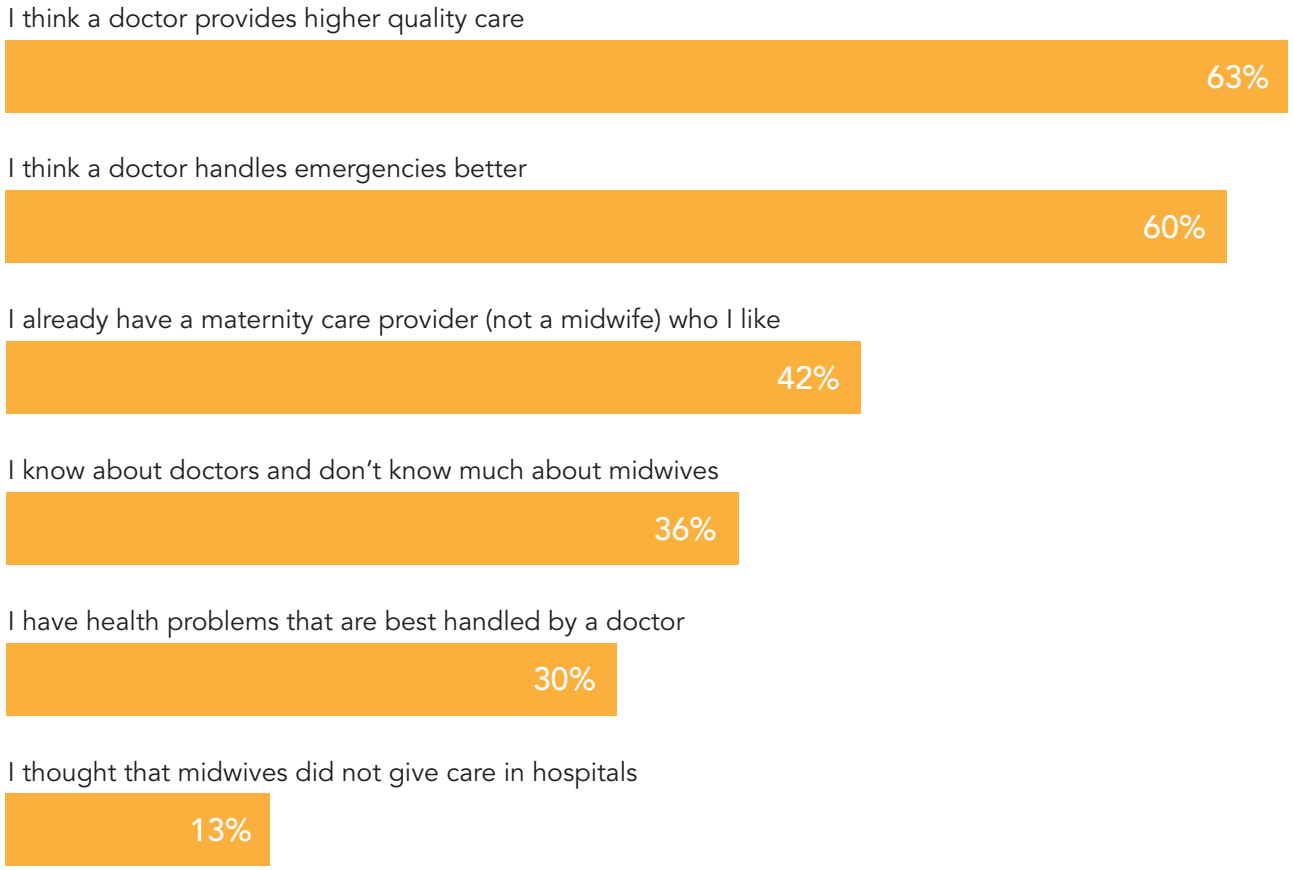
Care Team and Place of Birth

Interest in using midwives for future births far exceeded current use. While only 9% of women used midwives as birth attendants, 17% said they would definitely want a midwife for a future birth, and 37% would consider it. Black and White women expressed the greatest interest in future midwifery care among racial and ethnic groups. Research consistently finds that midwives provide high-quality, cost-effective, and satisfying care.*

*M. Johantgen et al., "Comparison of Labor and Delivery Care Provided by Certified Nurse-Midwives and Physicians: A Systematic Review, 1990 to 2008," *Women's Health Issues* 22, no. 1 (Jan.-Feb. 2012): e73-81, doi:10.1016/j.whi.2011.06.005

Reasons for Not Wanting a Midwife for Future Birth
California, 2016

BASE: WOMEN WHO DEFINITELY WOULD NOT WANT A MIDWIFE FOR A FUTURE BIRTH (*n* = 595)



Notes: Not all eligible respondents answered each item. Respondents could select more than one answer choice. "Other" not shown.

Source: *Listening to Mothers in California* (statewide survey of 2,539 women who gave birth in California hospitals in 2016), National Partnership for Women & Families, 2018.

Care Team and Place of Birth

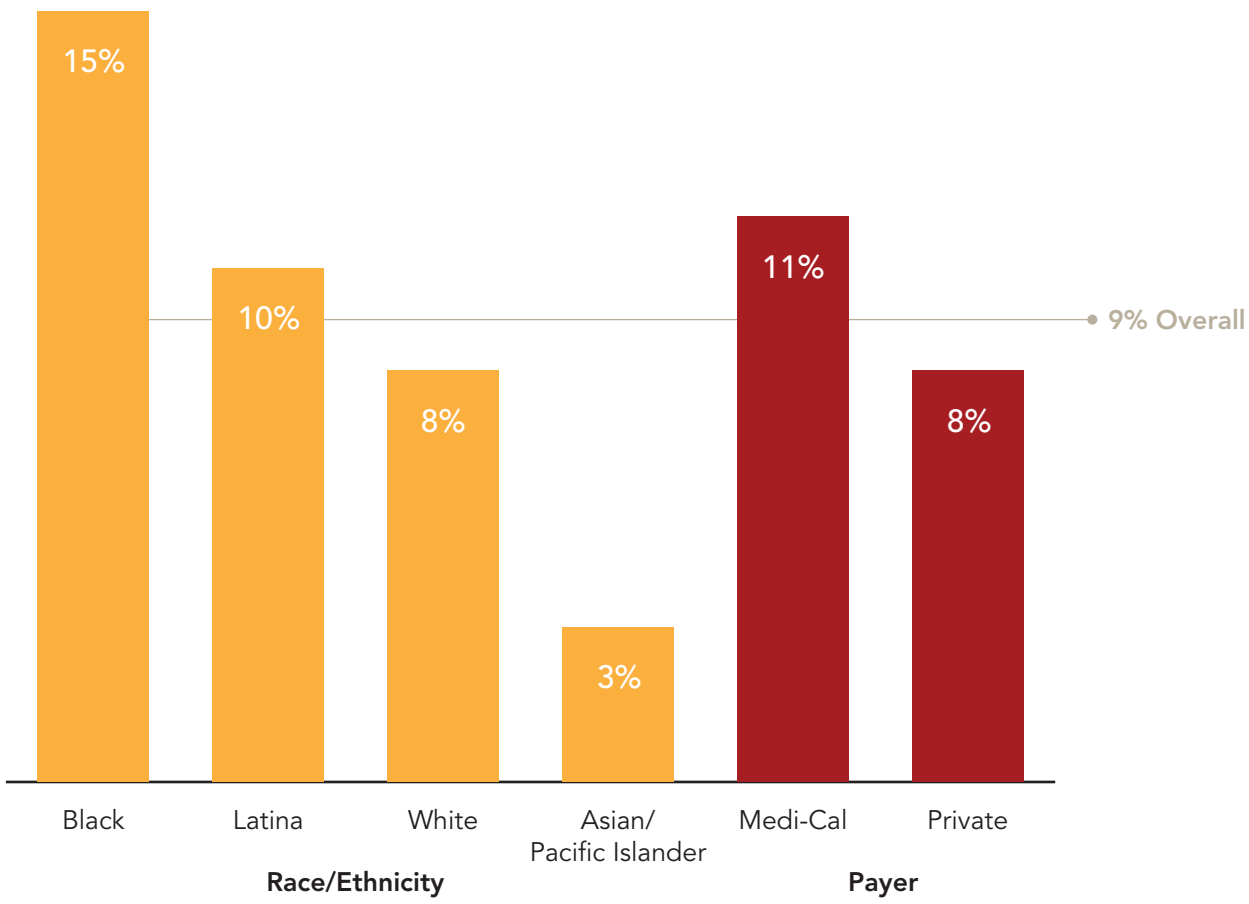
When asked about their maternal care provider preferences for a future birth, one-quarter of women said they definitely would not want a midwife. Their reasons reveal a lack of knowledge about midwives and the high quality of maternal care they provide. While many studies have demonstrated that midwives provide care that is as good as physicians,* 63% of women thought that a doctor provided higher quality care and 60% that a doctor handled emergencies better.

*M. Johantgen t al., "Comparison of Labor and Delivery Care Provided by Certified Nurse-Midwives and Physicians: A Systematic Review, 1990 to 2008," *Women's Health Issues* 22, no. 1 (Jan.-Feb. 2012): e73-81, doi:10.1016/j.whi.2011.06.005

Support from a Labor Doula

by Race/Ethnicity and Payer, California, 2016

BASE: WOMEN WHO PRIMARILY SPEAK ENGLISH AT HOME (*n* = 1,433)



Notes: Due to evidence of overcounting use of doulas among some non-English speakers, we limited our analysis of doula support to women who primarily speak English at home. Medi-Cal respondents were identified based upon a Medi-Cal record of a paid 2016 childbirth claim. Privately insured respondents self-identified in the survey. Not all eligible respondents answered each item. $p < .01$ for differences by race/ethnicity and by payer.

Sources: *Listening to Mothers in California* (statewide survey of 2,539 women who gave birth in California hospitals in 2016), National Partnership for Women & Families, 2018; California Department of Health Care Services MIS/DSS Data Warehouse.

Care Team and Place of Birth

During their recent labor, slightly less than 1 in 10 English-speaking women used labor doulas — non-clinical health workers who offer continuous physical, emotional, and informational support to women around the time of birth. Doula support offers many benefits, including reduced likelihood of using pain medicine and of cesarean birth and increased likelihood of having a satisfying childbirth.*

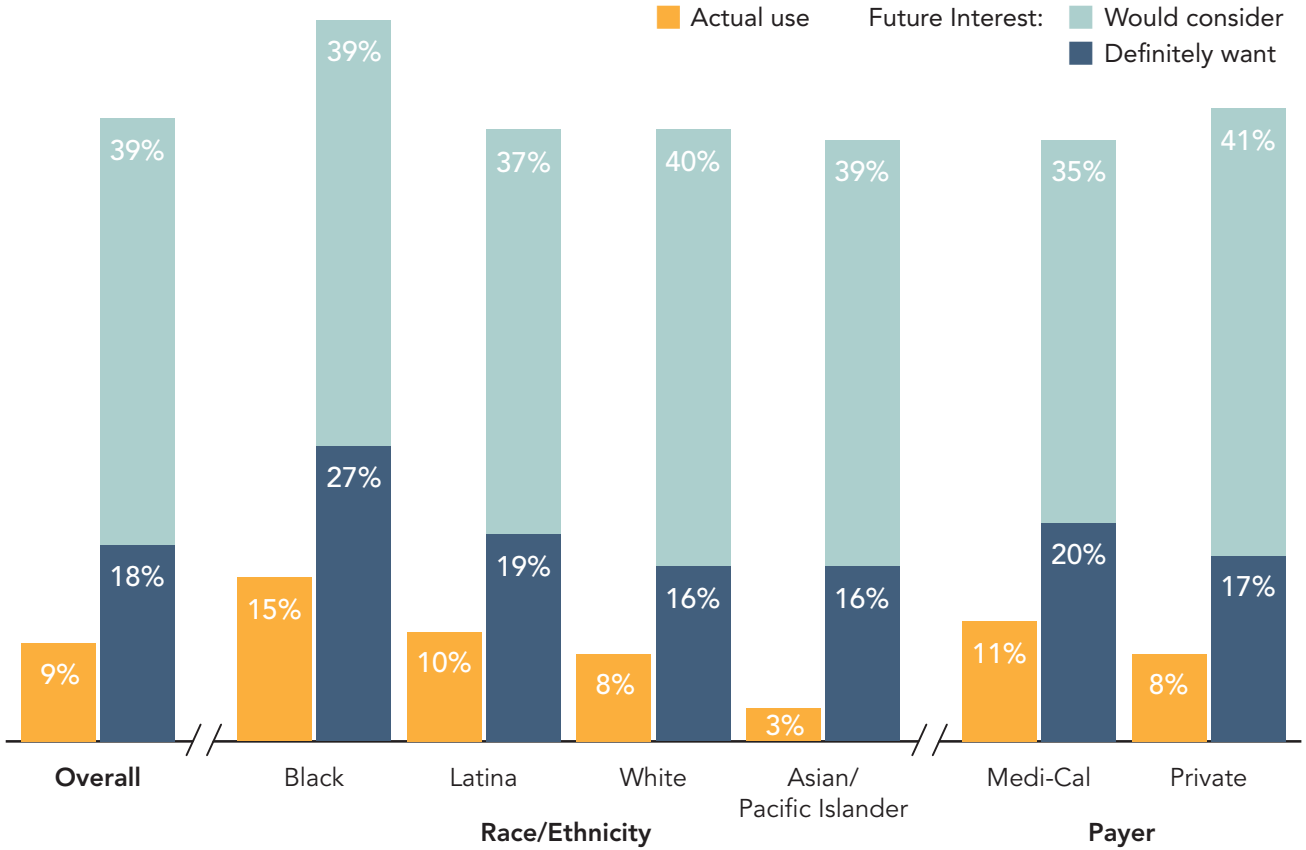
*M. A. Bohren et al., "Continuous Support for Women During Childbirth," *Cochrane Database of Systematic Reviews* 7 (July 6, 2017): CDC003766, doi: 10.1002/14651858.CD003766.pub6.

Labor Doula Use: Actual and Future Interest

by Race/Ethnicity and Payer, California, 2016

BASE: WOMEN WHO SPEAK PRIMARILY ENGLISH AT HOME (*n* = 1,433)

If you have a future pregnancy, how open would you be to having the support of a doula (trained labor companion) while you are giving birth?



Notes: A *labor doula* is a nonclinician health worker who offer continuous physical, emotional, and informational support to women around the time of birth. Due to evidence of overcounting the doula role among some non-English speakers, we limited our analyses of doula support to women who primarily speak English at home. "Would definitely not want this" and "not sure" not shown. Medi-Cal respondents were identified based upon a Medi-Cal record of a paid 2016 childbirth claim. Privately insured respondents self-identified in the survey. Not all eligible respondents answered each item. $p < .01$ for differences by race/ethnicity and by payer.

Sources: *Listening to Mothers in California* (statewide survey of 2,539 women who gave birth in California hospitals in 2016), National Partnership for Women & Families, 2018; California Department of Health Care Services MIS/DSS Data Warehouse.

Care Team and Place of Birth

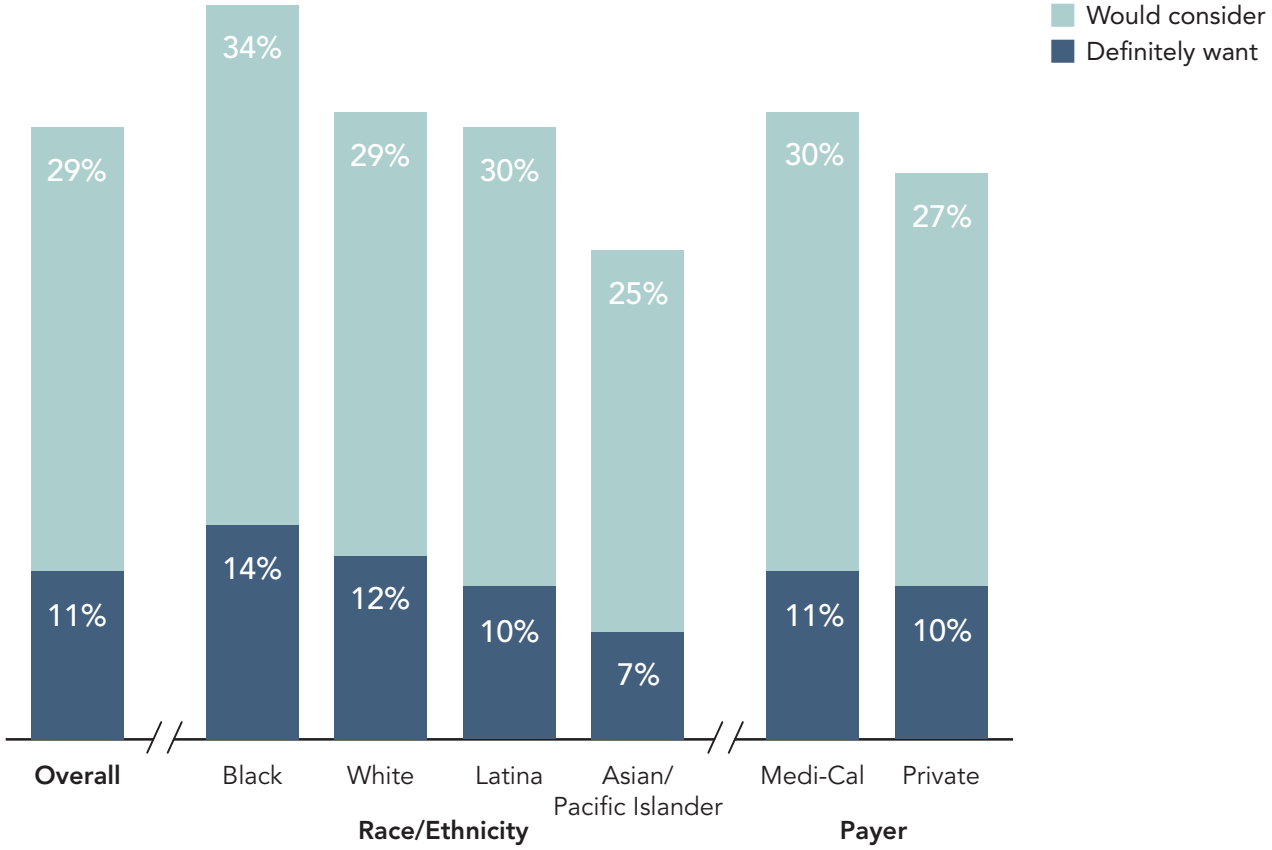
Interest in the use of a doula for a future birth was high among California women who spoke English at home and exceeded actual use for their recent birth. Nearly one in five women said that they would definitely want and an additional two in five would consider doula support for a future birth. Women of all race/ethnic groups showed high levels of interest in doula support, with Black women expressing the greatest interest in doula use.

Future Interest in Birth Center Use

by Race/Ethnicity and Payer, California, 2016

BASE: ALL WOMEN WHO ANSWERED THIS QUESTION (*n* = 2,482)

If you have a future pregnancy, how open would you be to giving birth in a birth center that is separate from a hospital (with hospital care, if needed)?



Notes: "Would definitely not want this" and "not sure" not shown. Medi-Cal respondents were identified based upon a Medi-Cal record of a paid 2016 childbirth claim. Privately insured respondents self-identified in the survey. Not all eligible respondents answered each item. $p < .01$ for differences by race/ethnicity and by payer.

Sources: *Listening to Mothers in California* (statewide survey of 2,539 women who gave birth in California hospitals in 2016), National Partnership for Women & Families, 2018; California Department of Health Care Services MIS/DSS Data Warehouse; Natality public-use data 2007–16 in CDC WONDER database, Centers for Disease Control and Prevention, February 2018, accessed March 6, 2018, wonder.cdc.gov.

Care Team and Place of Birth

In 2016, less than one percent (0.3%) of California women gave birth in a free-standing birth center (not shown). While all survey respondents had hospital births,* 11% would definitely want a birth center birth for a future pregnancy, and an additional 29% would consider it. Black women expressed the greatest interest in giving birth at a birth center, and women with Medi-Cal were more interested than women with private insurance.

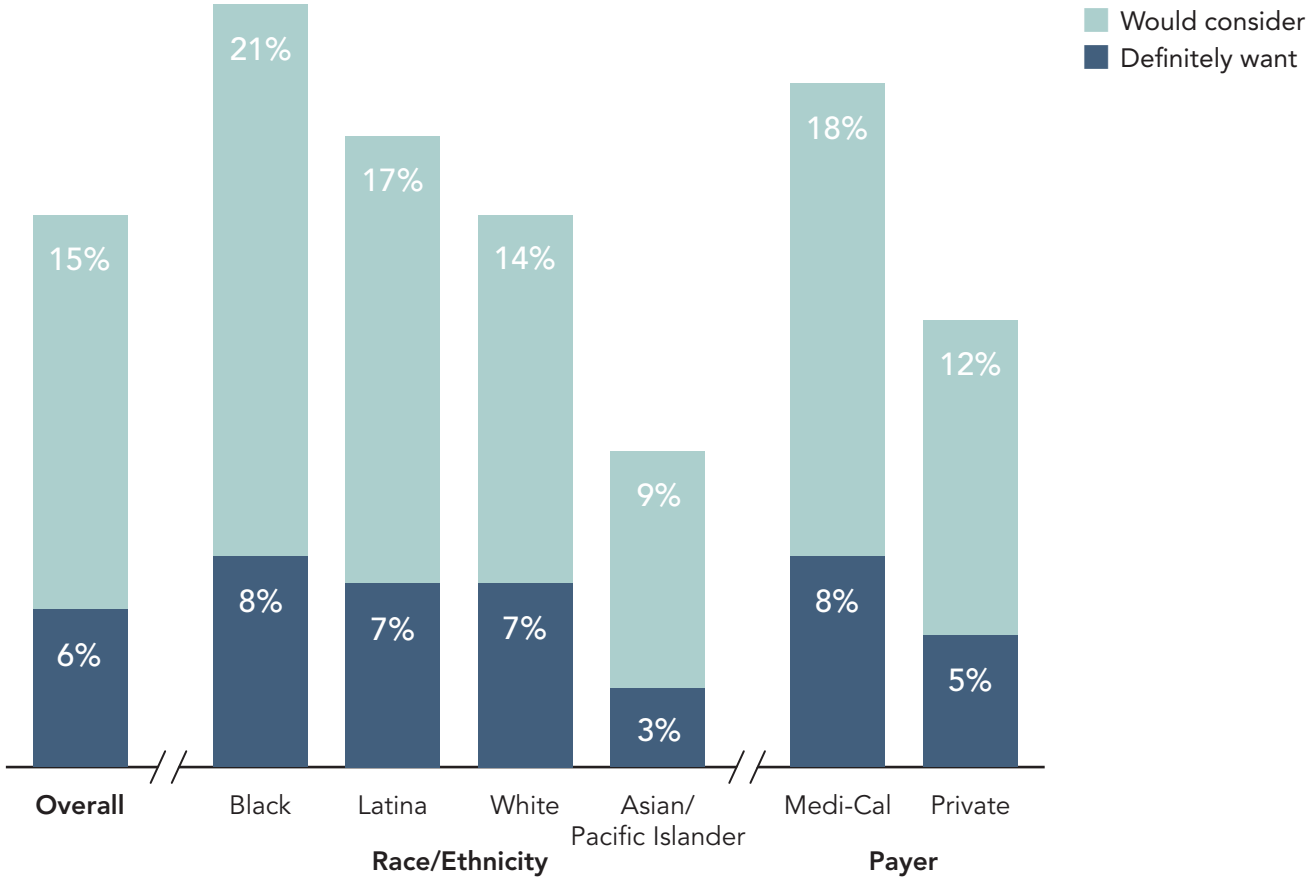
*Survey was limited to women who gave birth in a hospital.

Future Interest in Home Birth

by Race/Ethnicity and Payer, California, 2016

BASE: ALL WOMEN WHO ANSWERED THIS QUESTION (*n* = 2,482)

If you have a future pregnancy, how open would you be to giving birth at home (with hospital care, if needed)?



Notes: "Would definitely not want this" and "not sure" not shown. Medi-Cal respondents were identified based upon a Medi-Cal record of a paid 2016 childbirth claim. Privately insured respondents self-identified in the survey. Not all eligible respondents answered each item. $p < .01$ for differences by race/ethnicity and by payer.

Sources: *Listening to Mothers in California* (statewide survey of 2,539 women who gave birth in California hospitals in 2016), National Partnership for Women & Families, 2018; California Department of Health Care Services MIS/DSS Data Warehouse; Natality public-use data 2007–16 in CDC WONDER database, Centers for Disease Control and Prevention, February 2018, accessed March 6, 2018, wonder.cdc.gov.

Care Team and Place of Birth

While all survey respondents had hospital births,* 6% said they would definitely want a home birth for a future pregnancy, and an additional 15% would consider it. This level of interest contrasts with the low rate of home births in California in 2016 (0.7%). Black women and women covered by Medi-Cal reported the highest level of interest in a future home birth.

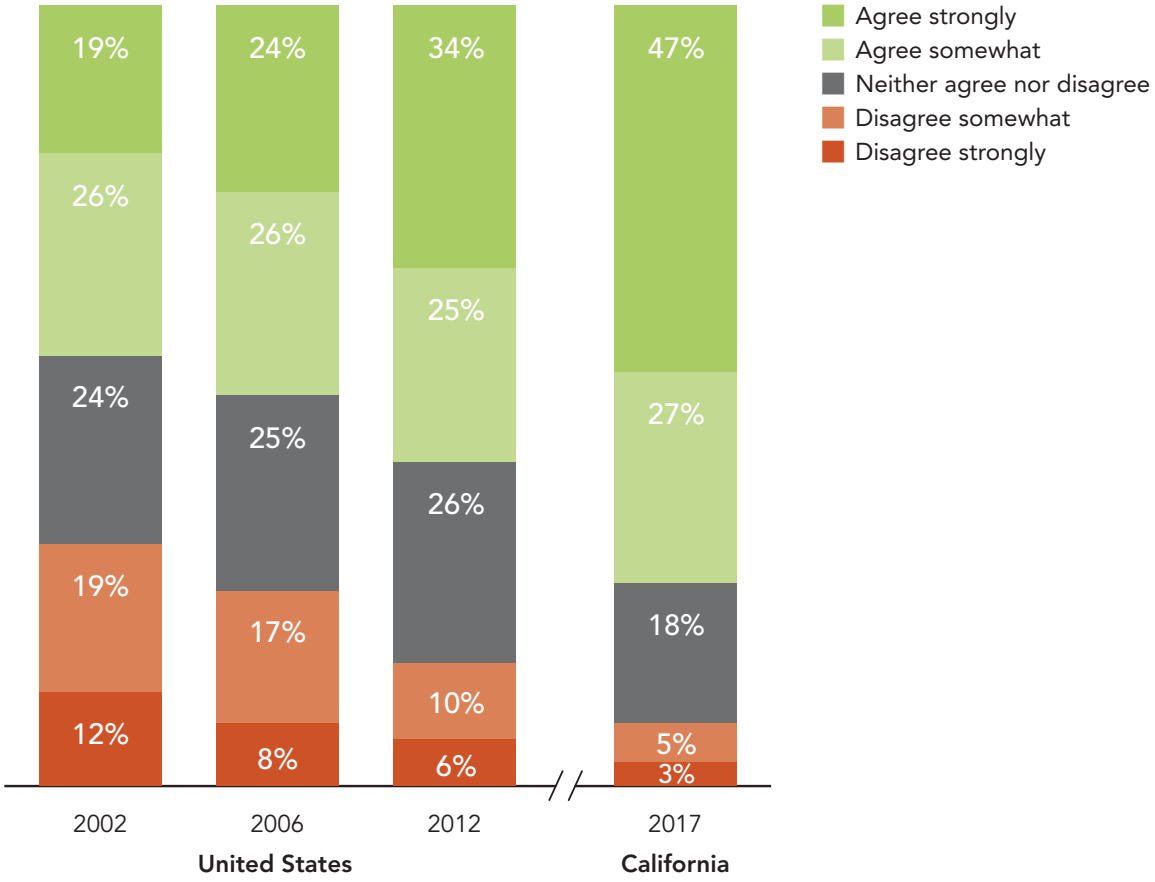
*Survey was limited to women who gave birth in a hospital.

Beliefs About Childbirth and Medical Interference

United States, 2002 to 2012, Selected Years; California, 2017

BASE: ALL WOMEN WHO ANSWERED THIS QUESTION (*n* = 2,451)

Childbirth is a process that should not be interfered with unless medically necessary.



Notes: Not all eligible respondents answered each item. Segments may not add to 100% due to rounding.

Sources: *Listening to Mothers in California* (statewide survey of 2,539 women who gave birth in California hospitals in 2016), National Partnership for Women & Families, 2018; *Listening to Mothers III: Pregnancy and Birth*, June 2013; *Listening to Mothers II: Report of the Second National U.S. Survey of Women's Childbearing Experiences*, October 2006; *Listening to Mothers: Report of the First National U.S. Survey of Women's Childbearing Experiences*, Maternity Center Association, October 2002, www.nationalpartnership.org.

Maternity Care Practices

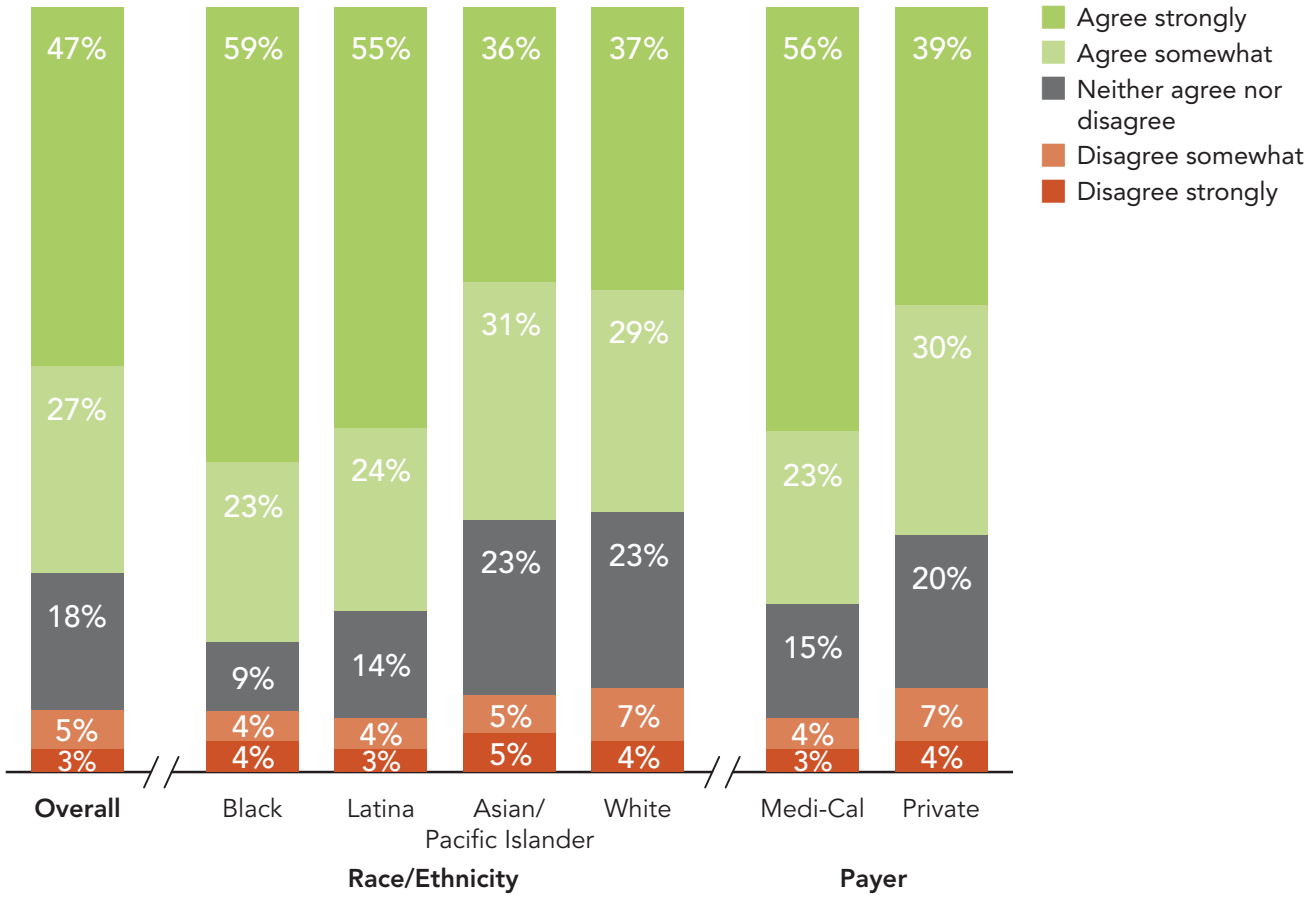
Nearly half of California women agreed strongly that childbirth is a process that should not be interfered with unless medically necessary, and an additional 27% agreed somewhat with this idea. Since this question was first asked in a 2002 national *Listening to Mothers* survey, an increasing number of women nationally have strongly agreed with this idea. These beliefs contrast with the many interventions respondents experienced during their labors and births, including labor inductions, intravenous drips, and catheters to remove urine.

Beliefs About Childbirth and Medical Interference

by Race/Ethnicity and Payer, California, 2017

BASE: ALL WOMEN WHO ANSWERED THIS QUESTION (*n* = 2,451)

Childbirth is a process that should not be interfered with unless medically necessary.



Notes: Medi-Cal respondents were identified based upon a Medi-Cal record of a paid 2016 childbirth claim. Privately insured respondents self-identified in the survey. Not all eligible respondents answered each item. $p < .01$ for differences by payer. Segments may not add to 100% due to rounding.

Sources: *Listening to Mothers in California* (statewide survey of 2,539 women who gave birth in California hospitals in 2016), National Partnership for Women & Families, 2018; California Department of Health Care Services MIS/DSS Data Warehouse.

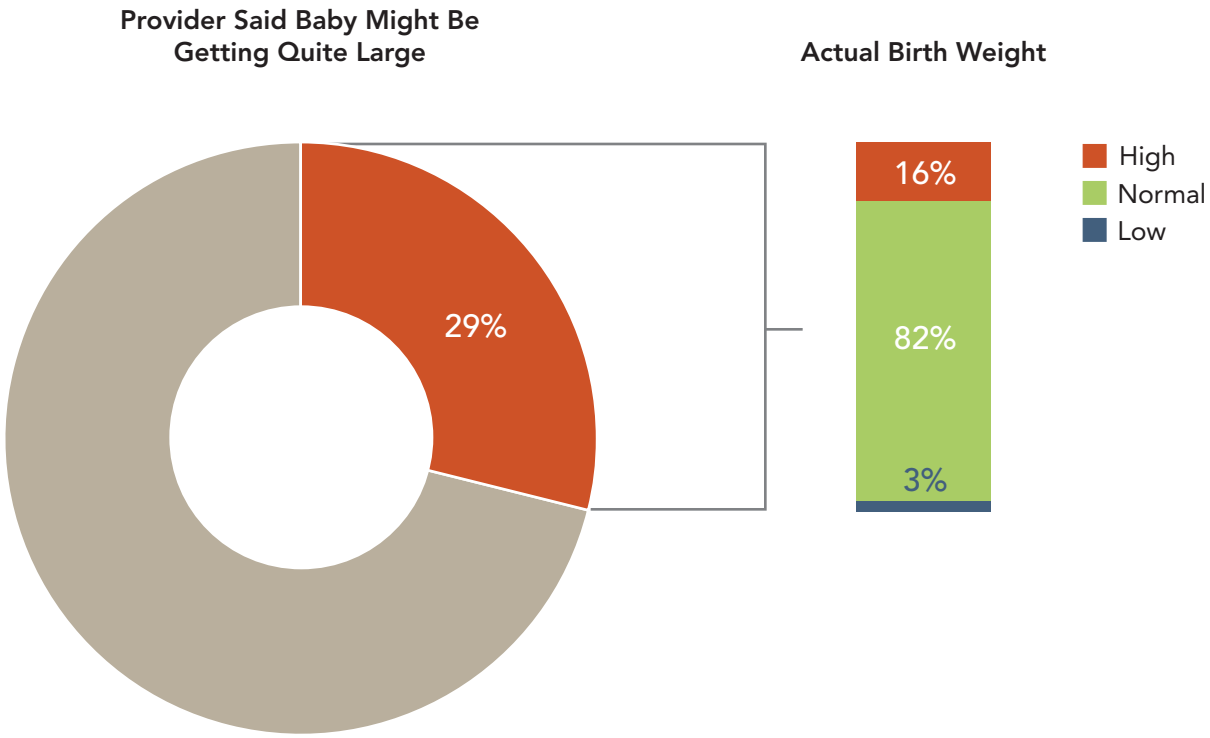
Maternity Care Practices

Black and Latina women expressed the highest levels of agreement that birth is a process that should not be interfered with unless medically necessary. Medi-Cal beneficiaries were more likely to agree than women with private insurance.

Birth Weight: Provider's Prenatal Estimate vs. Actual

California, 2016

BASE: ALL WOMEN WHO ANSWERED THIS QUESTION (*n* = 2,523)



Notes: *Low* birth weight is <2,500 g (<5 lb., 8 oz.); *normal* birth weight is 2,500–3,999 g (5 lb., 8 oz. to 8 lb., 13 oz.); *high* birth weight, sometimes called "macrosomia," is ≥4,000 g (>8 lb., 13 oz.). Not all eligible respondents answered each item. Segments may not add to 100% due to rounding.

Source: *Listening to Mothers in California* (statewide survey of 2,539 women who gave birth in California hospitals in 2016), National Partnership for Women & Families, 2018.

Maternity Care Practices

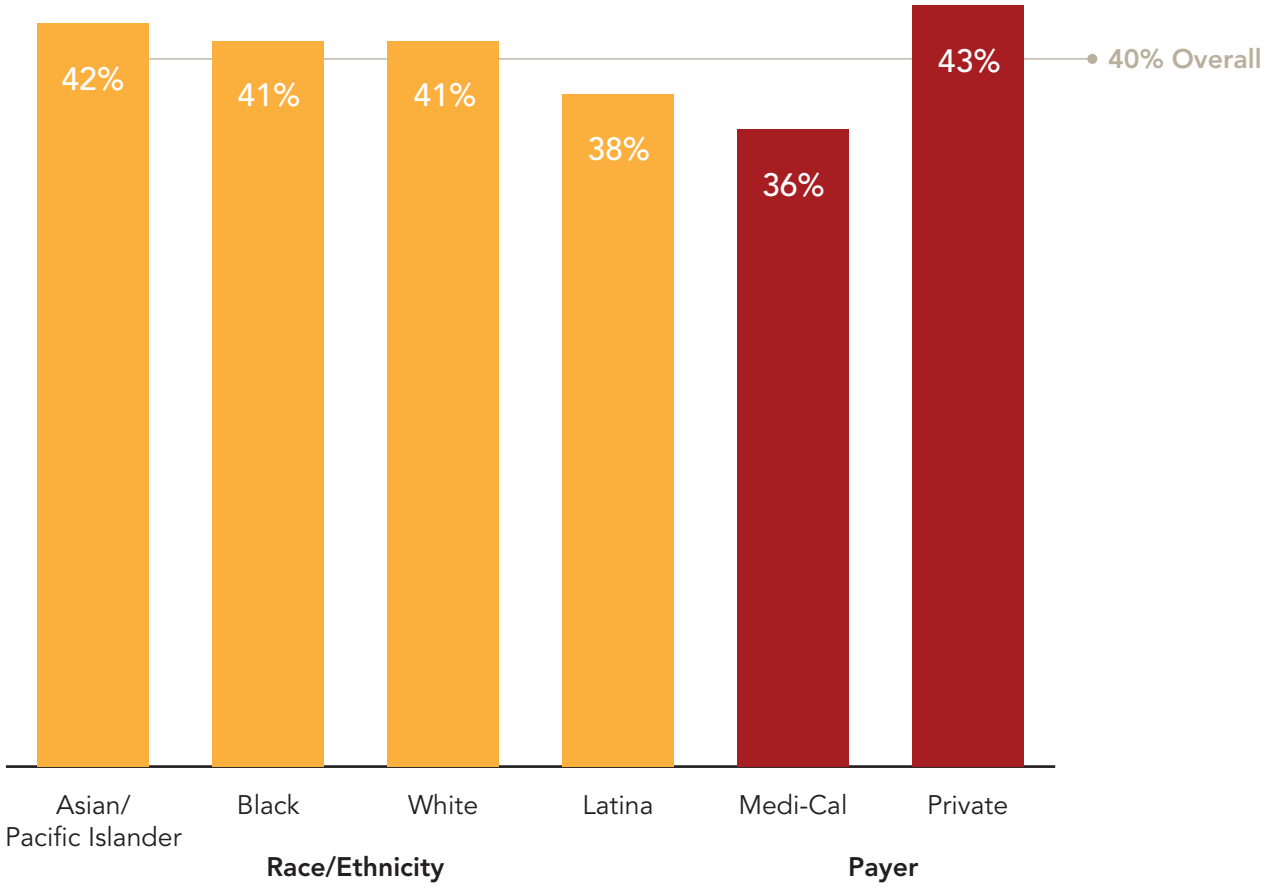
About 3 women in 10 reported that their providers said their baby might be getting quite large near the end of pregnancy, a speculation that can raise concerns in women and lead to higher rates of intervention such as induction of labor. However, just one in six babies born to women receiving this message could be classified as large; the rest were in the normal or low birth-weight ranges.

Attempted Labor Induction

by Race/Ethnicity and Payer, California, 2016

BASE: ALL WOMEN WHO ANSWERED THIS QUESTION (*n* = 2,521)

Did your maternity care provider try to induce your labor in any way?



Notes: Medi-Cal respondents were identified based upon a Medi-Cal record of a paid 2016 childbirth claim. Privately insured respondents self-identified in the survey. Not all eligible respondents answered each item. $p < .01$ for differences by payer. Differences by race/ethnicity were not significant.

Sources: *Listening to Mothers in California* (statewide survey of 2,539 women who gave birth in California hospitals in 2016), National Partnership for Women & Families, 2018; California Department of Health Care Services MIS/DSS Data Warehouse.

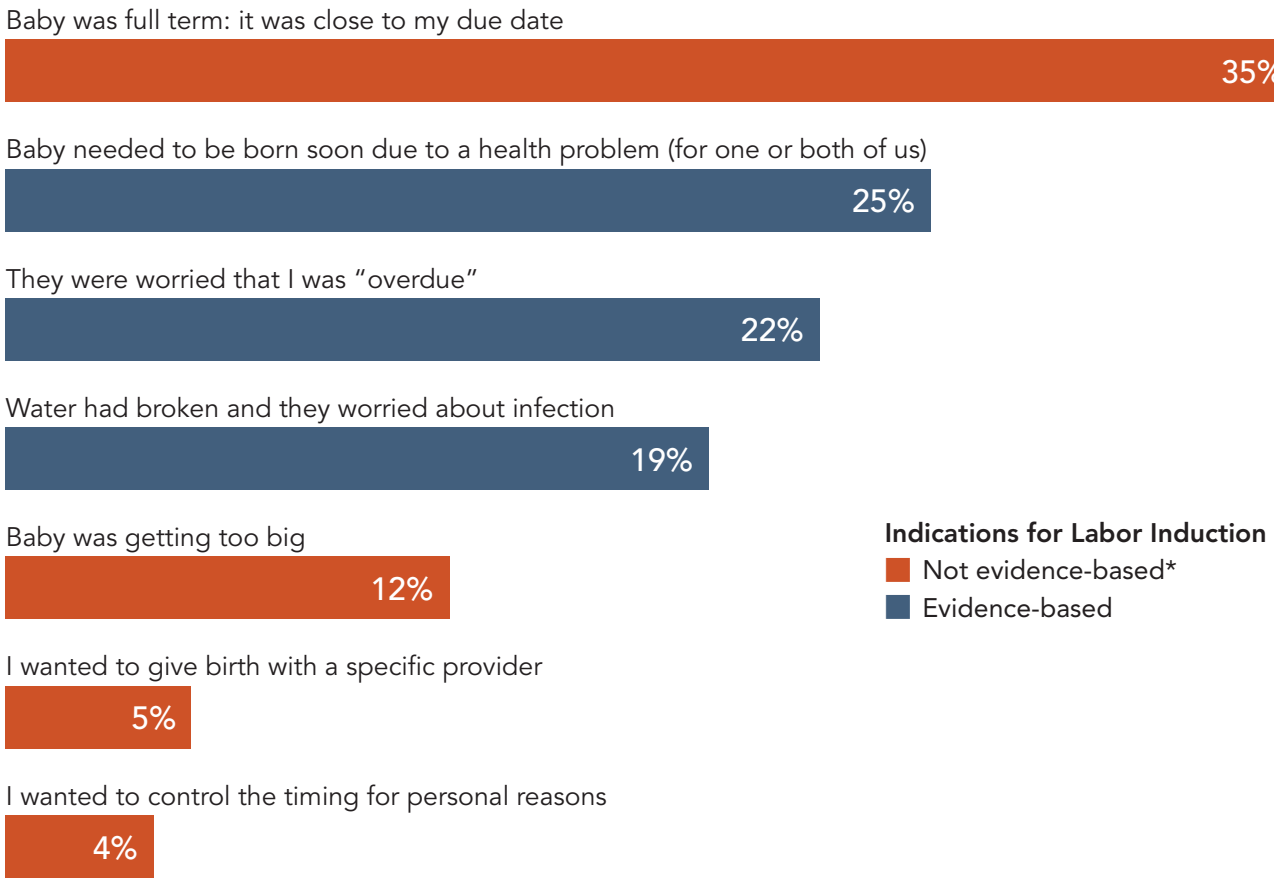
Maternity Care Practices

Four in 10 women reported that a care provider tried to induce their labor (using medicine and/or other methods to try to cause labor to start before it starts on its own). While there was little variation across race/ethnicity groups, women with private insurance were more likely than women with Medi-Cal coverage to experience attempted induction. While induction is sometimes necessary, inducing labor without a clear medical reason needlessly exposes the woman and baby to medications and other procedures.

Reasons for Labor Induction

California, 2016

BASE: WOMEN WHOSE CARE PROVIDER TRIED TO INDUCE LABOR (*n* = 995)



*Author analysis of write-in answers found that 15% of women indicated an additional non-evidence-based reason for labor induction.

Notes: "Some other reason" (not recoded) and "not sure" not shown. Respondents could select more than one answer. Not all eligible respondents answered each item.

Sources: *Listening to Mothers in California* (statewide survey of 2,539 women who gave birth in California hospitals in 2016), National Partnership for Women & Families, 2018; E. Mozurkewich et al., "Indications for Induction of Labour: A Best-Evidence Review." *BJOG* 116, no. 5 (2009): 626–36, doi:10.1111/j.1471-0528.2008.02065.x; Koopmans, C.M., Bijlenga, D.,Groen, H., Vijgen, S.M., Aarnoudse, J.G., Bekedam, D.J., . . . van Pampus, M.G. (2009). "Induction of Labour Versus Expectant Monitoring for Gestational Hypertension or Mild Pre-Eclampsia After 36 Weeks' Gestation (HYPITAT): A Multicentre, Open-Label Randomised Controlled Trial. *Lancet*, 374(9694), 979–988.

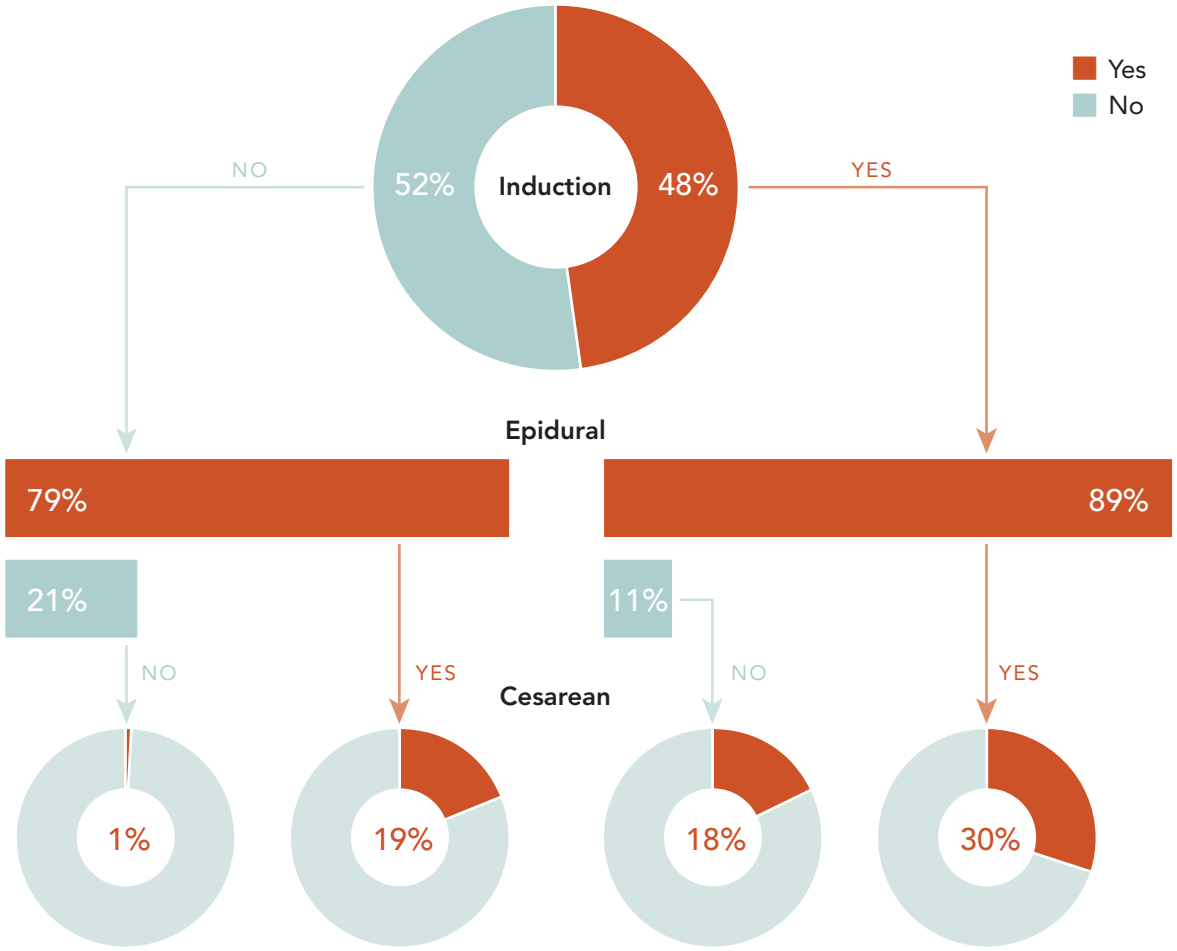
Maternity Care Practices

More than one-third of women who had labor induced (labor started by a provider using a drug and/or other methods before it started on its own) said the reason was that their baby was full term, which is not an evidence-based indication for labor induction. One-quarter said they had labor induced due to a health problem. At least 37% of women with attempted induced labor solely cited non-evidence-based reasons for having their labors induced, a procedure that can add medical risks.

Cascade of Intervention

Induction, Epidural, and Cesarean, California, 2016

BASE: WOMEN HAVING THEIR FIRST BABY WHO EXPERIENCED LABOR AT 37 OR MORE WEEKS OF PREGNANCY (*n* = 841)



Notes: Not all eligible respondents answered each item. A term baby is one that is born at 37 or more weeks of gestation. In this group, which included 80% of women giving birth for the first time, the overall epidural rate was 84% and overall cesarean rate was 22%. $p < .01$ for differences in cesarean birth rate across induction-epidural groups.

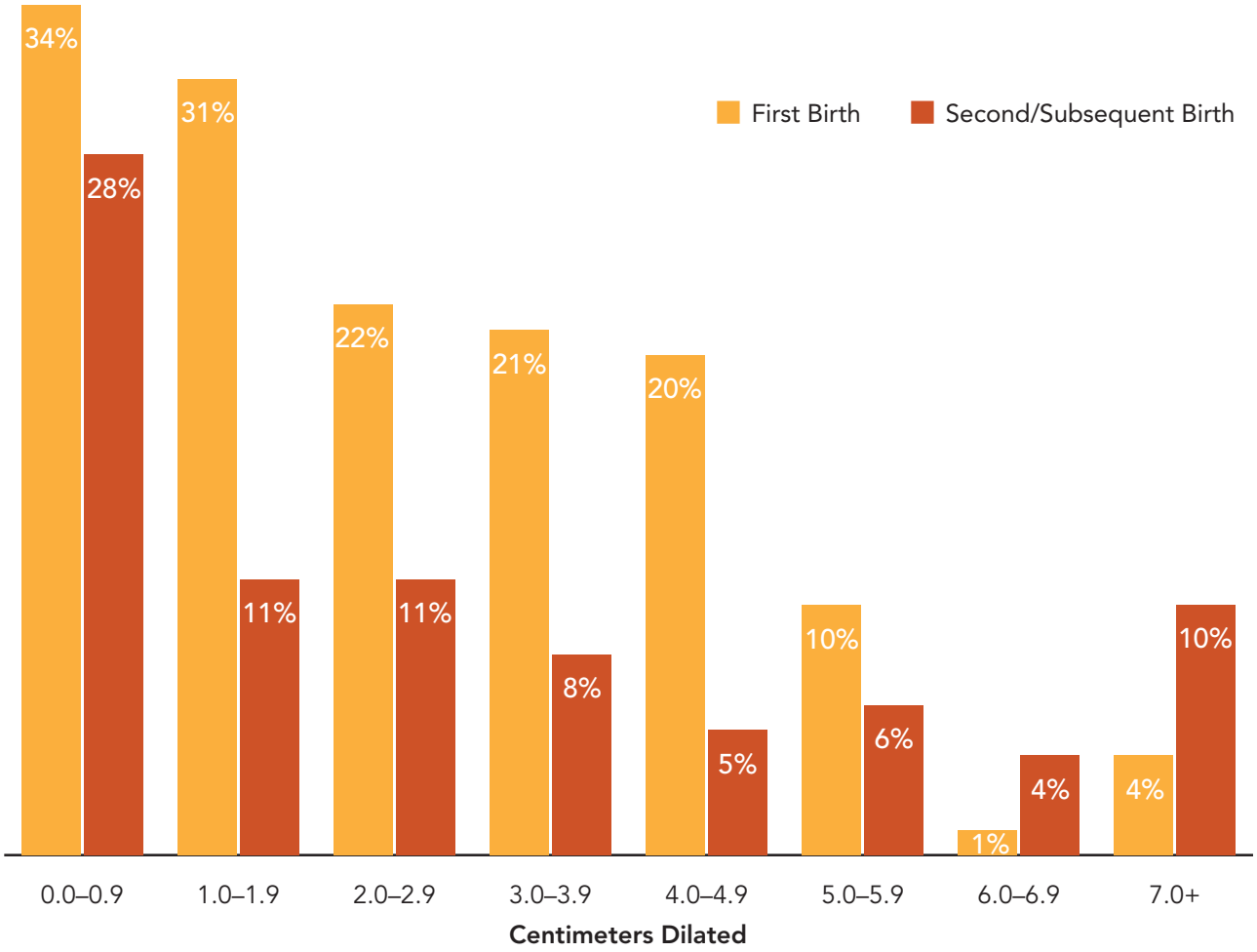
Source: *Listening to Mothers in California* (statewide survey of 2,539 women who gave birth in California hospitals in 2016), National Partnership for Women & Families, 2018.

Maternity Care Practices

Among first-time mothers who experienced labor at 37 or more weeks of pregnancy, there was a strong association between cesarean birth and use of labor induction and/or epidural for pain relief. Only 1% who had neither induction nor an epidural had a cesarean birth, whereas those experiencing both interventions had a 30% cesarean rate. While cesareans are critical in some circumstances, medically unnecessary cesareans can pose serious complications for women and their babies.

Cesarean Rate, by Centimeters Dilated at Admission
California, 2016

BASE: WOMEN WHO HAD ONE OR MORE VAGINAL EXAMS AND EXPERIENCED LABOR (*n* = 1,461)



Notes: Not all eligible respondents answered each item. $p < .01$ for differences in cesarean rate across dilation groups.

Source: *Listening to Mothers in California* (statewide survey of 2,539 women who gave birth in California hospitals in 2016), National Partnership for Women & Families, 2018.

Maternity Care Practices

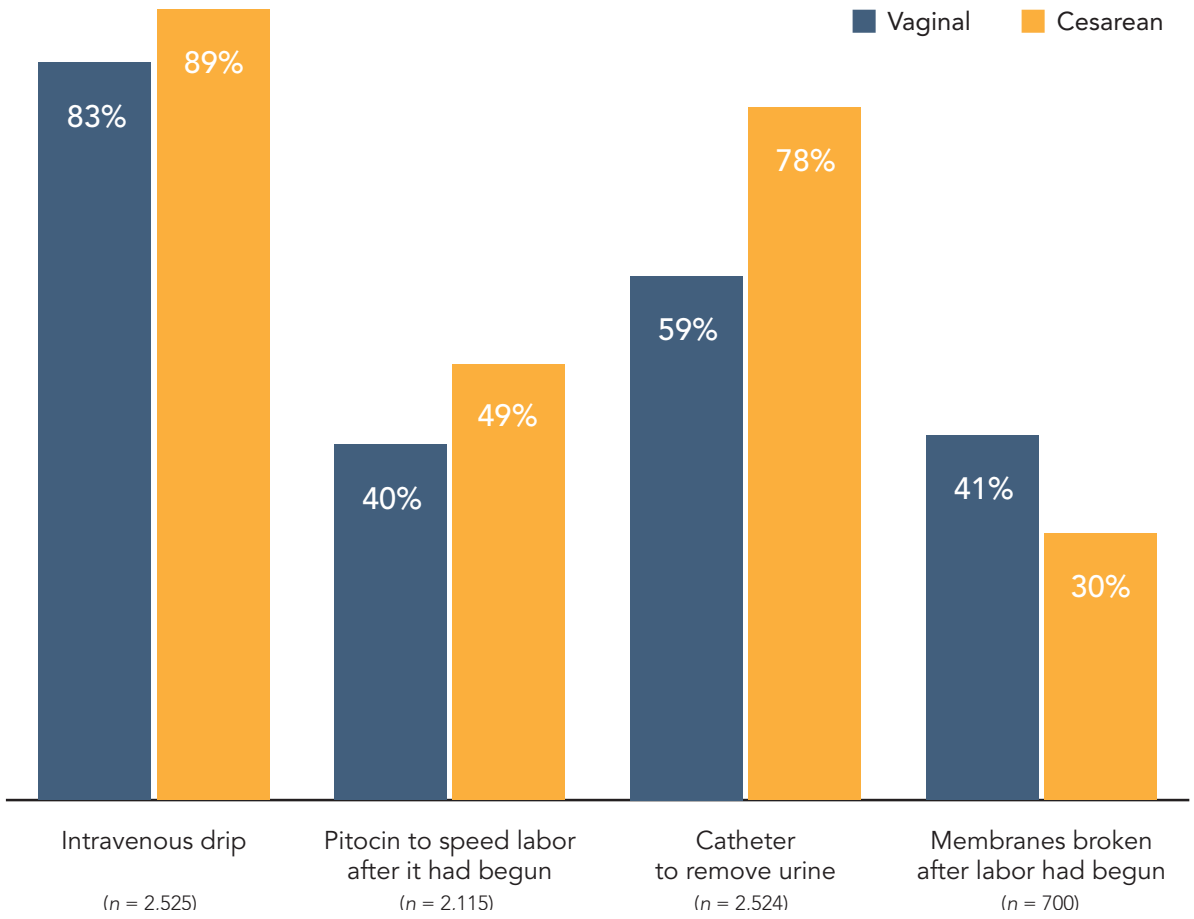
Experts recommend avoiding unneeded cesarean birth and other interventions by delaying hospital admission until the woman is in active labor (cervix dilated, or opened, least five or six centimeters).* Just 23% of women reported that they were five centimeters or more dilated at their first vaginal exam upon hospital admission (data not shown). Of women experiencing their first birth, one-fifth or more had cesareans if they were less than five centimeters dilated at their first vaginal exam.

*"Approaches to Limit Intervention During Labor and Birth," American College of Obstetricians and Gynecologists, February 2017, www.acog.org; "Toolkit to Support Vaginal Birth and Reduce Primary Cesareans (2016)," California Maternal Quality Care Collaborative, www.cmqcc.org.

Selected Interventions, by Mode of Birth

California, 2016

BASE: WOMEN WHO EXPERIENCED LABOR (PITOCIN, MEMBRANES BROKEN)
ALL WOMEN (INTRAVENOUS DRIP, BLADDER CATHETER)



Notes: "Not sure" not shown. Also not shown here are interventions experienced to assess cervical dilation and position of the baby, induce labor, monitor the status of the baby, and help with pain, among others. Not all eligible respondents answered each item. $p < .01$ for differences by mode of birth.

Source: *Listening to Mothers in California* (statewide survey of 2,539 women who gave birth in California hospitals in 2016), National Partnership for Women & Families, 2018.

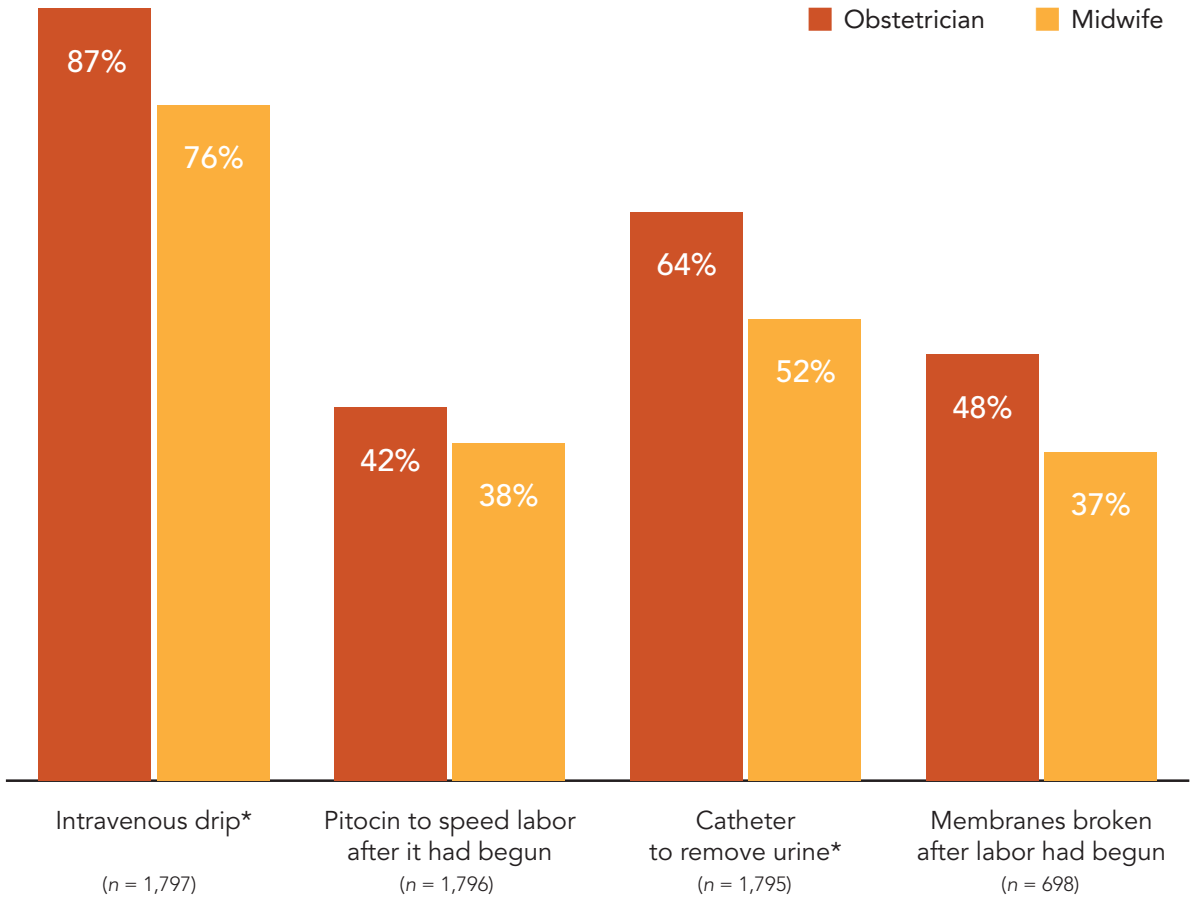
Maternity Care Practices

Women with both vaginal and cesarean births experienced numerous interventions around the time of birth, in many cases at high rates. Large majorities of all women experienced an intravenous drip and a catheter to remove urine. These interventions can restrict mobility, lead to additional interventions during childbirth, and introduce health risks to mother and baby. Many women also had Pitocin and/or had membranes broken to try to induce labor (not shown).

Selected Interventions, Vaginal Births

by Provider Type, California, 2016

BASE: WOMEN WHO EXPERIENCED LABOR (PITOCIN, MEMBRANES BROKEN)
ALL WOMEN (INTRAVENOUS DRIP, BLADDER CATHETER)



*p < .01 for differences by provider.

Notes: Provider type listed is the provider who delivered the baby. "Not sure" not shown. Also not shown are interventions experienced to assess cervical dilation and position of the baby, induce labor, monitor the status of the baby, and help with pain, among others. Not all eligible respondents answered each item.

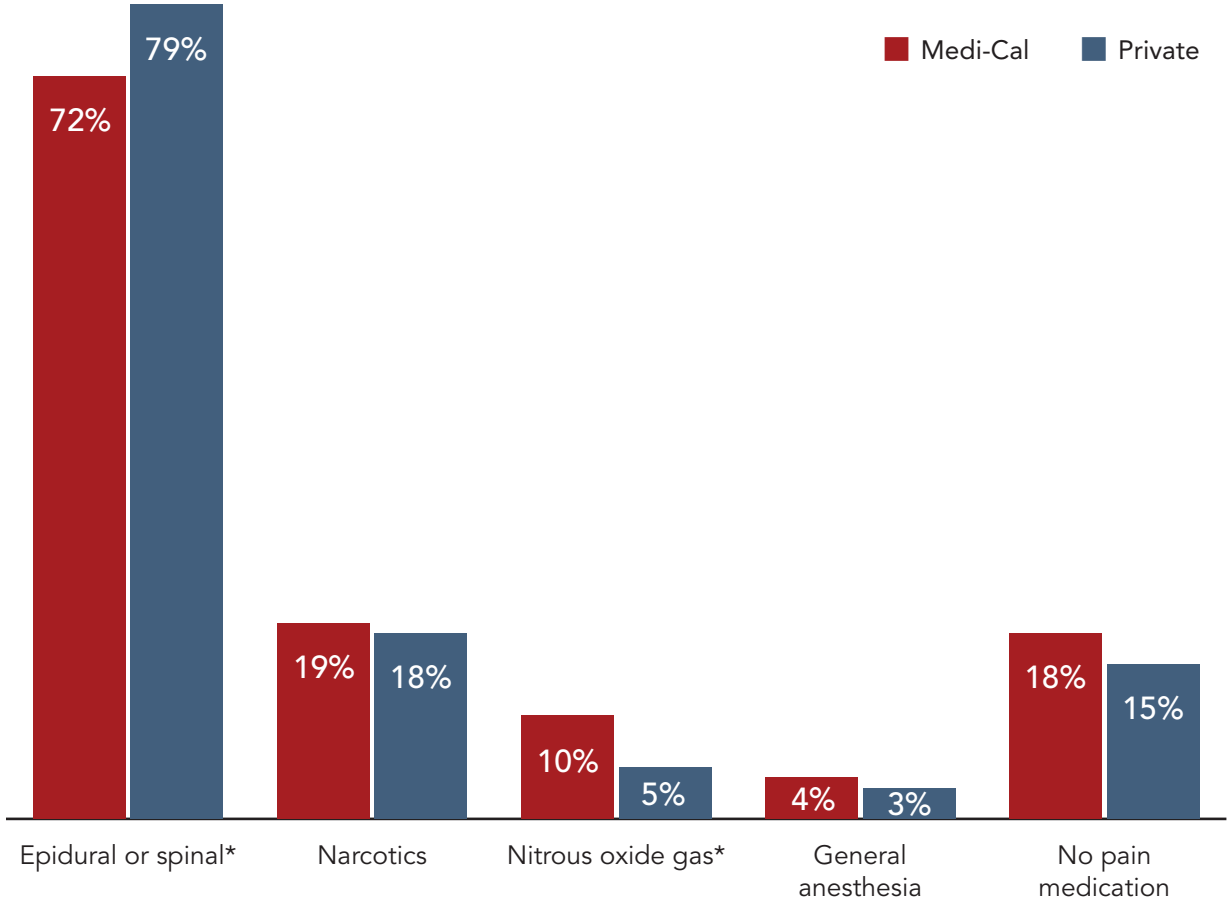
Source: *Listening to Mothers in California* (statewide survey of 2,539 women who gave birth in California hospitals in 2016), National Partnership for Women & Families, 2018.

Maternity Care Practices

Among women with vaginal births, those who had a midwife birth attendant were significantly less likely to have an intravenous drip or a catheter inserted to remove urine than women with an obstetrician birth attendant. Many laboring women also had Pitocin or had their membranes broken as methods of labor induction. These interventions can restrict mobility, cause discomfort, and introduce health risks to mother and baby.

Use of Pain Medications
by Payer, California, 2016

BASE: ALL WOMEN WHO ANSWERED THIS QUESTION (*n* = 2,516)



*$p < .01$ for differences by payer.

Notes: "Other" not shown. Not all eligible respondents answered each item. Medi-Cal respondents were identified based upon a Medi-Cal record of a paid 2016 childbirth claim. Privately insured respondents self-identified in the survey. *Epidurals* often deliver a combination of local anesthetic and narcotic medications. *Nitrous oxide*, a colorless, odorless gas that has long been used for labor pains in many countries, is administered via a mask that the woman controls.

Sources: *Listening to Mothers in California* (statewide survey of 2,539 women who gave birth in California hospitals in 2016), National Partnership for Women & Families, 2018; California Department of Health Care Services MIS/DSS Data Warehouse.

Maternity Care Practices

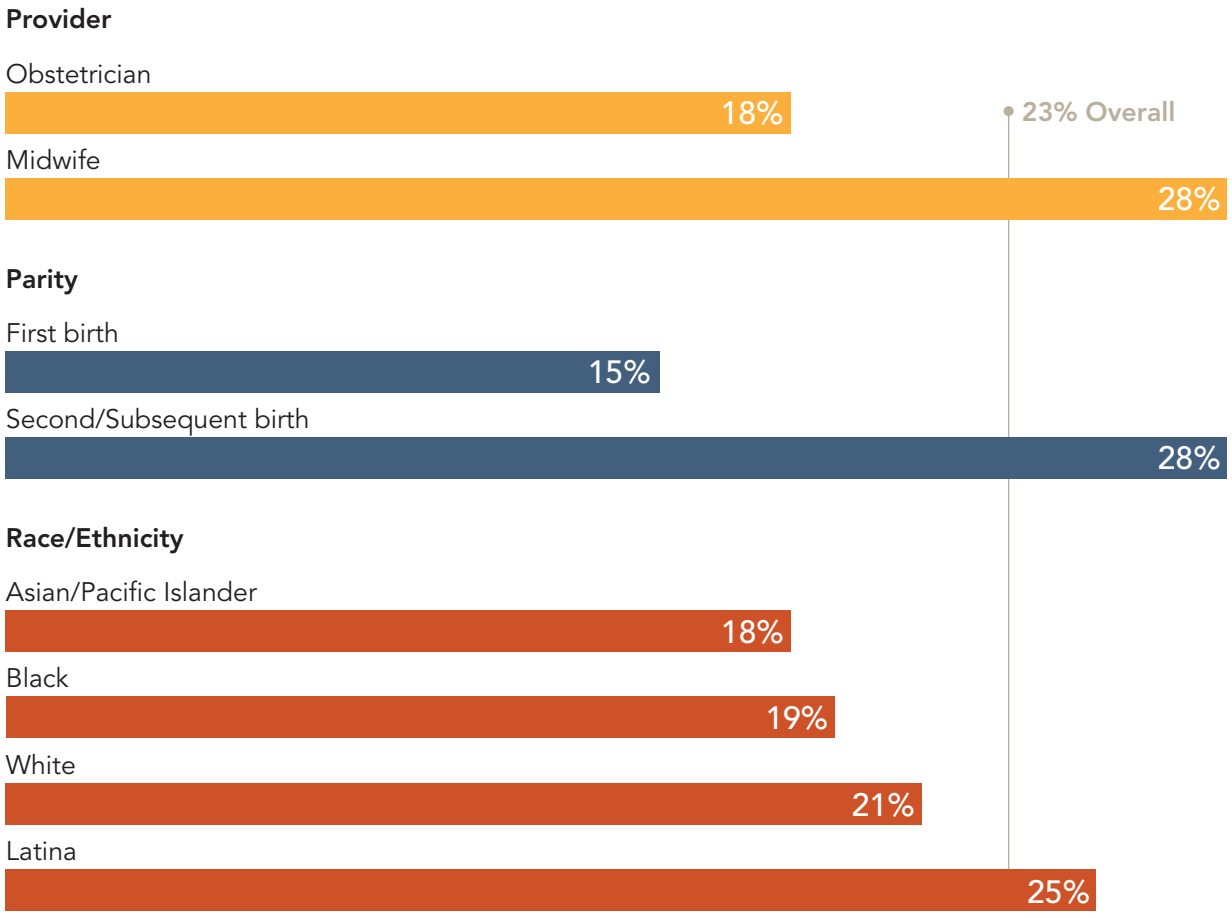
Three-quarters of women surveyed had an epidural when they gave birth. While effective for pain relief in most women, epidurals increase the risk of longer labor, low blood pressure, and fever, as well as expose women to other interventions.* Women with private insurance were more likely to report having epidurals than women with Medi-Cal coverage, while women with Medi-Cal had nitrous oxide gas for pain relief at twice the rate of women with private insurance.

*M. Anim-Somuah, R. M. Smyth, and L. Jones, "Epidural versus Non-Epidural or No Analgesia in Labour," *Cochrane Database of Systematic Reviews* 12 (Dec. 7, 2011): CD000331, doi:10.1002/14651858.CD000331.pub3.

Vaginal Birth Without Pain Medication

by Provider, Parity, and Race/Ethnicity, California, 2016

BASE: WOMEN WHO HAD A VAGINAL BIRTH (*n* = 1,799)



Notes: Provider type shown is the provider who attended the birth. Not all eligible respondents answered each item. $p < .01$ for differences by provider, by parity, and by race/ethnicity.

Sources: *Listening to Mothers in California* (statewide survey of 2,539 women who gave birth in California hospitals in 2016), National Partnership for Women & Families, 2018; California Department of Health Care Services MIS/DSS Data Warehouse.

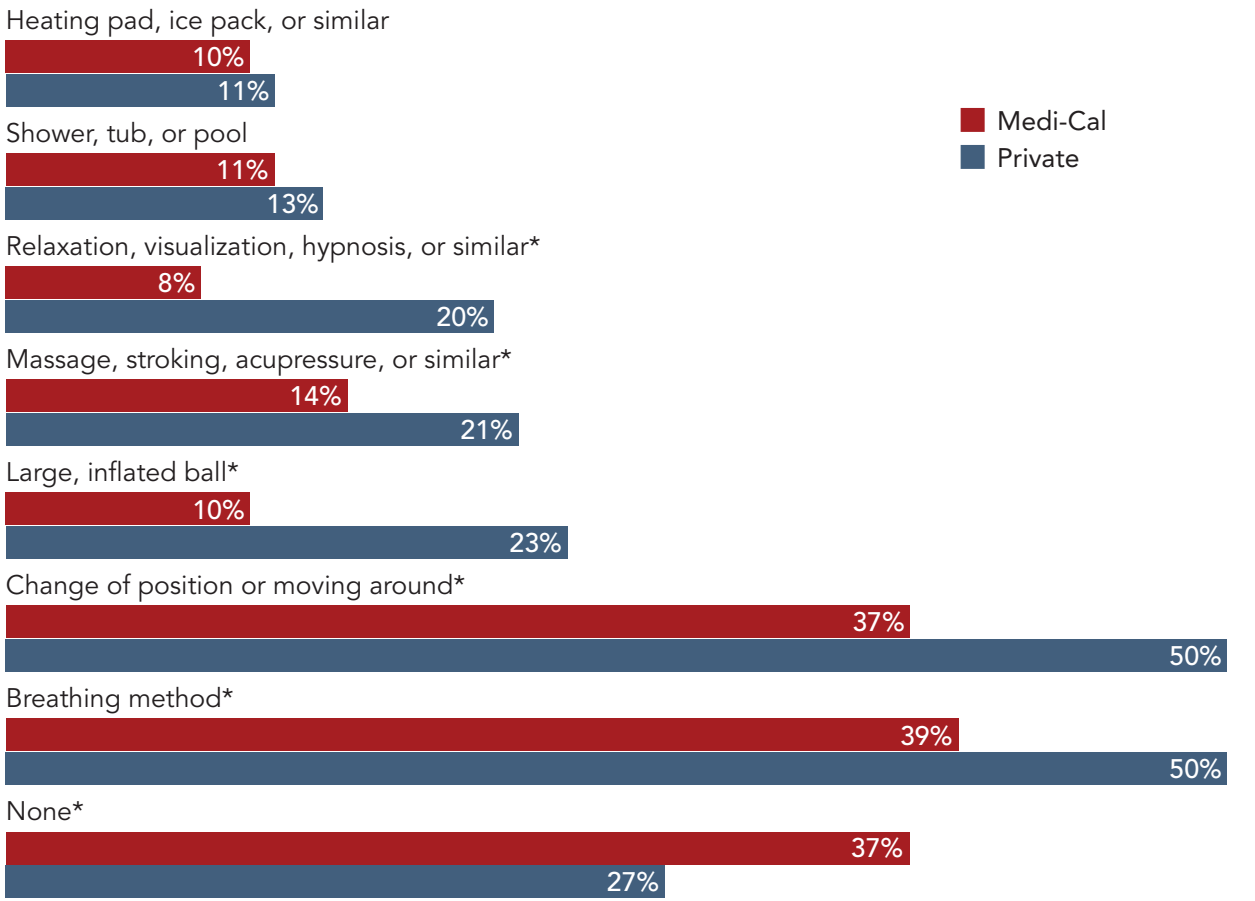
Maternity Care Practices

Fewer than one in four women with a vaginal birth used no pain medications during labor. Of all respondents, women who used a midwife as their birth attendant and women who had given birth previously were most likely to have used no pain medication. One-quarter of Latina women gave birth with no pain medication. The use of pain medications can have an adverse impact on mother and baby and can increase the need for additional interventions during labor.*

*Leanne Jones et al., "Pain Management for Women in Labour: An Overview of Systematic Reviews," *Cochrane Database of Systematic Reviews* 3 (Mar. 14, 2012): CD009234, doi:10.1002/14651858.CD009234.pub2.

Strategies for Coping with Pain
by Payer, California, 2016

BASE: WOMEN WHO EXPERIENCED LABOR (*n* = 2,113)



*$p < .01$ for differences by payer.

Notes: "Some other method" not shown. Use of labor doula not shown. Respondents could select more than one answer. Medi-Cal respondents were identified based upon a Medi-Cal record of a paid 2016 childbirth claim. Privately insured respondents self-identified in the survey. Not all eligible respondents answered each item.

Sources: *Listening to Mothers in California* (statewide survey of 2,539 women who gave birth in California hospitals in 2016), National Partnership for Women & Families, 2018; California Department of Health Care Services MIS/DSS Data Warehouse.

Maternity Care Practices

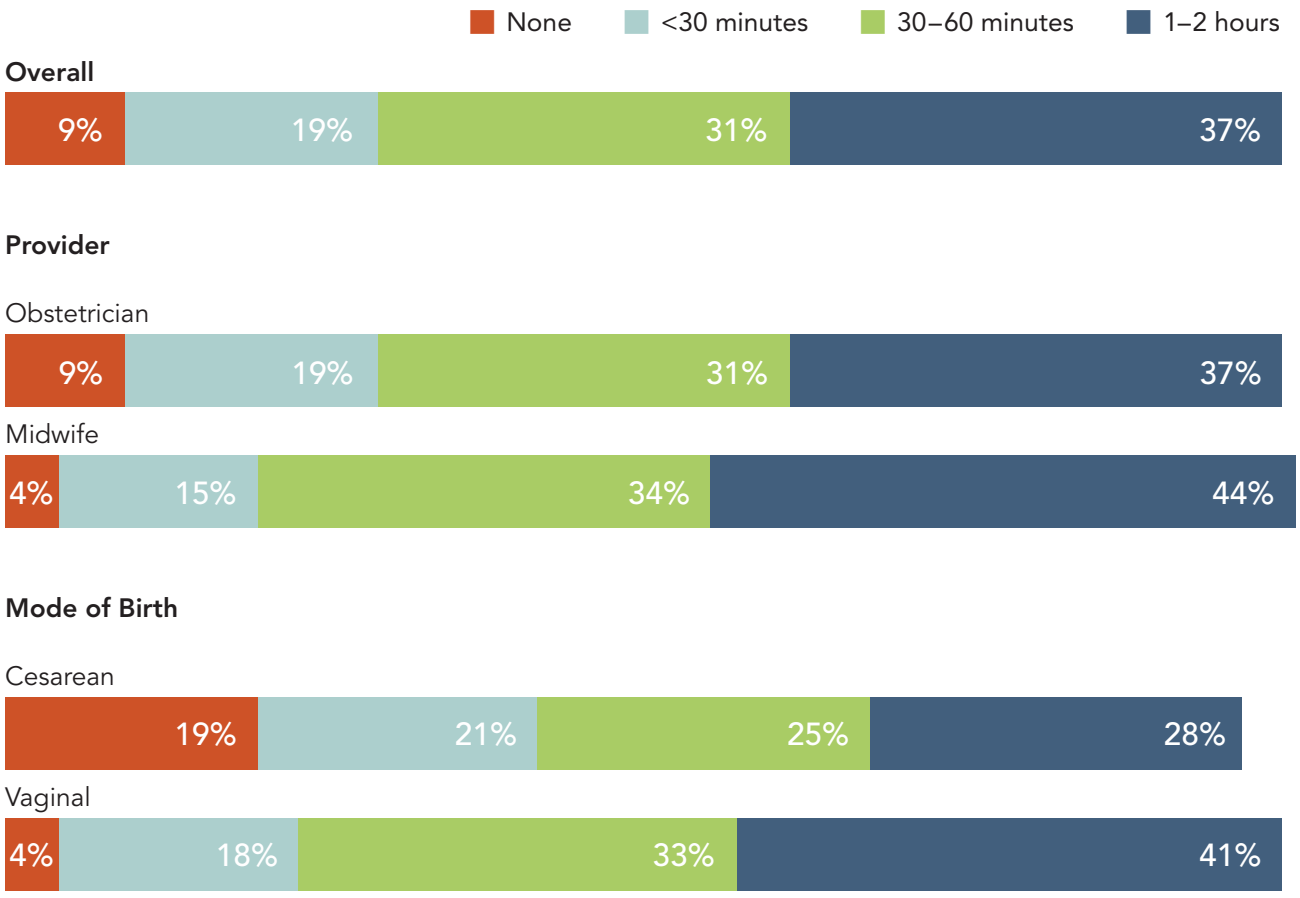
Approximately one woman in three who labored reported not using any of the listed strategies for coping with pain. These strategies can help relieve pain and have no adverse effects on the woman, the fetus, and labor progress.* Among respondents who labored, those with private insurance were more likely to have used most of these strategies for coping with pain than women covered by Medi-Cal. One woman in three who labored used no drug-free strategies to cope with pain.

*"Approaches to Limit Intervention During Labor and Birth," American College of Obstetricians and Gynecologists, Feb. 2017, www.acog.org.

Skin-to-Skin Contact in the First Two Hours After Birth

by Provider and Mode of Birth, California, 2016

BASE: ALL WOMEN WHO ANSWERED THIS QUESTION (*n* = 2,527)



Notes: "Not sure" not shown. Provider type listed is the provider who attended the birth. Not all eligible respondents answered each item. $p = .0118$ for differences by provider; $p < .01$ for differences by mode of birth.

Source: *Listening to Mothers in California* (statewide survey of 2,539 women who gave birth in California hospitals in 2016), National Partnership for Women & Families, 2018.

Maternity Care Practices

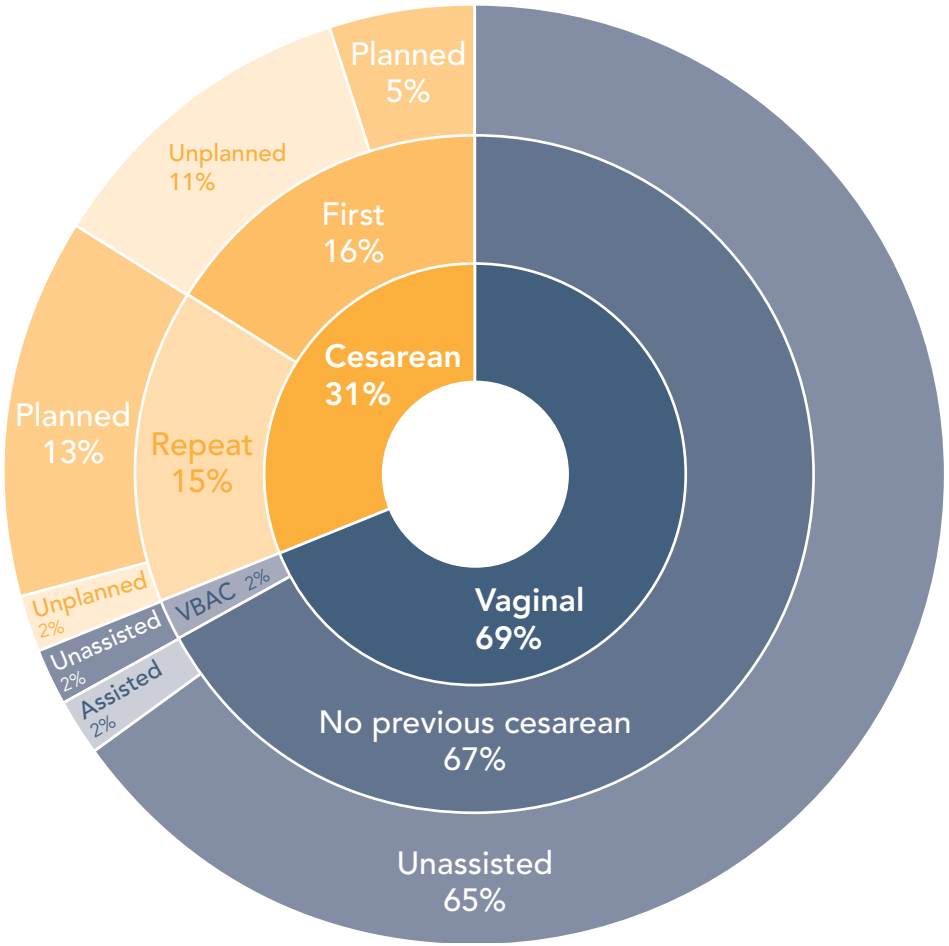
Skin-to-skin contact just after birth promotes breast-feeding and newborn adaptation to life outside the womb.* Nine in 10 women had some skin-to-skin contact with their newborns just after birth, with nearly 4 in 10 reporting an hour or more of this contact. Women with mid-wife support or who had vaginal births were more likely to have longer skin-to-skin contact than those who used obstetricians or who had cesarean births.

*E. R. Moore et al., "Early Skin-to-Skin Contact for Mothers and Their Healthy Newborn Infants," *Cochrane Database of Systematic Reviews* 11 (Nov. 25, 2016): CD003519, www.ncbi.nlm.nih.gov.

Mode of Birth: Vaginal vs. Cesarean

California, 2016

BASE: ALL WOMEN WHO ANSWERED THIS QUESTION (*n* = 2,529)



Notes: *VBAC* is vaginal birth after cesarean. *Assisted* vaginal birth involves use of vacuum or forceps. Not all eligible respondents answered each item.

Source: *Listening to Mothers in California* (statewide survey of 2,539 women who gave birth in California hospitals in 2016), National Partnership for Women & Families, 2018.

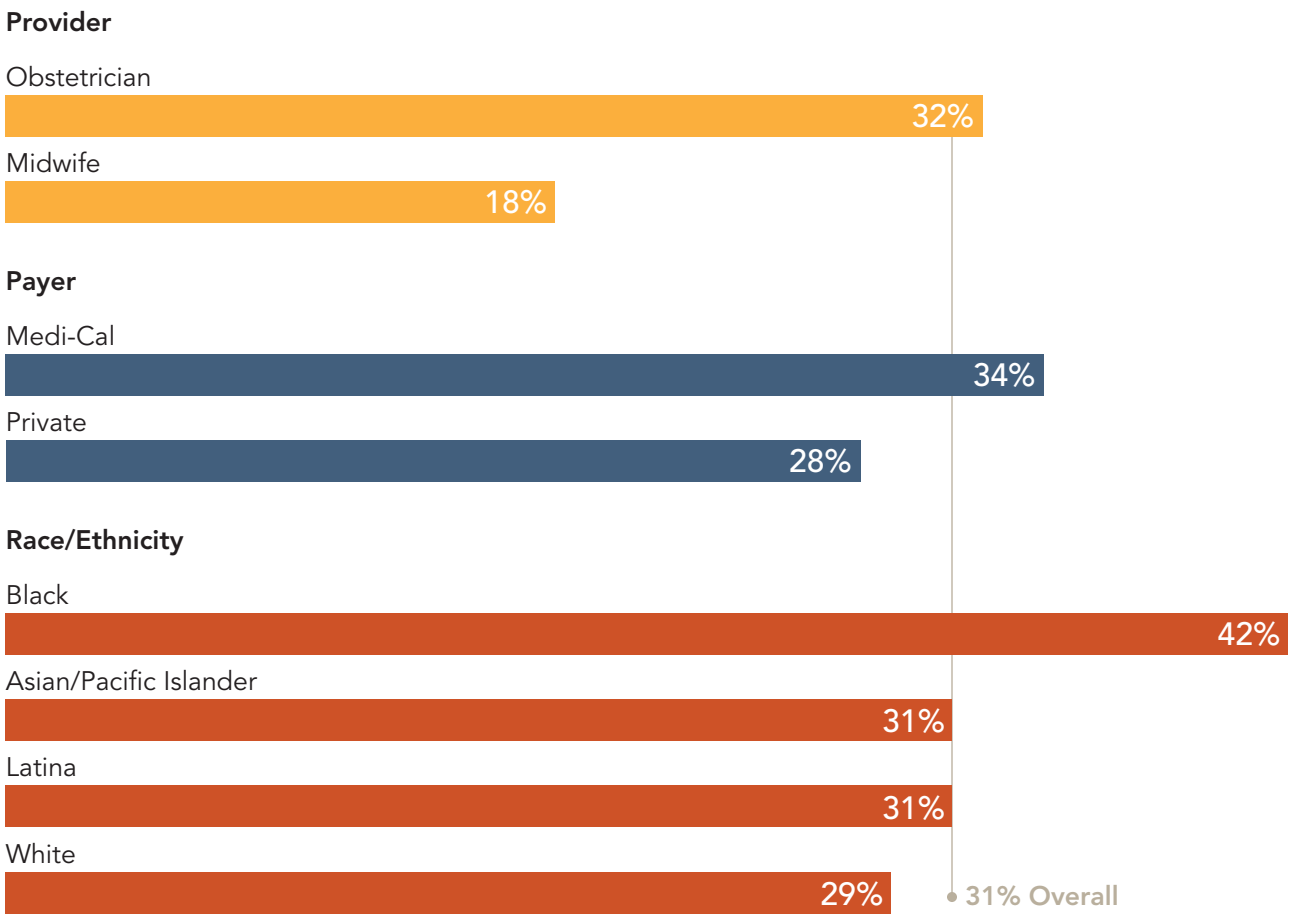
Mode of Birth

The majority of women had vaginal births, most of which were unassisted (no forceps or vacuum) and very few (2%) were VBACs. Nearly one in three had a cesarean. Most first cesareans were unplanned, while nearly all repeat cesareans were planned. Most women who had a cesarean birth in the past had repeat cesareans. Professional guidelines support offering a VBAC to nearly all pregnant women who have had one or two past cesareans, due in part to increased risks of complications for both mothers and babies from repeat cesareans.

Total Cesarean Rates

by Provider, Payer, and Race/Ethnicity, California, 2016

BASE: ALL WOMEN WHO ANSWERED THIS QUESTION (*n* = 2,529)



Notes: Not all eligible respondents answered each item. Provider type listed is the provider most often providing care during pregnancy. Medi-Cal respondents were identified based upon a Medi-Cal record of a paid 2016 childbirth claim. Privately insured respondents self-identified in the survey. $p = .05$ for differences by race/ethnicity; $p < .01$ for differences by payer and by provider.

Sources: *Listening to Mothers in California* (statewide survey of 2,539 women who gave birth in California hospitals in 2016), National Partnership for Women & Families, 2018; California Department of Health Care Services MIS/DSS Data Warehouse.

Mode of Birth

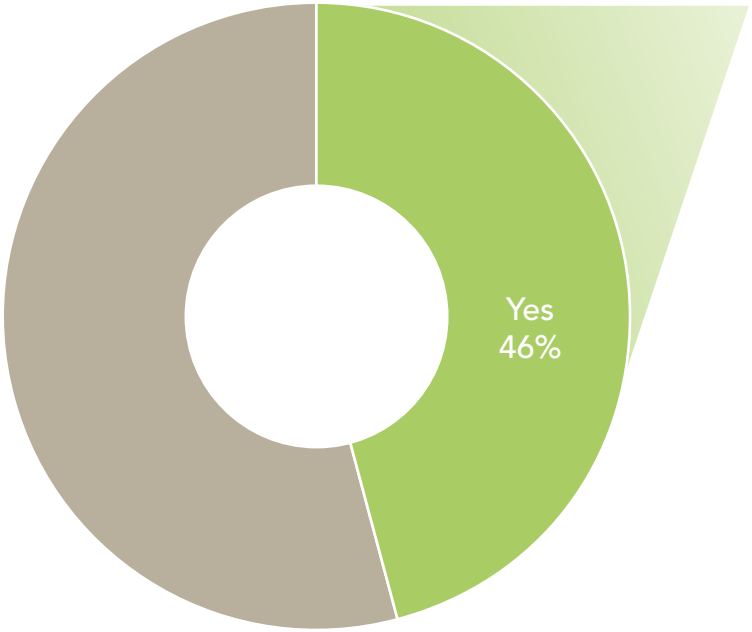
Nearly one-third of women had a cesarean birth, and over 40% of Black women gave birth by cesarean. Women who used an obstetrician as their prenatal care provider were more likely to have a cesarean birth than women who used a midwife. The difference in cesarean rates between the two types of providers persisted when researchers limited the comparison to low-risk, first-birth women (17% for midwife versus 28% for obstetrician). While cesareans are critical in some circumstances, they can pose serious complications for women and their babies.

Interest in and Access to Vaginal Birth After Cesarean

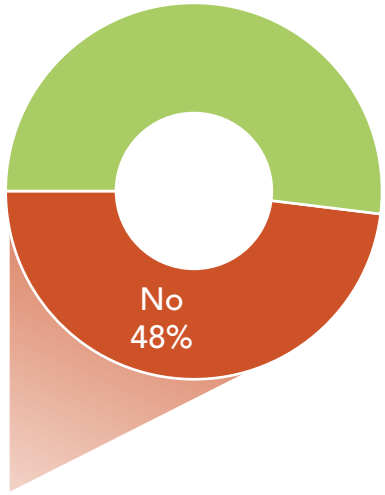
California, 2016

BASE: WOMEN WHO HAD A REPEAT CESAREAN (*n* = 331)

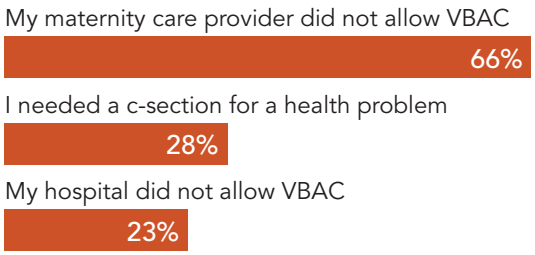
Were you interested in VBAC?



Did you have the option of VBAC?



Why didn't you have the option of VBAC?



Notes: Respondents could select more than one answer for "Why didn't you have the option of planning a VBAC?" Not all eligible respondents answered each item.

Source: *Listening to Mothers in California* (statewide survey of 2,539 women who gave birth in California hospitals in 2016), National Partnership for Women & Families, 2018.

Mode of Birth

Nearly half of women who had repeat cesareans were interested in the option of vaginal birth after cesarean (VBAC). However, almost half who were interested in a VBAC said that they did not have the option of planning a VBAC, with the most common reason being that their maternity care provider did not allow VBAC. Professional guidelines support offering a VBAC to nearly all pregnant women who have had one or two past cesareans, due to increased risks of complications for both mothers and babies from cesarean.*

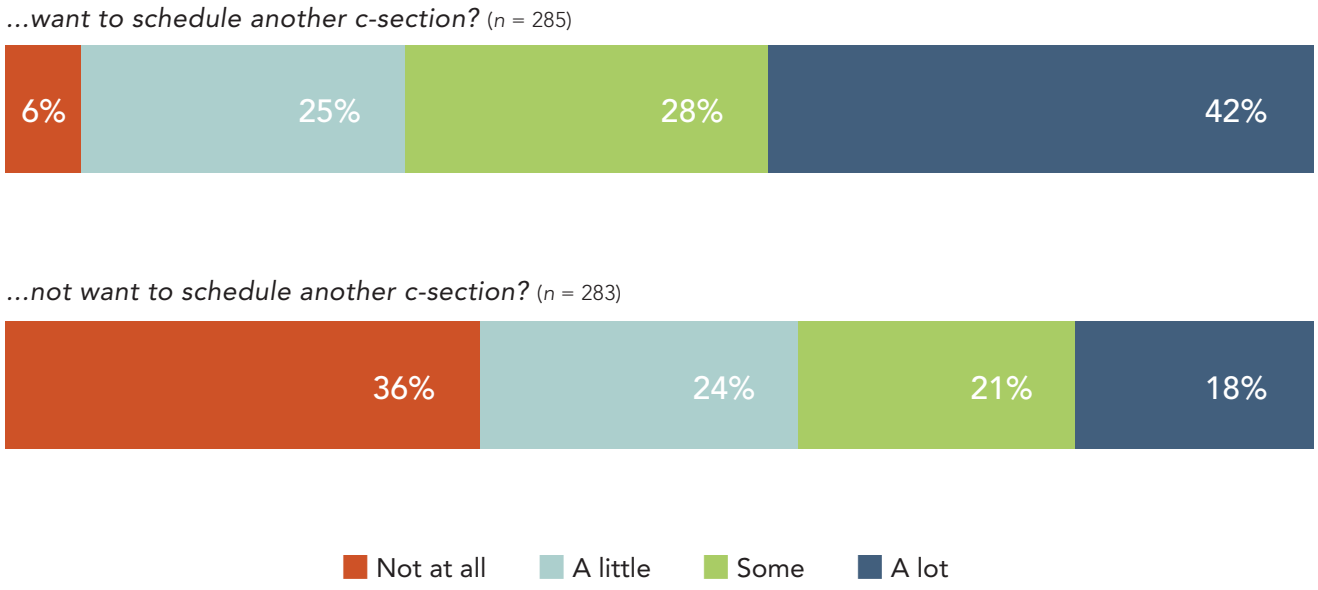
*"Practice Bulletin No. 184: Vaginal Birth After Cesarean Delivery," *Obstetrics and Gynecology* 130, no. 5 (Nov. 2017): e217–33, doi:10.1097/AOG.0000000000002398.

Discussion with Provider About Repeat Cesarean

California, 2016

BASE: WOMEN WHO TALKED WITH PROVIDER ABOUT SCHEDULING REPEAT CESAREAN BECAUSE OF PAST CESAREANS

How much did you and your maternity care provider talk about the reasons you might...



Notes: Not all eligible respondents answered each item. Sections may not add to 100% due to rounding. $p < .01$ for differences across groups in patterns of discussion for versus against a repeat cesarean.

Source: *Listening to Mothers in California* (statewide survey of 2,539 women who gave birth in California hospitals in 2016), National Partnership for Women & Families, 2018.

Mode of Birth

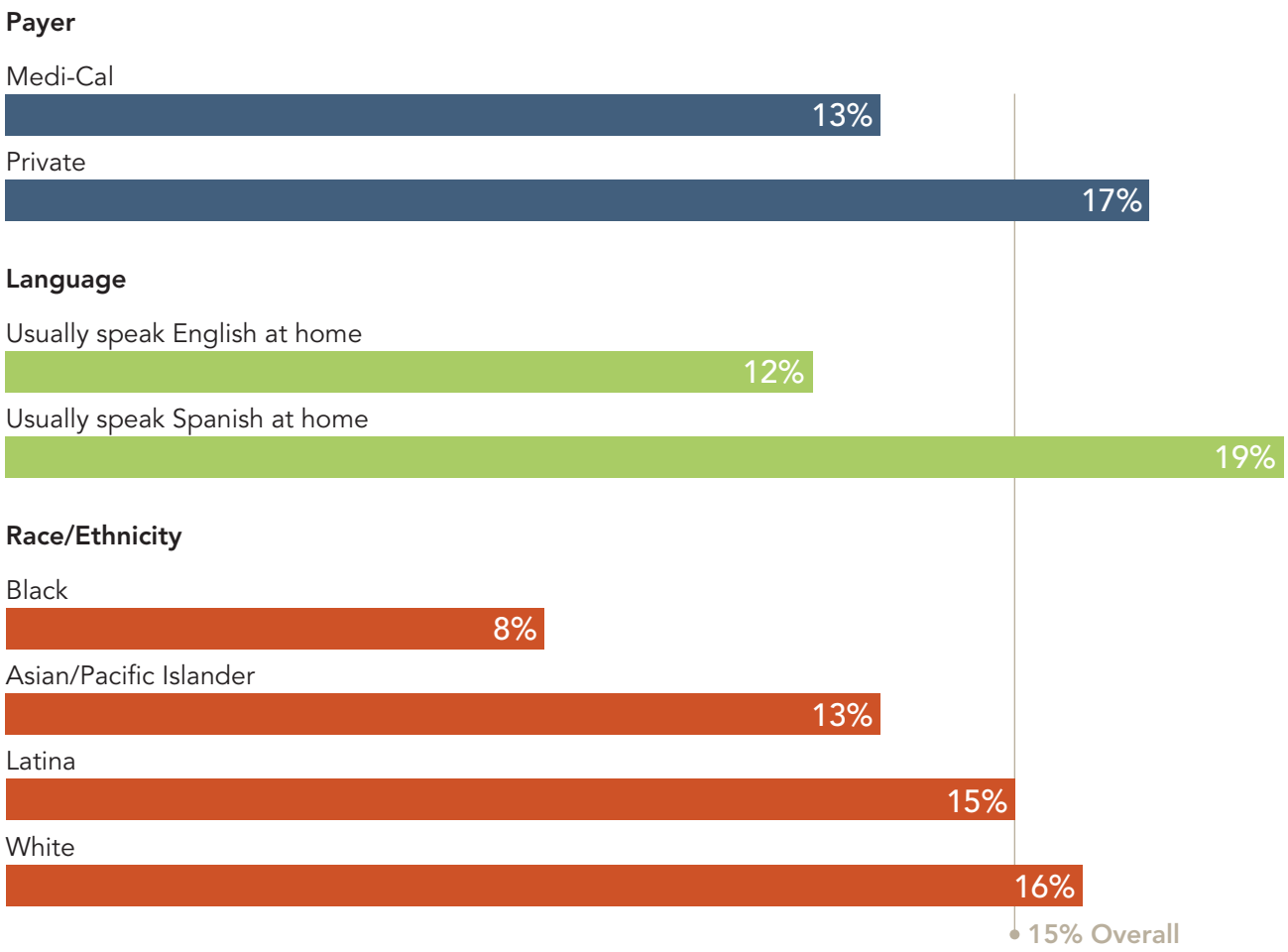
Professional guidelines support offering a vaginal birth after cesarean (VBAC) to nearly all pregnant women who have had one or two past cesareans, due to increased risks of complications for both mothers and babies from cesarean births.* Despite this guidance, discussions with providers were more likely to focus on reasons to schedule another c-section.

*"Practice Bulletin No. 184: Vaginal Birth After Cesarean Delivery," *Obstetrics and Gynecology* 130, no. 5 (Nov. 2017): e217–33, doi:10.1097/AOG.0000000000002398.

Vaginal Birth After Cesarean Rates

by Payer, Language, and Race/Ethnicity, California, 2016

BASE: ALL WOMEN WHO ANSWERED THIS QUESTION (*n* = 2,529)



Notes: Medi-Cal respondents were identified based upon a Medi-Cal record of a paid 2016 childbirth claim. Privately insured respondents self-identified in the survey. Not all eligible respondents answered each item. $p < .01$ for differences by payer, by language, and by race/ethnicity.

Sources: *Listening to Mothers in California* (statewide survey of 2,539 women who gave birth in California hospitals in 2016), National Partnership for Women & Families, 2018; California Department of Health Care Services MIS/DSS Data Warehouse.

Mode of Birth

Professional guidelines support offering a vaginal birth after cesarean (VBAC) to nearly all pregnant women who have had one or two past cesareans.* This helps women and babies avoid the harms of repeat cesareans. However, just one in seven women (15%) with one or more past cesareans had a VBAC. Black women had VBACs half as often as White women. Women who primarily spoke English at home had a notably lower VBAC rate than those who primarily spoke Spanish.

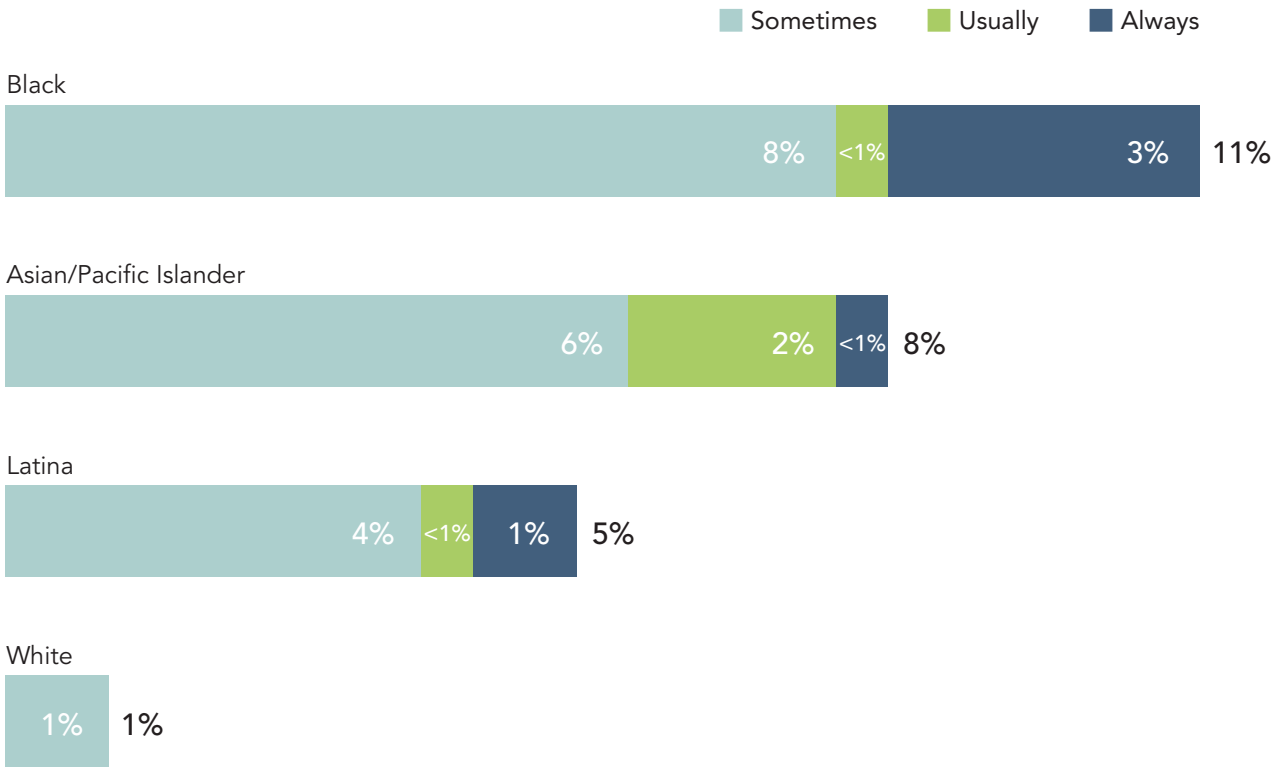
*"Practice Bulletin No. 184: Vaginal Birth After Cesarean Delivery," *Obstetrics and Gynecology* 130, no. 5 (Nov. 2017): e217–33, doi:10.1097/AOG.0000000000002398.

Unfair Treatment Due to Race or Ethnicity

by Race/Ethnicity, California, 2016

BASE: ALL WOMEN WHO ANSWERED THIS QUESTION (*n* = 2,502)

During your recent hospital stay when you had your baby, how often were you treated unfairly because of your race or ethnicity?



Notes: "Never" not shown. Not all eligible respondents answered each item. $p < .01$ for differences by race/ethnicity.

Source: *Listening to Mothers in California* (statewide survey of 2,539 women who gave birth in California hospitals in 2016), National Partnership for Women & Families, 2018.

Treatment During Hospital Stay

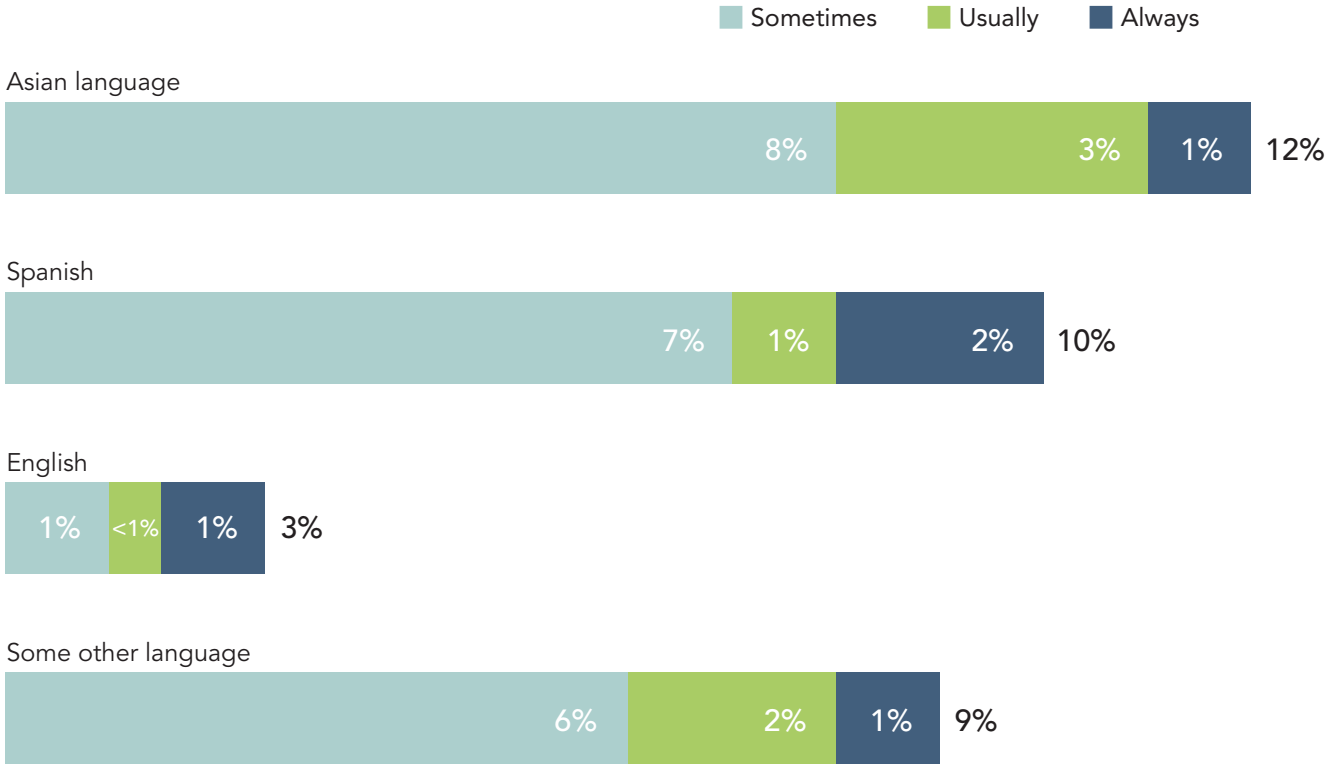
Overall, a relatively small portion of women felt they had been treated unfairly due to their race or ethnicity. Responses differed among racial/ethnic groups. Eight percent of Black women reported that they sometimes felt unfairly treated, and 3% felt that they were always unfairly treated. Also, 6% of Asian/Pacific Islander women felt they were sometimes treated unfairly and 2% usually unfairly treated.

Unfair Treatment Due to Language Spoken

by Language, California, 2016

BASE: ALL WOMEN WHO ANSWERED THIS QUESTION (*n* = 2,507)

During your recent hospital stay when you had your baby, how often were you treated unfairly because of the language you spoke?



Notes: Languages are those usually spoken at home. "Never" and "English and Spanish spoken equally at home" not shown. Not all eligible respondents answered each item. $p < .01$ for differences by language spoken.

Source: *Listening to Mothers in California* (statewide survey of 2,539 women who gave birth in California hospitals in 2016), National Partnership for Women & Families, 2018.

Treatment During Hospital Stay

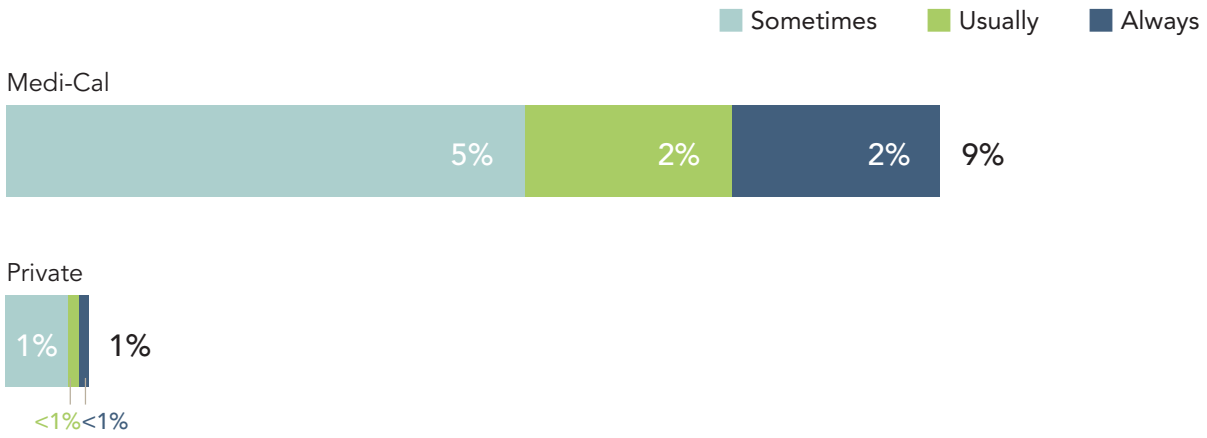
The majority of respondents did not perceive receiving unfair treatment due to the language they spoke. Twelve percent who speak an Asian language stated that they had experienced unfair treatment in the hospital because of their language, followed by 10% of those who speak Spanish at home, and 9% who speak some other language.

Unfair Treatment Due to Type of Insurance

by Payer, California, 2016

BASE: ALL WOMEN WHO ANSWERED THIS QUESTION (*n* = 2,501)

During your recent hospital stay when you had your baby, how often were you treated unfairly because of the type of health insurance you had?



Notes: Not all eligible respondents answered each item. "Never" not shown. Medi-Cal respondents were identified based upon a Medi-Cal record of a paid 2016 childbirth claim. Privately insured respondents self-identified in the survey. $p < .01$ for differences by payer.

Sources: *Listening to Mothers in California* (statewide survey of 2,539 women who gave birth in California hospitals in 2016), National Partnership for Women & Families, 2018; California Department of Health Care Services MIS/DSS Data Warehouse.

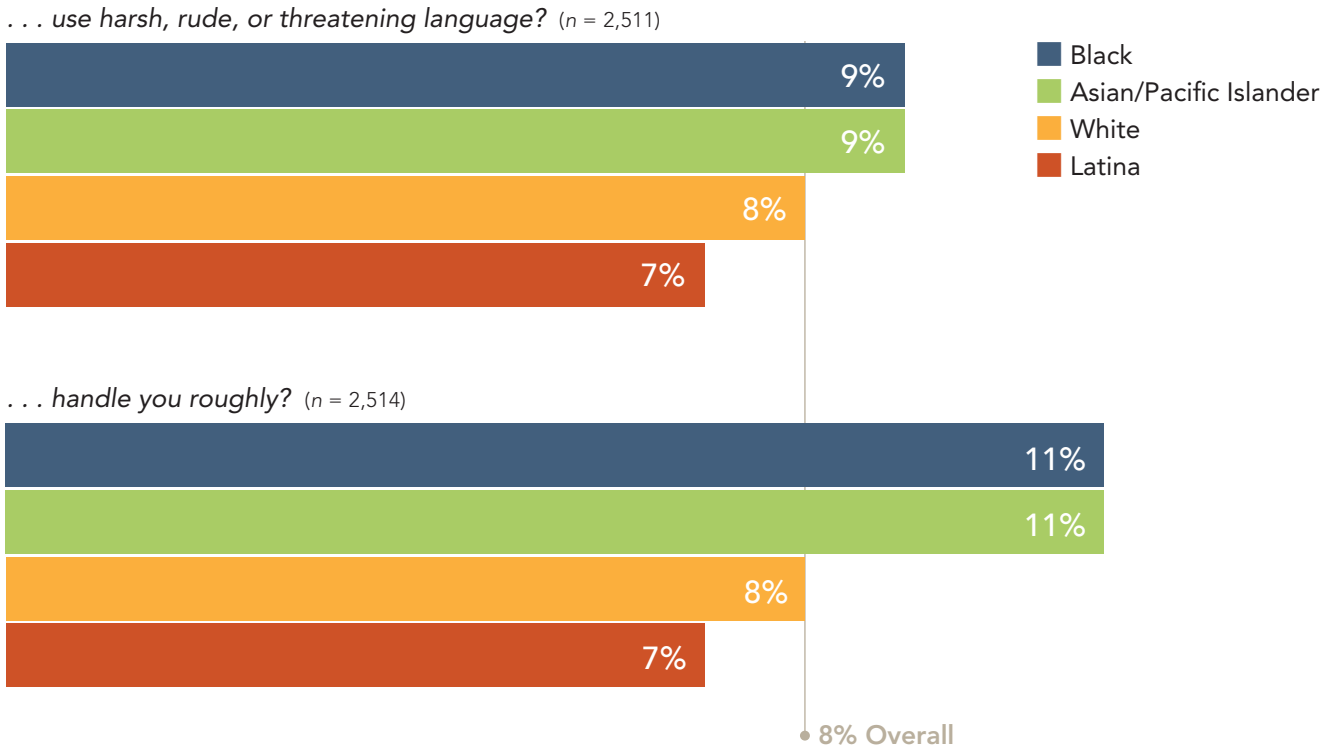
Treatment During Hospital Stay

Nearly 1 in 10 women with Medi-Cal coverage reported receiving unfair treatment during their hospital stay because of the type of insurance they had. In contrast, 1% of women with private insurance reported experiencing such bias.

Experience of Harsh Treatment
by Race/Ethnicity, California, 2016

BASE: ALL WOMEN WHO ANSWERED THIS QUESTION

During your recent hospital stay when you had your baby, did a nurse or maternity care provider ever...



Notes: Not all eligible respondents answered each item. Differences by race/ethnicity were not significant.

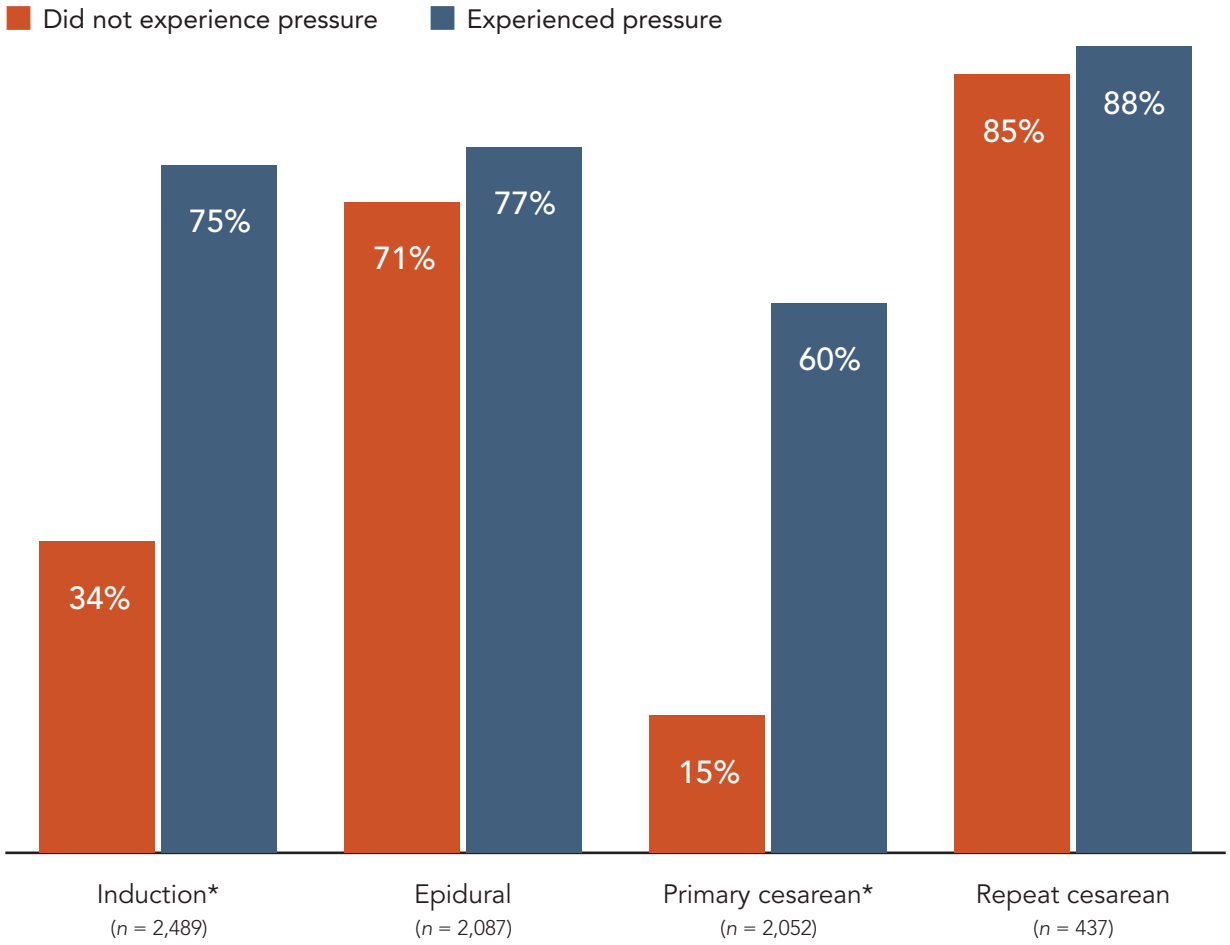
Source: *Listening to Mothers in California* (statewide survey of 2,539 women who gave birth in California hospitals in 2016), National Partnership for Women & Families, 2018.

Treatment During Hospital Stay

Overall, about 1 in 12 women reported experiencing harsh, rude, or threatening language, and rough handling from a nurse or maternity care provider when they were in the hospital to have their baby. While differences across racial and ethnic groups were not statistically significant, Asian/Pacific Islander and Black women reported the highest rates of harsh handling.

Rate of Interventions, No Pressure vs. Pressure

by Intervention Type, California, 2016



*$p < .01$ for differences between "did not experience pressure" and "experienced pressure."

Notes: Not all eligible respondents answered each item. Base for induction is all women, for epidural is women who experienced labor, for primary cesarean is women without a previous cesarean, for repeat cesarean is women with a previous cesarean.

Source: *Listening to Mothers in California* (statewide survey of 2,539 women who gave birth in California hospitals in 2016), National Partnership for Women & Families, 2018.

Treatment During Hospital Stay

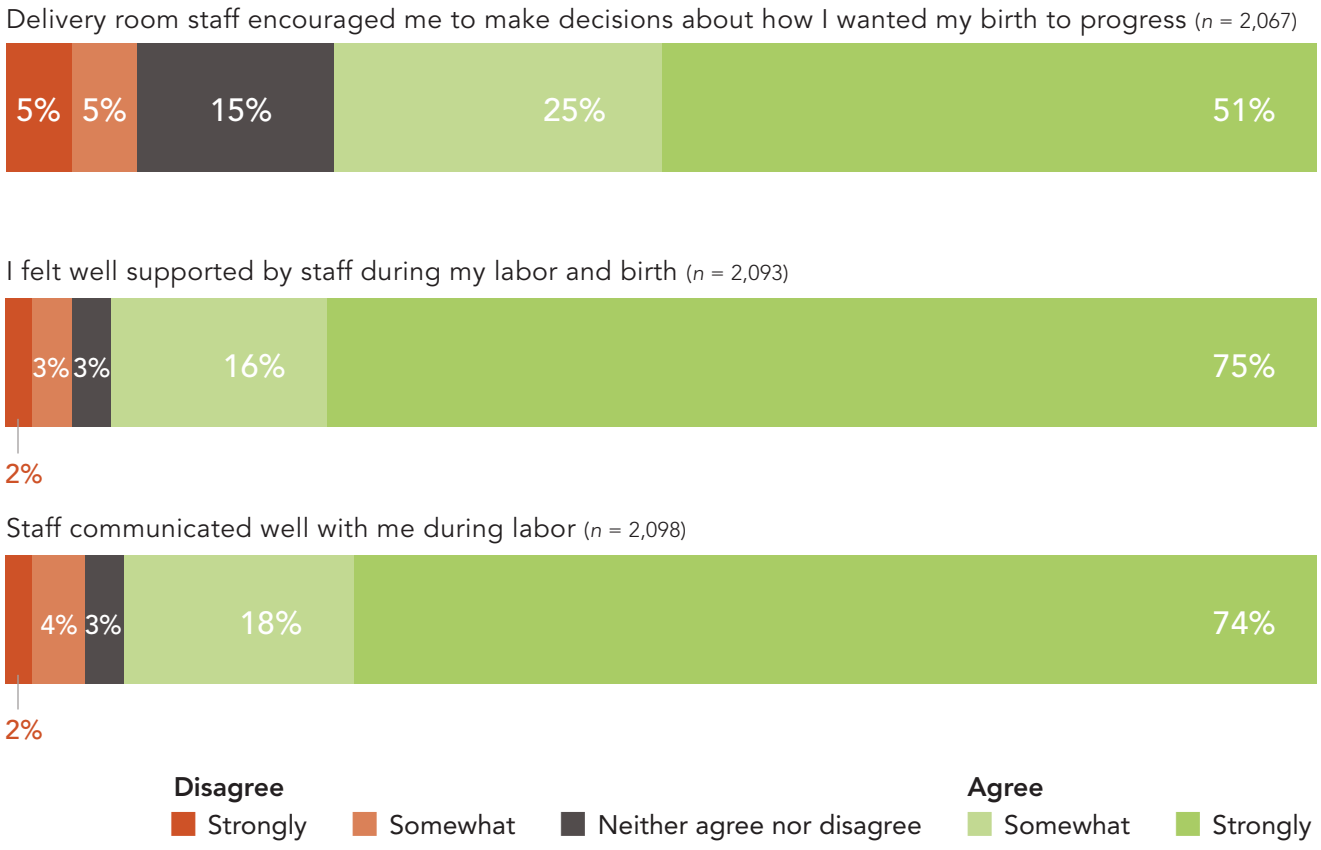
Women who experienced pressure from a health professional to have labor induction were more than twice as likely as those not experiencing pressure to have this intervention. Among women with no previous cesarean, those who were pressured were four times as likely to have a cesarean than those who were not. Differences were modest and all rates were high in the case of women in labor having epidurals and women with past cesarean(s) having another cesarean birth.

Autonomy, Support, and Communication

During Labor and Birth, California, 2016

BASE: ALL WOMEN WHO EXPERIENCED LABOR AND ANSWERED THESE QUESTIONS

How much do you agree with the following statements about your recent experience of labor and birth?



Notes: Not all eligible respondents answered each item. Segments don't add to 100% due to rounding.

Source: *Listening to Mothers in California* (statewide survey of 2,539 women who gave birth in California hospitals in 2016), National Partnership for Women & Families, 2018.

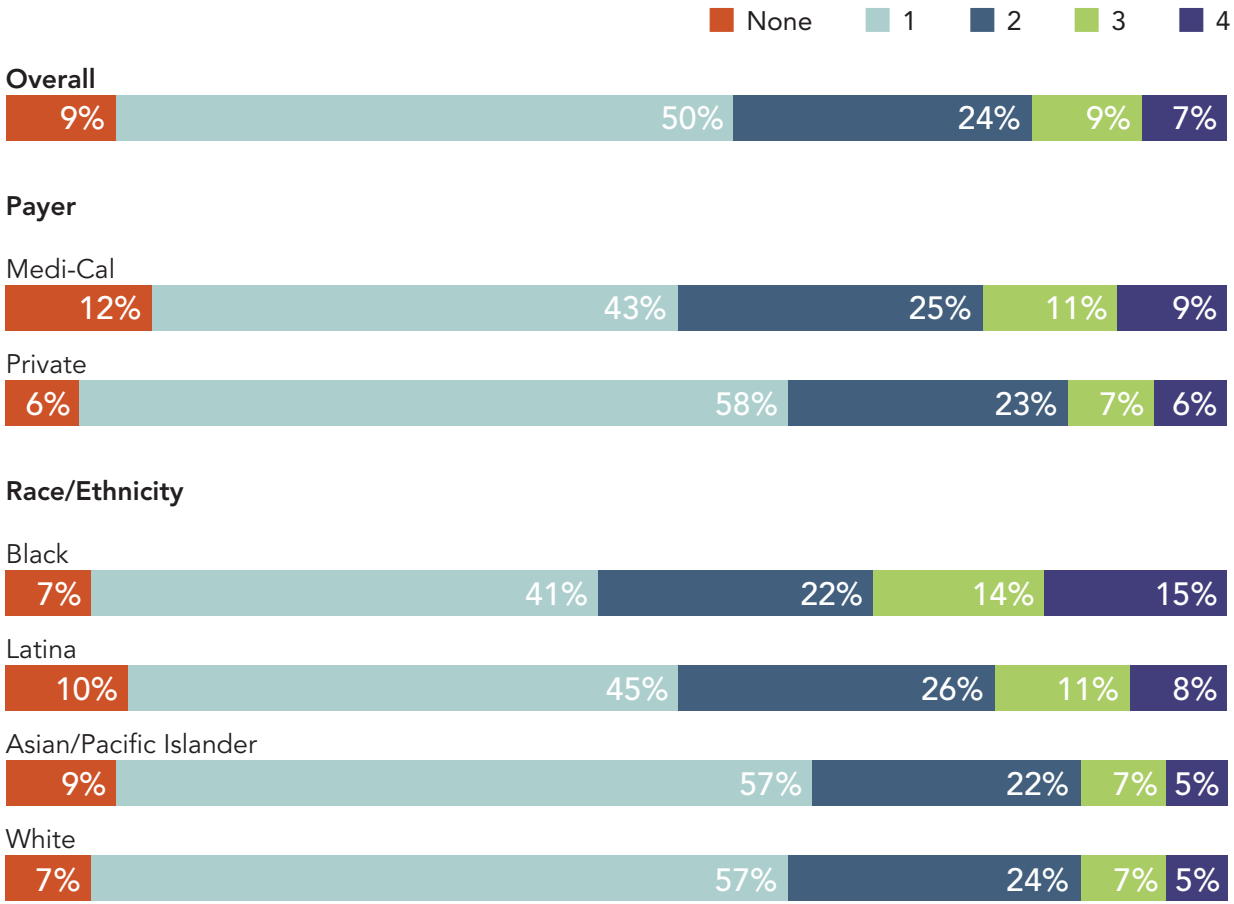
Treatment During Hospital Stay

The majority of women reported receiving respectful care from hospital staff as they were giving birth. Three in four women strongly agreed that they felt well supported during their labor and the birth of their baby, and that staff communicated well. Half of women strongly agreed that staff encouraged them to make their own decisions about their baby's birth. In comparison with women with private insurance, Medi-Cal beneficiaries gave poorer ratings on decision autonomy and communication (not shown).

Number of Maternal Postpartum Office Visits

by Payer and Race/Ethnicity, California, 2016

BASE: ALL WOMEN WHO ANSWERED THIS QUESTION (*n* = 2,444)



Notes: Medi-Cal respondents were identified based upon a Medi-Cal record of a paid 2016 childbirth claim. Privately insured respondents self-identified in the survey. Not all eligible respondents answered each item. $p < .01$ for differences by race/ethnicity and by payer.

Sources: *Listening to Mothers in California* (statewide survey of 2,539 women who gave birth in California hospitals in 2016), National Partnership for Women & Families, 2018; California Department of Health Care Services MIS/DSS Data Warehouse.

Postpartum Experiences

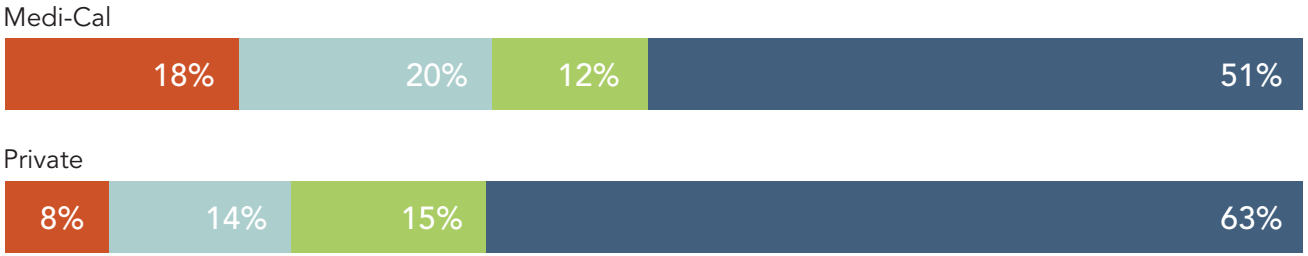
Postpartum visits are critical opportunities to support women on breast-feeding, wound care, and mental health, among other issues. About 1 woman in 10 had no postpartum visit; however, women with Medi-Cal coverage were twice as likely as women with private insurance to have no postpartum visit. About 3 in 10 Black women had three or more postpar-tum visits, perhaps indicating more extensive postpartum health challenges.

Postpartum Emotional and Practical Support
by Payer, California, 2016

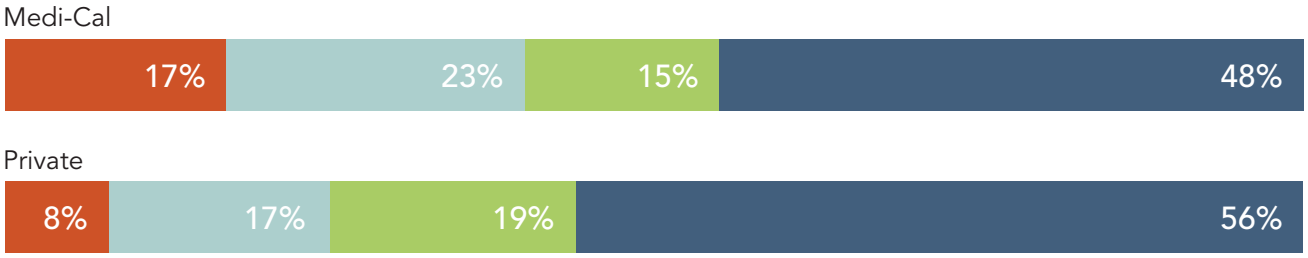
BASE: ALL WOMEN WHO ANSWERED THIS QUESTION

Since the birth of your baby, how often do you have someone you can turn to for…

…emotional support, such as listening to your concerns and giving good advice? (*n* = 2,494)



..practical support, such as helping you get things done or get information you need? (*n* = 2,498)



Never Sometimes Usually Always

Notes: Not all eligible respondents answered each item. Medi-Cal respondents were identified based upon a Medi-Cal record of a paid 2016 childbirth claim. Privately insured respondents self-identified in the survey. Segments may not add to 100% due to rounding. $p < .01$ for difference in emotional and in practical support by payer.

Sources: *Listening to Mothers in California* (statewide survey of 2,539 women who gave birth in California hospitals in 2016), National Partnership for Women & Families, 2018; California Department of Health Care Services MIS/DSS Data Warehouse.

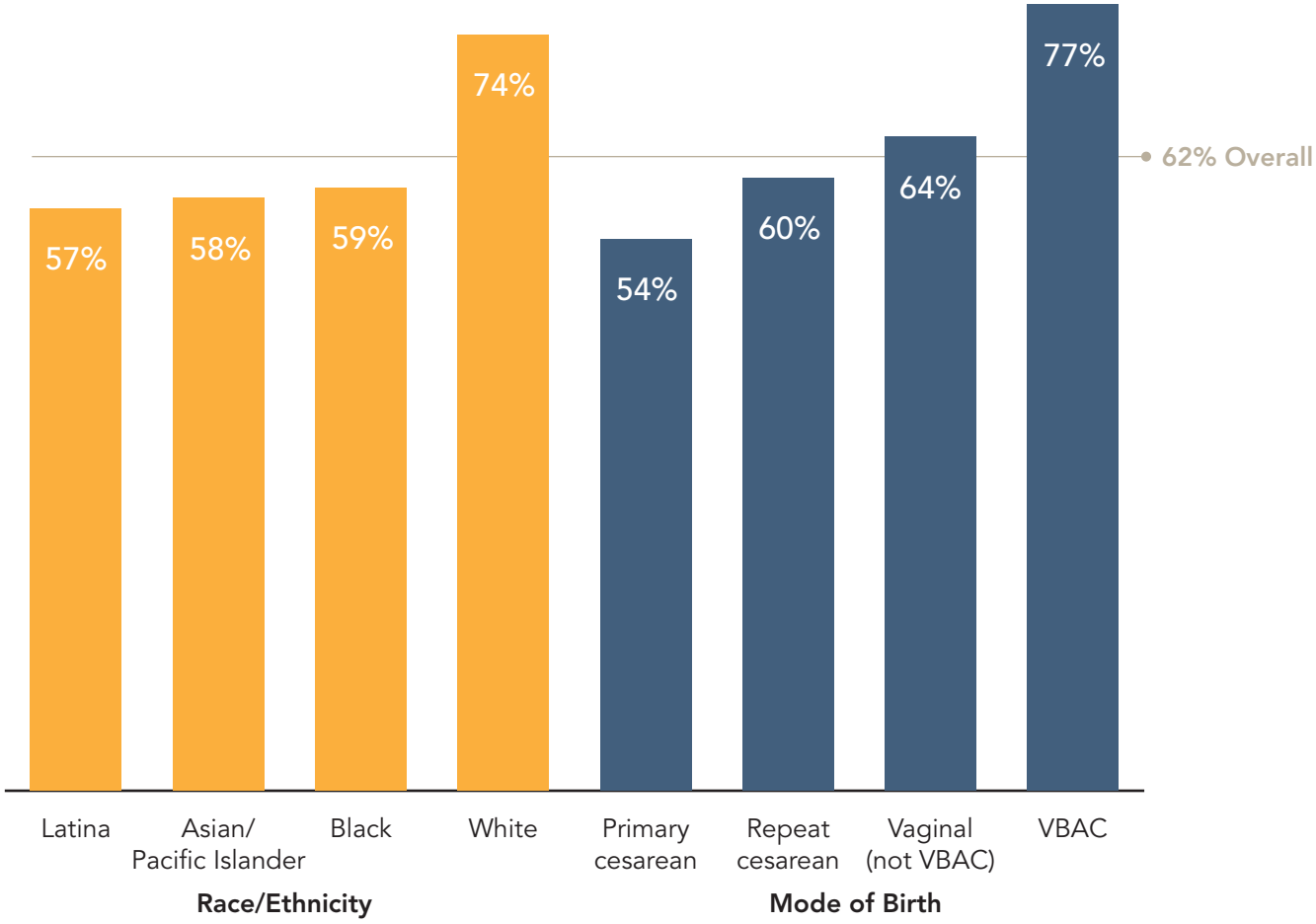
Postpartum Experiences

Women with Medi-Cal coverage reported having less access to both emotional and practical support after giving birth than women with private coverage. Compared to women with private insurance, more than twice as many women with Medi-Cal coverage stated that they never had anyone to turn to for emotional or practical support.

Exclusive Breast Milk Feeding at One Week

by Race/Ethnicity and Mode of Birth, California, 2016

BASE: ALL WOMEN WHO ANSWERED THIS QUESTION (*n* = 2,525)



Notes: Not all eligible respondents answered each item. $p < .01$ for differences by race/ethnicity and by mode of birth.

Source: *Listening to Mothers in California* (statewide survey of 2,539 women who gave birth in California hospitals in 2016), National Partnership for Women & Families, 2018.

Postpartum Experiences

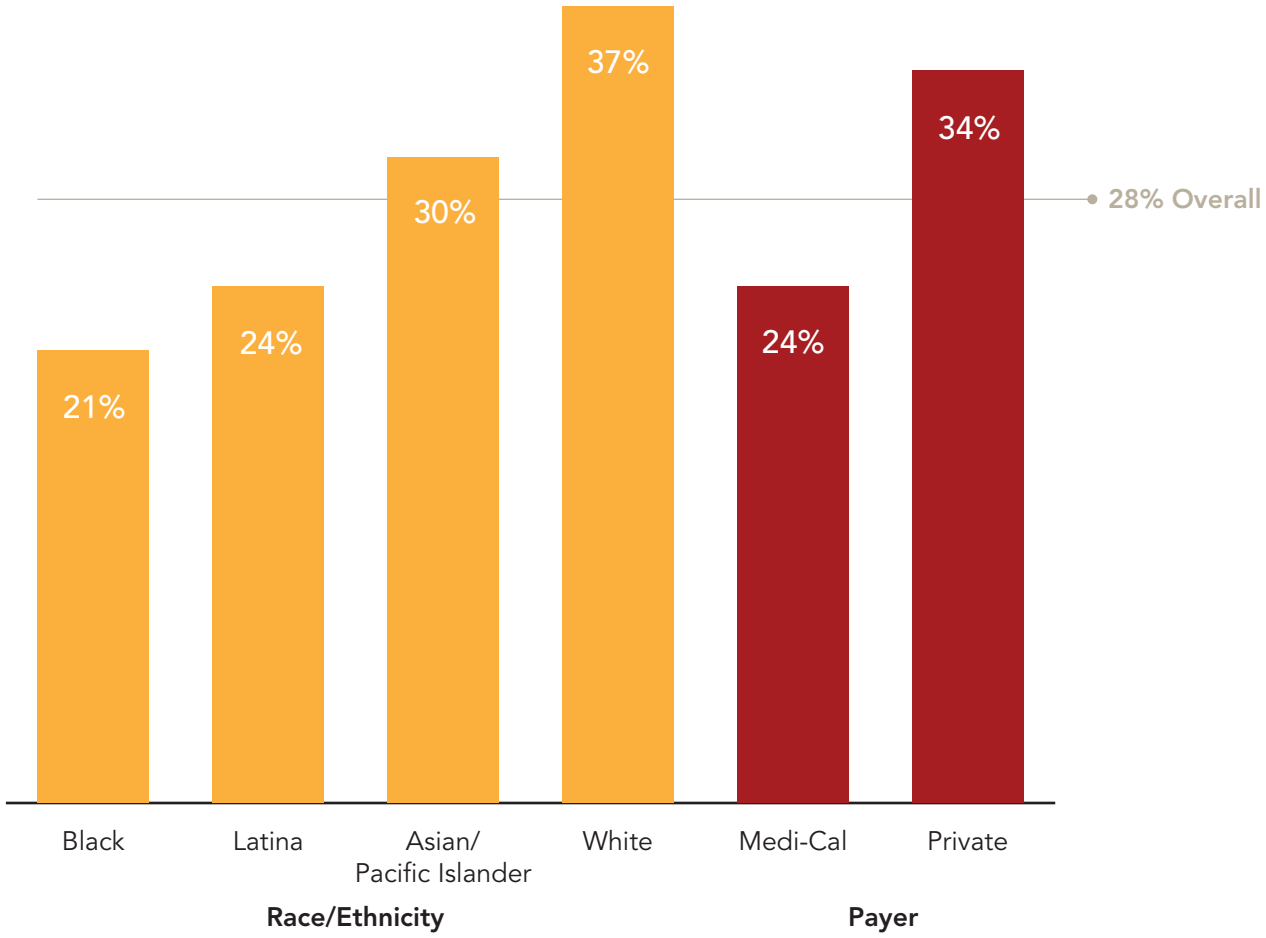
Experts recommend exclusive breast milk feeding for the first six months of life.* White women were far more likely to be exclusively breastfeeding at one week than women of other races/ethnicities. Exclusive breastfeeding at one week varied widely by mode of birth, ranging from 54% of women who had a primary cesarean to 77% of women who had a vaginal birth after cesarean (VBAC).

*Chantry, C.J., Eglash, A., & Labbok, M. (2015). ABM position on breastfeeding – revised 2015. *Breastfeeding Medicine*, 10(9), 407–411. Retrieved May 1, 2018, www.bfmed.org (PDF).

Exclusive Breast Milk Feeding for Six Months

by Race/Ethnicity and Payer, California, 2016

BASE: WOMEN WHO GAVE BIRTH AT LEAST 6 MONTHS PRIOR TO TAKING THE SURVEY (*n* = 713)



Notes: Medi-Cal respondents were identified based upon a Medi-Cal record of a paid 2016 childbirth claim. Privately insured respondents self-identified in the survey. Not all eligible respondents answered each item. $p < .01$ for differences by race/ethnicity and by payer.

Sources: *Listening to Mothers in California* (statewide survey of 2,539 women who gave birth in California hospitals in 2016), National Partnership for Women & Families, 2018; California Department of Health Care Services MIS/DSS Data Warehouse.

Postpartum Experiences

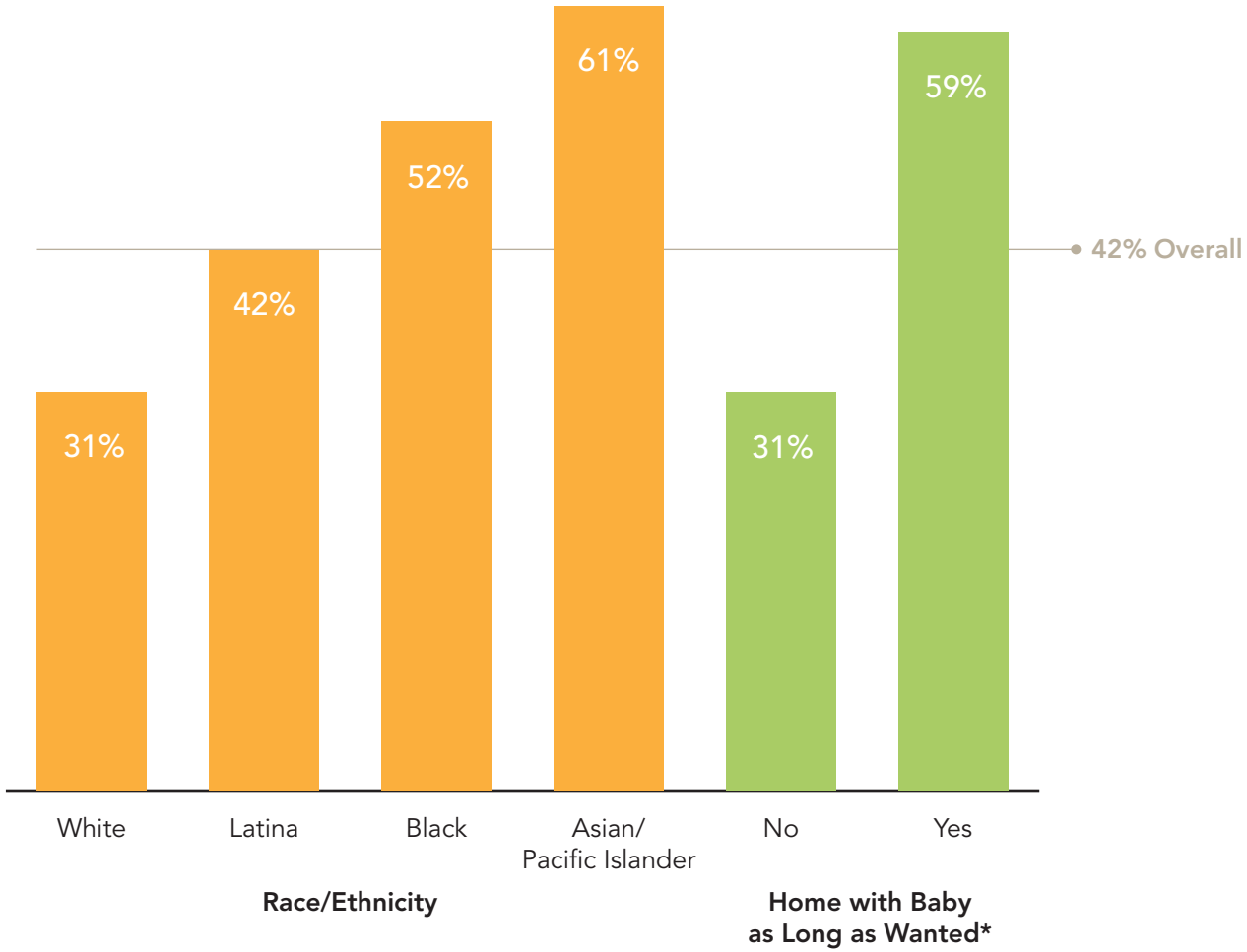
While leading health organizations recommend exclusive breast milk feeding through six months postpartum, only 28% of respondents met this standard.* Exclusive breastfeeding varied by racial/ethnic groups: Thirty-seven percent of White women reported exclusively breastfeeding to six months, while 21% of Black women did. Women with Medi-Cal coverage were much less likely (24%) than women with private insurance (34%) to exclusively breastfeed to six months.

*Chantry, C.J., Eglash, A., & Labbok, M. (2015). ABM position on breastfeeding – revised 2015. *Breastfeeding Medicine*, 10(9), 407–411. Retrieved May 1, 2018, www.bfmed.org (PDF).

Breastfed as Long as Wanted

by Race/Ethnicity and Time Home with Baby, California, 2016

BASE: WOMEN WHO BREASTFED, BUT WERE NO LONGER BREASTFEEDING AT THE TIME OF THE SURVEY (*n* = 854)



*Limited to women who had breastfed, were no longer doing so, and were working at a paid job.

Notes: Not all eligible respondents answered each item. $p < .01$ for differences by race/ethnicity and by whether home with baby as long as wanted.

Source: *Listening to Mothers in California* (statewide survey of 2,539 women who gave birth in California hospitals in 2016), National Partnership for Women & Families, 2018.

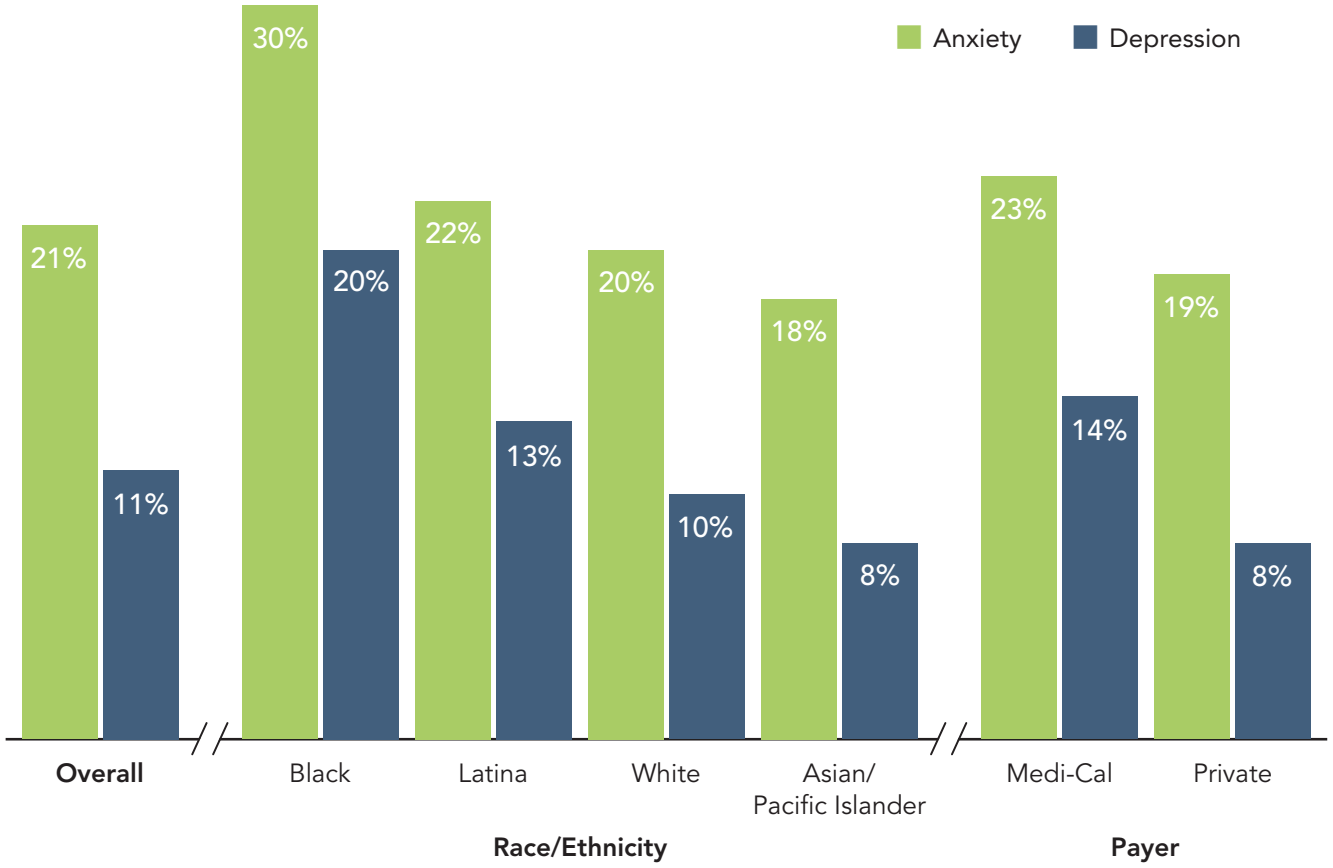
Postpartum Experiences

Only about 4 in 10 women who had breastfed and were not breastfeeding at the time of the survey had done so for as long as they wanted. Asian/Pacific Islander women were about twice as likely as White women to say they had breastfed as long as desired. Those who had stayed home as long as they wanted with their babies before working at paid jobs were about twice as likely as those who did not to have breastfed as long as desired.

Prenatal Symptoms of Anxiety and Depression

by Race/Ethnicity and Payer, California, 2017

BASE: ALL WOMEN WHO ANSWERED THESE QUESTIONS (*n* = 2,519)



Notes: Women were asked to answer two questions each about the frequency of anxiety symptoms and depression symptoms, both "during your recent pregnancy" and "during the last two weeks."* Medi-Cal respondents were identified based upon a Medi-Cal record of a paid 2016 childbirth claim. Privately insured respondents self-identified in the survey. Not all eligible respondents answered each item. Differences by race/ethnicity and by payer were not significant for prenatal anxiety. $p < .01$ for differences by race/ethnicity and by payer for prenatal depression.

Sources: *Listening to Mothers in California* (statewide survey of 2,539 women who gave birth in California hospitals in 2016), National Partnership for Women & Families, 2018; California Department of Health Care Services MIS/DSS Data Warehouse. *Kurt Kroenke et al., "An Ultra-Brief Screening Scale for Anxiety and Depression: The PHQ–4," *Psychosomatics* 50, no. 6 (Nov.–Dec. 2009): 613–21, doi:10.1016/S0033-3182(09)70864-3.

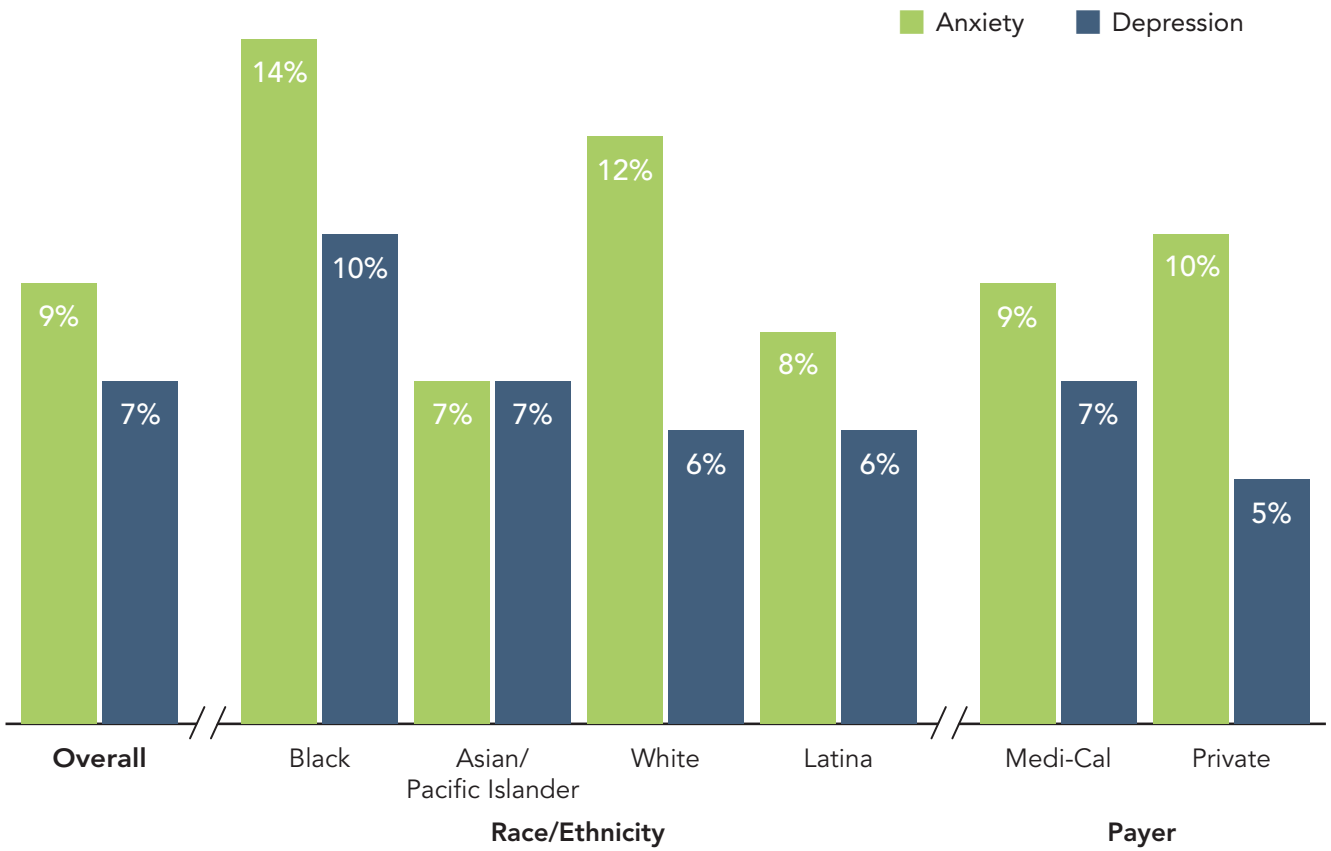
Maternal Mental Health

A large number of women in California suffer from mental health conditions while pregnant or after giving birth, negatively impacting the woman and the child. One woman in 5 reported symptoms of anxiety during pregnancy, and one woman in 10 reported symptoms of depression during pregnancy. Thirty percent of Black women reported symptoms of anxiety and 20% reported symptoms of depression during pregnancy.

Postpartum Symptoms of Anxiety and Depression

by Race/Ethnicity and Payer, California, 2017

BASE: ALL WOMEN WHO ANSWERED THESE QUESTIONS (*n* = 2,519)



Notes: Women were asked two questions each about the frequency of anxiety symptoms and depression symptoms, both "during your recent pregnancy" and "during the last two weeks.* Medi-Cal respondents were identified based upon a Medi-Cal record of a paid 2016 childbirth claim. Privately insured respondents self-identified in the survey. Not all eligible respondents answered each item.

Sources: *Listening to Mothers in California* (statewide survey of 2,539 women who gave birth in California hospitals in 2016), National Partnership for Women & Families, 2018; California Department of Health Care Services MIS/DSS Data Warehouse. *Kurt Kroenke et al., "An Ultra-Brief Screening Scale for Anxiety and Depression: The PHQ–4," *Psychosomatics* 50, no. 6 (Nov.–Dec. 2009): 613–21, doi:10.1016/S0033-3182(09)70864-3.

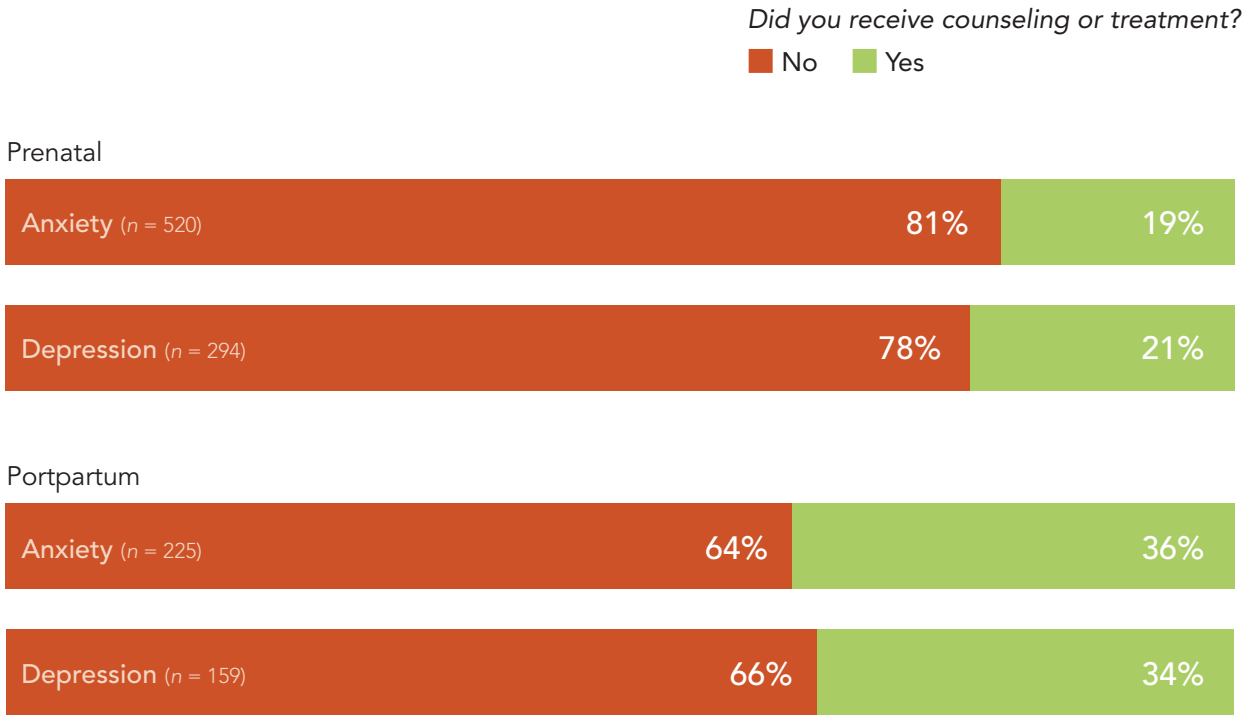
Maternal Mental Health

Similar to the prenatal period (shown on page 41), a greater percentage of women reported symptoms of anxiety than symptoms of depression "over the last two weeks" (postpartum). However, fewer women reported symptoms of either condition during the postpartum period than during pregnancy.

Prenatal and Postpartum Counseling and Treatment

Among Women Reporting Symptoms of Anxiety or Depression California, 2016

BASE: ALL WOMEN SCREENING POSITIVE FOR PRENATAL/POSTPARTUM ANXIETY OR DEPRESSION



Notes: Women were asked two questions each about the frequency of anxiety symptoms and depression symptoms both "during your recent pregnancy" and "during the last two weeks.* Not all eligible respondents answered each item.

Source: *Listening to Mothers in California* (statewide survey of 2,539 women who gave birth in California hospitals in 2016), National Partnership for Women & Families, 2018. *Kurt Kroenke et al., "An Ultra-Brief Screening Scale for Anxiety and Depression: The PHQ–4," *Psychosomatics* 50, no. 6 (Nov.–Dec. 2009): 613–21, doi:10.1016/S0033-3182(09)70864-3.

Maternal Mental Health

Maternal mental health conditions are treatable. Most women who reported symptoms of anxiety or depression did not receive counseling or treatment, especially during pregnancy. Only one in five women who reported symptoms of prenatal anxiety or depression had received counseling or treatment. Slightly more than one in three women who reported symptoms of anxiety or depression in the two weeks prior to the survey had received counseling or treatment.

Methodology

Listening to Mothers in California is a population-based, statewide survey of the experiences and views of childbearing women in California.

California birth certificates of women who gave birth from September 1, 2016, through December 15, 2016, were sampled. The following women were excluded: less than 18 years old, non-California residents, and women with out-of-hospital births, multiple births, and birth certificates indicating a deceased newborn. Researchers oversampled Black women, women with midwife-attended births, and women with vaginal birth after cesarean (VBAC). Further exclusions during the field period were women who were not living with their baby at the time of contact and women who could not participate in English or Spanish. The final data were weighted with the 2016 Birth Statistical Master File to reflect 2016 California births meeting inclusion criteria available in birth certificates. Despite selected exclusions, survey results closely resembled statewide 2016 results for many variables.

Women were reached by mail, telephone, email, and text message. Respondents could complete the survey in English or Spanish, on their own web-enabled device or by phone with an interviewer. They could work through the questionnaire in one or more sessions and switch between modes and devices. Participants received thank-you gift cards for completing the survey, which required at least a half hour on average.

A total of 2,539 women completed the survey, for a response rate of 55%. The women participated in 2017 from 2 to 11 months after giving birth. *Medi-Cal beneficiary* was defined as a woman with a 2016 childbirth claim covered by Medi-Cal, as identified through the Department of Health Care Services claims database. The research was approved by the Committee for the Protection of Human Subjects of the Office of Statewide Health Planning and Development.

Weighted Survey Respondent Demographics

Age group	
18–19	4%
20–24	18%
25–29	27%
30–34	30%
35+	22%

Education	
Less than high school	11%
High school graduate / GED	21%
Some college	32%
College graduate	33%
Missing	3%

Race/Ethnicity*	
Latina/Hispanic	50%
White, non-Latina	27%
Asian/Pacific Islander, non-Latina	16%
Black, non-Latina	5%
Other, non-Latina	3%

Birth payer	
Self-pay	<1%
Medi-Cal	47%
Private	44%

Parity	
First birth	40%
2nd or 3rd birth	48%
4th or more birth	11%

Birth place	
United States	65%
Another country	35%

Language spoken at home	
English	57%
Spanish	18%
English and Spanish equally	15%
Asian language	7%
Something else	3%

*There were too few participants to separately report on women who identified as American Indian or Alaskan Native.

Notes: Some survey questions were preceded by brief explanatory material not shown here — for example, to define induction of labor. Some response choices have been abbreviated or edited for clarity of presentation. Survey questionnaire, full survey report, and other resources available at www.chcf.org/listening-to-mothers-ca and www.nationalpartnership.org/ltmca. Demographic segments may not add to 100% due to rounding.

Glossary

Note: Italicized words are also defined here.

Anxiety is a common mood disorder that may involve symptoms such as excessive worry, difficulty concentrating, irritability, fatigue, and sleep concerns.

Assisted vaginal birth is a *vaginal birth* using vacuum extraction or forceps applied to the baby's head to help move the baby out during birth.

Birth center is a facility for both prenatal and postpartum office visits, and for giving birth, that is separate from a hospital. Birth centers typically offer *midwife*-led care and *physiologic childbirth*, and do not offer interventions such as *epidural analgesia* and *cesarean birth*.

Birth weight is the weight of a baby at birth. Low birth weight babies weigh less than 2,500 grams (or less than 5 pounds, 8 ounces) at birth. Babies with normal birth weight weigh 2,500 to 3,999 grams (or from 5 pounds, 8 ounces to 8 pounds, 13 ounces) at birth. Large babies weigh 4,000 or more grams (or more than 8 pounds, 13 ounces) at birth.

Bladder catheter is a tube inserted into the urethra to collect urine in a bag. This is typically used when a birthing woman loses lower body sensation and/or the ability to get to the toilet due to the effects of pain medications or continuous electronic fetal monitoring.

Cervical dilation is a measure of progress during labor. The cervix, or point of passage out of the womb, typically opens or dilates to ten centimeters to enable the baby to move out.

Cesarean birth is when a baby is born through an opening in the lower abdomen made by surgical cuts through several layers of tissue from the skin to the womb.

Depression is a common mood disorder that may involve symptoms such as feeling sad, hopeless, or tired, and experiencing sleep and appetite concerns.

Epidural and spinal analgesia are techniques for delivering pain medicine through a tiny tube near the spinal cord for regional pain relief in the abdominal and pelvic areas.

Exclusive breast milk feeding is feeding babies breast milk only, with no supplements of formula, water, or other foods. The breast milk may be fed directly, pumped and fed through a bottle, or fed using donor breast milk.

Family physician is a medical doctor educated and licensed in family medicine to care for people regardless of age, sex, or condition. A relatively small proportion of family physicians in the United States are *maternity care providers*.

General anesthesia uses pain relief medications to affect the whole body. It involves being "put to sleep" and in general a period of having no consciousness.

Home birth is giving birth at home. Typically, the *maternity care provider* is a *midwife*, the woman experiences *physiologic childbirth*, and hospital-based interventions such as *epidural analgesia* and *cesarean birth* are not available.

Intravenous (IV) fluids involve a needle inserted into a vein to deliver fluids or medications into the bloodstream.

Labor doula is a non-clinical support person experienced with labor and birth who offers comfort measures, encouragement, and information to birthing women. Some labor doulas also meet with a woman during pregnancy to learn about her and her birth preferences, and support her by phone or in person at home after the birth.

Labor induction uses medications and/or mechanical methods (e.g., membrane sweeping, Foley catheter) to try to cause labor to begin artificially before it begins on its own. In most attempts, medical induction starts labor and shortens pregnancy.

Maternity care provider refers to autonomous practitioners who play a lead role in providing maternity care. Most are *obstetricians*, *midwives*, or *family physicians*.

Medi-Cal is California's federal-state Medicaid medical assistance program for low-income individuals. Medi-Cal is a major payer of maternal and newborn care through either managed care health plans or fee-for-service coverage.

Membranes breaking is the opening of the sac that contains the developing fetus and amniotic fluid. This can happen spontaneously before or during labor. Care providers often deliberately break the sac to try to start labor (*labor induction*) or in the belief that this hastens labor that is underway.

Glossary, continued

Midwife is a *maternity care provider* who can lead the prenatal, childbirth, and postpartum care of lower-risk women or collaborate with physicians in caring for women with specialized needs. Many midwives prioritize individualized preventive high-touch care and use interventions judiciously. Three midwifery credentials are nationally recognized: certified nurse midwives (CNMs), certified midwives (CMs), and certified professional midwives (CPMs).

Narcotics is a class of opioid-based pain relief medications that can be given systemically into the entire body (for example, by intravenous line) or regionally in combination with other pain medicines through epidural or spinal methods.

Nitrous oxide is an anesthetic gas than provides pain relief for many laboring women. Women self-administer this rapid-acting method by bringing a mask to their face as needed.

Nurse practitioner is an advanced practice nurse who may be educated and licensed to lead prenatal, postpartum, and newborn care.

Nulliparous, term, singleton, vertex (NTSV) cesarean is a *cesarean birth* in a low-risk first-birth woman. Specifically, NTSV indicates a nulliparous woman (first-time mother) giving birth at term (37 or more weeks of gestation) to a single baby in the vertex, or head-first, position.

Obstetrician is a medical doctor who is educated and licensed as a *maternity care provider* to lead prenatal, childbirth, and postpartum care. Obstetricians generally also provide care to prevent and treat other women's health conditions.

Physician assistant may be educated and licensed to lead the prenatal, childbirth, and postpartum care of lower-risk women. In practice, few physician assistants attend births.

Physiologic childbirth is giving birth without major interventions. A professional consensus statement defines physiologic childbirth as being birth where labor starts on its own, progresses without pain medicine, use of synthetic oxytocin (*Pitocin*), or artificial rupture of membranes, and ends in a vaginal birth without episiotomy, vacuum, or forceps.

Pitocin is a medication that is used for *labor induction*, labor augmentation (strengthening or hastening labor that is underway), and to reduce the likelihood of excessive bleeding after birth. It is a synthetic form of oxytocin, which differs in action in important respects from the endogenous oxytocin produced by a woman's body.

Planned cesarean is a *cesarean birth* that is scheduled. Planned cesareans generally take place before the onset of labor and to some degree shorten pregnancy. Most are in women with one or more past cesarean births.

Primary cesarean is an initial *cesarean birth* in a woman who has not had a cesarean birth in the past. Primary cesareans can occur in women who are having their first birth or who have had one or more *vaginal births* in the past.

Repeat cesarean is a *cesarean birth* in a woman who has had one or more cesarean births in the past.

Skin-to-skin contact between a woman and her newborn baby is an early postpartum practice that fosters healthy maternal-newborn transitions, the establishment of breastfeeding, and maternal-newborn attachment.

Vaginal birth is a birth that occurs when the baby passes through the opened, or dilated, cervix and down and out through the birth canal (vagina).

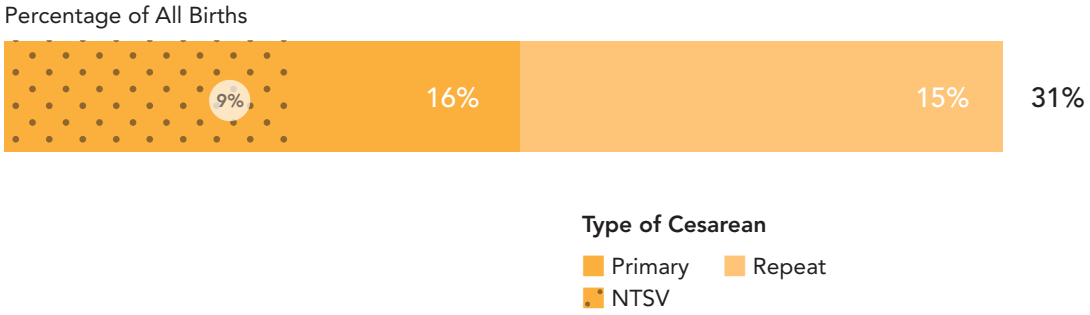
Vaginal birth after cesarean (VBAC) is a *vaginal birth* in a woman who has had one or more *cesarean births* in the past.

Vaginal exam is used to assess labor progress, especially the degree of *cervical dilation,* and the position of the baby.

Cesarean Rate Definitions

Type of Cesarean	Proportion of Cesareans Among:	Survey Rate
TOTAL (*n* = 2,529)	All births	31%
Primary (*n* = 2,082)	All births to women who have never had a cesarean	19%
Repeat (*n* = 447)	All births to women who have had one or more past cesareans	85%
NTSV (*n* = 873)	All births to "low-risk," first-birth women	26%

Cesarean Rates Among Survey Respondents



Notes: *NTSV* indicates a "nulliparous" woman (first-time mother), giving birth at term (37 or more weeks gestation) to a single baby in the "vertex," or head-first, position. Calculated from survey responses and respondent birth certificate data on position of baby's head at birth. Covered California and other California entities use the nationally endorsed NTSV cesarean measure, calculated from hospital discharge records, and incorporating specific exclusions, which resulted in 2016 NTSV rate of 25%. Not all eligible respondents answered each item.

Sources: *Listening to Mothers in California* (statewide survey of 2,539 women who gave birth in California hospitals in 2016), National Partnership for Women & Families, 2018; California Department of Public Health, California Monthly Birth Data files, Sep. – Dec. 2016.

About the Authors

The National Partnership for Women & Families led *Listening to Mothers in California*, in collaboration with investigators from the University of California, San Francisco, Center on Social Disparities in Health and the Boston University School of Public Health. Quantum Market Research administered the survey.

Carol Sakala, principal investigator, is the director of Childbirth Connection programs at the National Partnership for Women & Families. Eugene R. Declercq, investigator and lead data analyst, is a professor at the Boston University School of Public Health. Jen Joynt, project manager and author, is an independent consultant. Jessica M. Turon, research assistant, is an independent consultant.

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