Data Briefs:
Listening to Mothers III[SM] in-depth review on topics of interest to women, consumers, advocates and policymakers

These data briefs provide an in-depth look at highly important topics covered by the third *Listening to Mothers*[SM] survey. The data briefs address important questions regarding the variation and disparities experienced by childbearing women as they interact with different points of the maternity care system, as well as growing trends that are becoming increasingly common across disparate populations of mothers.

Data brief topics are as follows:

- **Pre-pregnancy health concerns** *(What health concerns do women have before pregnancy?)*
- **Usage of online pregnancy information** *(How do U.S. women use the Internet and other sources of pregnancy information?)*
- **Racial/ethnic variation in mothers' experiences** *(How do childbearing experiences differ across racial and ethnic groups in the United States?)*
- **Variation in mothers' experience by primary payer source** *(How do experiences of childbearing women on Medicaid and private insurance compare?)*
- **Common reasons for cesarean section** *(What are some factors driving the use of cesarean section in the United States?)*
- **Common reasons for induction of labor** *(What are some factors driving use of induced labor in the United States?)*
- **Maternity care trends over the last decade** *(How have women's childbearing experiences changed over the past decade?)*

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What health concerns do women have before pregnancy?
A *Listening to Mothers℠ III* Data Brief

As research has established the link between women's health before pregnancy and outcomes such as preterm birth, there is increasing attention to preconception health and ensuring access to health care at this critical time. For the first time, national data provide a snapshot of preconception health among U.S. women. Data are from a nationally representative sample of 2,400 women who gave birth from July 2011 through June 2012. Learn more about Childbirth Connection's *Listening to Mothers℠ III* survey and access the full report and related documents at www.NationalPartnership.org/maternitycare/listeningtomothers.

SUMMARY OF KEY FINDINGS

Most pregnancies were planned, and preconception visits are becoming more common. However, about 1 in 3 women were either pregnant earlier than they had planned (30%) or hadn't planned to get pregnant at all (5%).

- Most survey participants wanted to become pregnant either prior to (20%) or at the time (45%) they became pregnant.
- 16% of women had received medical help to become pregnant (e.g. assisted reproductive technologies).
- Among women with planned pregnancies, 52% had a preconception visit, up from 28% in
- *Listening to Mothers℠ II* (2005) and 30% in *Listening to Mothers℠ I* (2000-2002) surveys.

Almost half of women were overweight or obese entering pregnancy. Women were asked their height and to recall their weight just before pregnancy to calculate Body Mass Index (BMI).

- 9% were underweight before pregnancy by BMI
- 48% were normal weight
- 24% were overweight
- 20% were obese.

Preexisting diabetes, high blood pressure, and depression affected some pregnancies. Although most women did not report these conditions:

- 9% of women reported having Type 1 or Type 2 diabetes before pregnancy
- 8% of women were on prescription blood pressure medications in the month before pregnancy
- 13% were on prescription medication for depression in the month before pregnancy.

Some women received help with food before pregnancy. Almost half (48%) of women received used the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) during pregnancy, and of these, 23% were receiving these services before becoming pregnant.

How do U.S. women use the Internet and other sources of pregnancy information?
A *Listening to Mothers*^{SM} *III* Data Brief

Very little is known about childbearing women's sources of pregnancy and birth information, including Internet use. Existing studies have small sample sizes, survey specific populations such as women with high-risk pregnancies, or are several years old and thus do not reflect current technology. *Listening to Mothers*^{SM} *III* provides the most extensive and recent data on these matters among childbearing women in the United States. Data are from a nationally representative sample of 2400 women who gave birth from July 2011 through June 2012. Learn more about Childbirth Connection's *Listening to Mothers*^{SM} *III* survey and access the full report and related resources at www.NationalPartnership.org/maternitycare/listeningtomothers.

SUMMARY OF KEY FINDINGS

Nearly two-thirds (64%) of pregnant women access online information from a smartphone in a typical week, and 82% go online from a computer. Women also reported using tablet devices (35%), regular mobile phones (33%) and iPod Touch devices (21%) to get online information.

Mobile experience for accessing online pregnancy information is less valued. Among devices, women were most likely to consider a laptop or desktop computer as the best way to access information about pregnancy and birth.

- 64% of users said a computer is an "excellent" way to access pregnancy and birth information, compared with 46% of tablet users, 43% of smartphone users, and 42% or iPod Touch users.
- Only 22% of users rated regular mobile phones with text messaging capability and Internet access as an "excellent" way to access information.

Women's perceptions of value and trustworthiness of online sources vary. Traditional sources — maternity care providers and childbirth education classes — continue to be of most value to women who used them and were rated as more trustworthy than other sources considered. However, some online sources also received relatively high marks (see Figures below).

Women are turning to the Internet for help choosing their maternity care providers and hospitals. Insurance coverage was the leading factor driving decisions about where and with whom to give birth, but the Internet played a significant role.

- 69% of women reported that favorable information on web sites was a factor in choosing the hospital where they gave birth.
- Likewise, 69% of women reported that high ratings on web sites were a factor in selecting their doctor, midwife, or group practice.

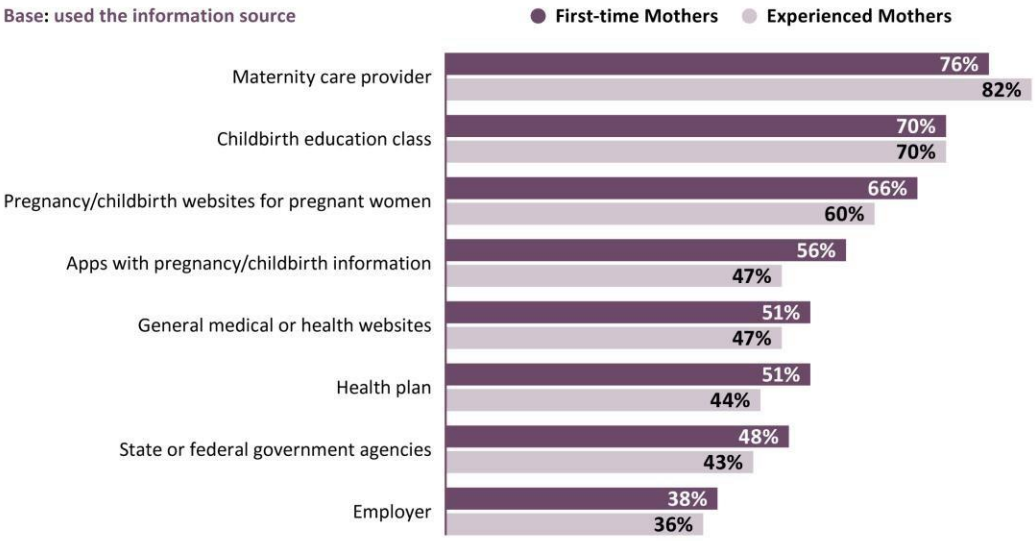
Many, but not most, pregnant women have access to health information technology for communication with care providers and care coordination.

- 47% of women indicated appointment scheduling was available online
- Nearly one in three (31%) had email access to their provider
- About half (49%) had access to other prenatal online services, like test results or prescription refills.

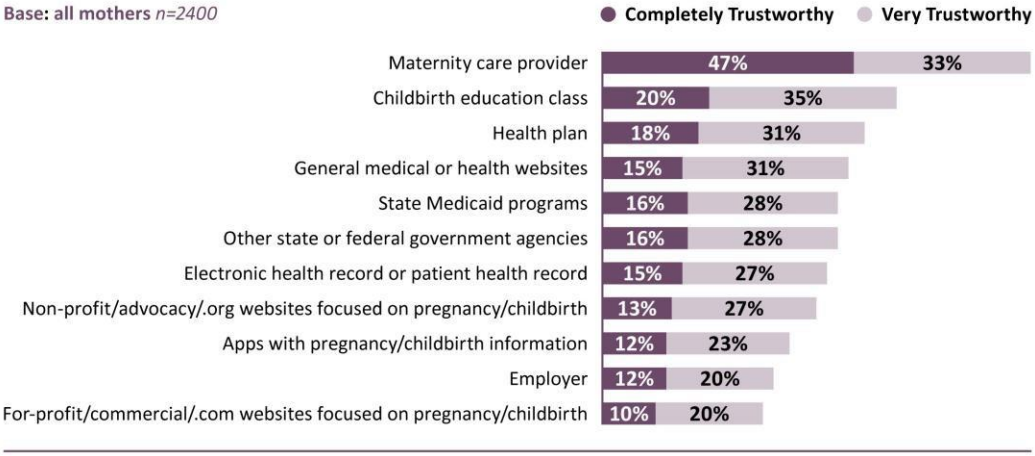
Many women use subscription services for delivery of pregnancy and birth information.

- 67% signed up to receive weekly or so emails with this information.
- 27% signed up to receive short text messages, with 17% of all mothers using Text4baby.

Mothers' ratings of sources of pregnancy and childbirth information used during recent pregnancy as "very valuable," by childbearing experience



Mothers' ratings of trustworthiness of possible sources of pregnancy and childbirth information



How do childbearing experiences differ across racial and ethnic groups in the United States?
A *Listening to Mothers*[SM] *III* data brief

Persistent health disparities, including differences in access to and the quality and outcomes of maternity care, can have long-lasting health impacts for women, children and our society. New data from the national *Listening to Mothers*[SM] *III* survey reveal differences in women's childbearing experiences that may reflect and contribute to poor health outcomes. Data are from a nationally representative sample of 2400 women who gave birth to a single baby in U.S. hospitals from July 2011 through June 2012 and could participate in English. This brief compares experience of black non-Hispanic ("black," below), Hispanic, and white non-Hispanic ("white") race/ethnicity groupings. There were too few participants to compare results of other groupings. Learn more about Childbirth Connection's *Listening to Mothers*[SM] *III* survey and access the full report at www.NationalPartnership.org/maternitycare/listeningtomothers.

SUMMARY OF KEY FINDINGS

About one in five black and Hispanic women report poor treatment from hospital staff due to race, ethnicity, cultural background, or language. Compared with 8% of white mothers, 21% of black mothers and 19% of Hispanic mothers perceived such poor treatment while hospitalized to give birth.

Overweight and obesity are most common in black childbearing women before pregnancy and in the months after giving birth. More than one in four (27%) black women were obese based on body mass index (BMI) just before becoming pregnant, compared with 20% of Hispanic women and 19% of white women. Black women gained less weight during pregnancy than other racial/ethnic groups, but also lost less weight after giving birth. The result was that black mothers were more likely to report a current BMI at the time of the survey in the overweight or obese range (63%) compared with white (46%) or Hispanic mothers (60%).

Black and Hispanic women are more likely than white women to experience group prenatal care. Among black women, 30% reported having at least one prenatal visit in a group with other pregnant women, compared with 27% of Hispanic women and only 16% of white women.

Black and Hispanic women are more likely to use WIC services in pregnancy and to name Medicaid or CHIP as the primary payer of their maternity care. During pregnancy, 70% of black women, 67% of Hispanic women, and 38% of white women use the Women, Infants and Children (WIC) Food and Nutrition Service. Medicaid or CHIP (the Child Health Insurance Program) was the primary payer of maternity services for 52% of black women, 50% of Hispanic women, and 29% of white women.

Sources and perceived trustworthiness of pregnancy and birth information differed across racial and ethnic groupings. Hispanic women were least likely to rate their maternity care provider as "completely trustworthy" (36% versus more than half of white — 51% — and black — 52% —

women). Black women were the most likely to report that their prenatal provider always answered questions to their satisfaction (68% versus 56% of white women and 55% of Hispanic women) and to receive text messages with pregnancy and birth information, such as Text4Baby messages (42% versus 30% of Hispanic women and 20% of white women). Among first time mothers, Hispanic women were the least likely to take childbirth education classes (53% versus 58% of black women and 61% of white women).

There were some important variations in prenatal and labor and birth care providers. In identifying major factors in the "choice" of prenatal care provider, 55% of black women, 45% of Hispanic women, and 29% of white women reported that prenatal providers had been assigned to them. Whereas 18% of white women met their birth attendant for the first time at the birth, 27% of Hispanic women and 26% of black women had no prior relationship with their birth attendant. There was little variation across the groups in use of obstetrician-gynecologists (77- 79%), family physicians (8-10%), and midwives (6-9%) for prenatal care. However, white women were more likely to have an obstetrician-gynecologist birth attendant (73%) versus black women (64%) and Hispanic women (65%).

Support during labor from a spouse/partner and doula varied among racial and ethnic groupings. Among the racial and ethnic groups, black mothers were most likely to report that they were without support of a spouse or partner (13%, versus 7% of Hispanic women and 5% of white women). White women were more likely to report that a spouse or partner had provided support during labor (82% versus 69% of black women and 72% of Hispanic women). Non-significant differences in use of a labor doula were 9% of black, 6% of Hispanic, and 5% of white women. Among women who had a good understanding of doulas and doula support in labor, black women were most likely to say they would have liked to have had such support (39% versus 30% Hispanic and 22% white).

Among racial and ethnic groupings, black women were most likely both to prefer and to have a low-intervention birth. Almost 7 in 10 black women (69%) agreed with the statement, "Birth should not be interfered with unless medically necessary," compared with 57% of white women and 54% of Hispanic women. Black women were the group most likely to have given birth with none of 5 major interventions (labor induction, epidural analgesia, labor augmentation, cesarean, vacuum or forceps assisted delivery). Almost one in five black women (18%) gave birth without these interventions, versus 15% of Hispanic women and 10% of white women. Among women who had episiotomies, black women were the most likely to report having been given a choice (59%, versus 46% of Hispanic women and 36% of white women).

There were racial/ethnic differences in intention to breastfeed and hospital breastfeeding support, but a similar proportion of women in each group exclusively breastfed at one week. White women were most likely to intend to exclusively breastfeed (59% versus 50% of Hispanic women and 43% of black women). Black women who intended exclusive breastfeeding were more likely than other groups to receive formula samples or offers from hospital staff (64% versus about half of the other groups), and their babies were more likely to be supplemented while in the hospital (45% versus 38% of babies of Hispanic mothers and 32% of babies of white mothers). Despite concerns about hospital breastfeeding support, black women who intended to exclusively breastfeed generally did, and some who planned both breast and formula feeding were exclusively breastfeeding at one week. Overall, about half of mothers in each group exclusively breastfed at one week: 51% of white, 49% of black, and 48% of Hispanic women.

How do experiences of childbearing women on Medicaid and private insurance compare?
A *Listening to Mothers*SM *III* data brief

Medicaid and CHIP (the Child Health Insurance Program) are important safety net programs that pay for a large proportion of the approximately four million U.S. births each year. Pregnancy, childbirth and newborn care are the costliest and most common hospital conditions covered by Medicaid (and private insurance). States have an interest in ensuring adequate access, quality care, and optimal health outcomes for childbearing women and infants insured by Medicaid and CHIP, taxpayers expect good value for these investments, and these programs provide policy makers with opportunities to improve maternity care. The *Listening to Mothers*SM *III* survey provides the fullest and most current data on the childbearing experiences of U.S. women, including comparison by source of payment. This brief presents data from a nationally representative sample of women who gave birth from July 2011 through June 2012. It compares women whose primary source of payment was Medicaid or CHIP (referred below as "Medicaid"; 38% of participants) with those whose primary payment source was private insurance (47%). Not included are those mainly covered by other government programs (e.g., Tricare, Federal Employees Health Benefits; 10%) or who mainly paid out of pocket (5%). Learn more about Childbirth Connection's *Listening to Mothers*SM *III* survey and access the full report and related resources at www.NationalPartnership.org/maternitycare/listeningtomothers.

SUMMARY OF KEY FINDINGS

Medicaid-insured women are more likely to have unplanned pregnancies than women with private insurance. More than 4 in 10 (43%) said they had hoped to get pregnant at a later time or not at all, versus 27% of privately insured women.

Women covered by Medicaid enter pregnancy underweight, overweight or obese more often than women with private insurance, and gaps in obesity widen over time. Just 40% of Medicaid-insured women began pregnancy with a healthy body mass index (BMI), compared with 54% of women with private insurance. Among women with Medicaid, 11% were underweight, 25% were overweight, and 24% were obese just before pregnancy. After birth, at the time of the survey, the Medicaid-private gap of women who were obese widened to 32% versus 20%.

Medicaid-insured women have greater need for basic services in pregnancy. Medicaid beneficiaries were more likely than women with private insurance to say that during pregnancy they had needed help with food, nutritional counseling, treatment for depression, and help with smoking cessation. Differences in identified need were greatest for help with food (77% versus 22%). Among those who needed the services, Medicaid beneficiaries were more likely than privately insured moms to get help with food and nutritional counseling, but less likely to receive needed treatment for depression or help with smoking cessation.

- Almost all Medicaid beneficiaries who needed help with food received such help (93%), largely through enrollment in the Women, Infants, and Children (WIC) Supplemental Nutrition Program. However, one in four Medicaid beneficiaries (27%) who received WIC were not enrolled until after their first trimester.

- One-third (32%) of Medicaid-insured women who said they needed counseling or treatment for depression in pregnancy reported that they did not receive these services.
- Only 41% of Medicaid-insured women who reported they needed help to quit smoking received such help.

Medicaid-insured women are less likely to take childbirth education classes and more likely to have unmet need for doula support in labor.

- Only 28% of Medicaid-insured women took childbirth education classes, compared with 39% of privately insured women.
- Despite the significant potential benefits of doula support in labor, women covered by Medicaid were much less likely than women with private insurance to be aware of this option: 36% insured by Medicaid versus 19% with private insurance had never heard about this type of care.
- Among those who did have an understanding of doula care but did not have this type of support in labor, 35% of Medicaid beneficiaries stated they would have liked to have had doula care, compared with 21% of privately insured women.

Induction and cesarean section were common, often for reasons that did not reflect best evidence or women's preferences. Use of induction was more common and access to vaginal birth after cesarean (VBAC) was less common for women covered by Medicaid.

- Nearly half of moms covered by Medicaid (46%) experienced labor induction versus 37% with private insurance.
- Some common reasons women in both groups cited for induction are not established medical reasons for this procedure, including "baby was full term/it was close to my due date" (44% Medicaid, 45% private), "a care provider was concerned about the size of the baby" (13% versus 18%), and "I wanted to get the pregnancy over with" (15% versus 19%).
- Almost one-third (31% Medicaid, 32% private insurance) gave birth by cesarean section.
- Only 40% of Medicaid-insured women reported having the option to plan a VBAC, compared with 45% of privately insured women. Medicaid-insured women were less likely to cite a medical reason for the repeat cesarean section (39% vs. 48%) and more likely to cite that their care provider was unwilling to assist a VBAC (27% vs. 20%).
- Among women with one or two prior cesareans whose care provider mentioned a possible repeat cesarean, only 62% of moms with Medicaid versus 81% of privately-insured moms had this situation framed as a choice, more felt this had been the provider's decision (30% versus 9%), and fewer would definitely make the same decision again (57% versus 73%).

Moms covered by Medicaid experienced breastfeeding-related gaps. Medicaid beneficiaries were less likely to intend to exclusively breastfeed (47% vs. 61% of privately insured women), and less likely to be exclusively breastfeeding a week after birth (42% versus 57%). Among those intending to breastfeed, Medicaid-insured women experienced deficits in some types of care:

- Fewer Medicaid-insured moms reported receiving help to get started with breastfeeding (78% versus 81%), receiving encouragement to nurse the baby on demand (64% versus 69%), or being informed of community breastfeeding resources (47% versus 53%).
- More moms with Medicaid reported that their breastfed babies received pacifiers (46% versus 38%) or formula/water supplementation (39% versus 35%) while in the hospital.

What are some factors driving use of cesarean section in the United States? A *Listening to Mothers℠ III* data brief

The cesarean section rate has risen sharply over the last decade, stabilizing in recent years around one in three women. Although potential benefits of the procedure may outweigh possible harms in the presence of certain complications or risk factors, rates above 10 to 15% appear to do more harm than good. Cesareans also pose serious risks to women and babies in future pregnancies. Thirty-one percent of *Listening to Mothers℠ III* survey participants gave birth by cesarean, including 15% with first (primary) cesareans and 16% with repeat cesareans. The survey explored possible drivers of high cesarean rates. Learn more about Childbirth Connection's *Listening to Mothers℠ III* survey and access the full report and related resources at www.NationalPartnership.org/maternitycare/listeningtomothers.

SUMMARY OF KEY FINDINGS

"Maternal request" primary cesareans remain rare. Despite much media and professional attention to "maternal request" cesareans, only 1% of respondents who had a planned initial, or "primary," cesarean did so with the understanding that there was no medical reason. About one mother in five (22%) reported asking their providers to schedule a cesarean before labor, and 87% of those did so believing that it would offer a health benefit to them or their babies, leaving about 2% overall who asked the provider to schedule a cesarean with no medical reason.

Many women report experiencing pressure from a care provider to have a cesarean. Overall, 13% of mothers reported experiencing pressure from a care provider to have a cesarean. However, this rose to 22% among women who had a repeat cesarean section, and 28% among both mothers who had a primary cesarean and those who had a vaginal birth after cesarean.

Discussion about giving birth after one or two prior cesareans steers many women toward repeat cesarean, even though research and professional guidelines support offering vaginal birth to nearly all such women. The survey looked at decision-making processes among women who had had one or two cesareans and whose care providers mentioned a possible repeat cesarean. Forty percent of women were presented with no information about why they should not have a repeat caesarean, while just 3% of women received no information about reasons to have a repeat cesarean. More than one in four of the women in this situation reported that the discussion had not been framed as a matter of choice. Among the 73% of care providers who expressed an opinion about the decision, 88% recommended repeat cesarean. Ultimately, 93% of the women in this group did have a repeat cesarean.

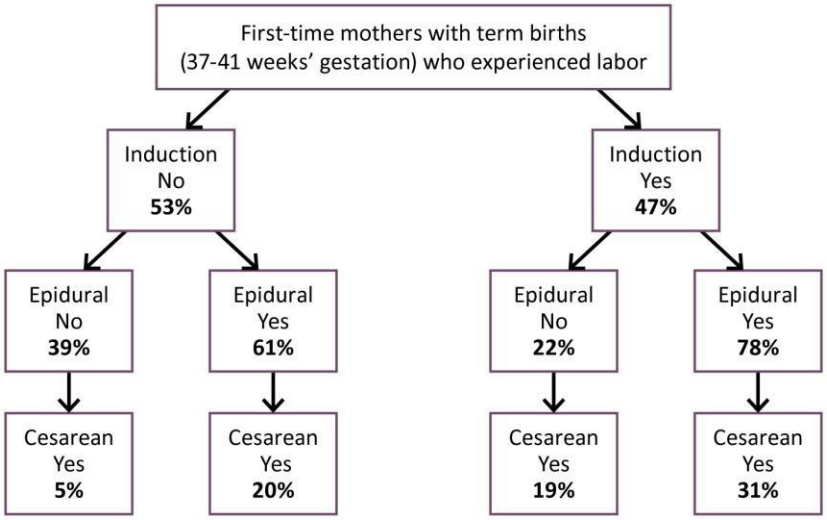
Discussion about giving birth when a baby might be getting large steers many women toward a primary cesarean, even though research and professional guidelines do not support use of cesarean section in this case. The survey looked at decision-making processes among women whose care providers discussed a planned initial or "primary" cesarean section (but not labor induction) because the baby might be getting quite large. One in five women (19%) were presented with no information about why they should not have an initial caesarean, while just 4% of women received no information about reasons to have a cesarean. Nearly four in ten of the women in this situation reported that the discussion had not been framed as a matter of choice. Among the 71% of care providers who expressed an

opinion about the decision, 72% recommended a primary cesarean. Ultimately, 29% of women in this situation had a primary cesarean, versus the survey's overall 19% primary cesarean rate.

Interventions in labor are closely linked with having unplanned cesarean. The phenomenon where one intervention increases the likelihood of others used to monitor, prevent, or treat side effects is known as the "cascade of intervention." This cascade frequently ends in an unplanned cesarean section. Among first-time mothers with term births who experienced labor, those who had both labor induction and epidural analgesia were six times as likely to have a cesarean section (31%) as those who had neither intervention (5%).

Cascade of intervention in first-time mothers with term births who experienced labor

Base: first-time mothers with term births who experienced labor *n=750*



In this group, which included 85% of first-time mothers, the overall epidural rate was 69% and overall cesarean rate was 21%.

A significant proportion of cesareans may be related to lack of access to vaginal birth after cesarean (VBAC). Of women with a previous cesarean, almost half (48%) were interested in the option of a VBAC, but 46% were denied that option. In 24%, the reason for the denial was unwillingness of the provider. In 15% the woman's hospital did not allow VBACs.

Most survey participants were uninformed about potential harms of cesarean section. We explored respondents' knowledge of two possible harms of cesarean section: breathing difficulties in newborns and placental problems in future pregnancies. In neither case did most cite the "correct" response, with "not sure" selected most often. Mothers who had a cesarean were no more likely to be correct about placental difficulties than mothers who did not, and much more likely than mothers with a vaginal birth to incorrectly agree that a cesarean lowers the likelihood of newborn breathing problems.

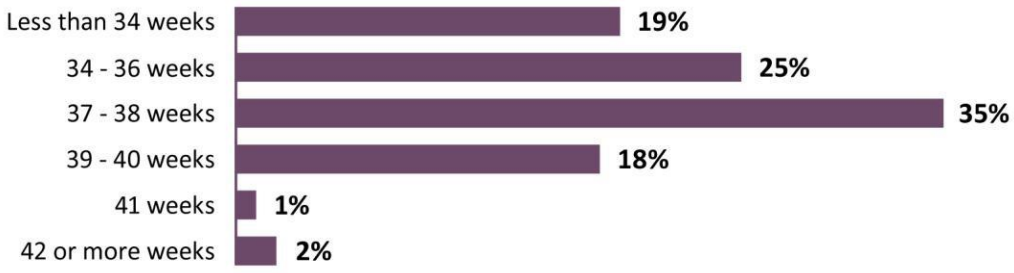
What are some factors driving use of induced labor in the United States?
A *Listening to Mothers℠ III* data brief

There has been growing attention to the use of induction of labor when it is medically inappropriate (such as prior to 39 weeks in a woman without a medical indication) and the high rate of apparently "elective" induction of labor. Research studies cannot easily discern women's knowledge and preferences underpinning rates of induced labor. *Listening to Mothers℠* surveys provide a unique perspective on labor induction trends, that of mothers themselves. Learn more about Childbirth Connection's *Listening to Mothers℠ III* survey and access the full report and related resources at www.NationalPartnership.org/maternitycare/listeningtomothers.

SUMMARY OF KEY FINDINGS

Most women do not know when in pregnancy the baby is full term and ready to be born, and thus are vulnerable to making uninformed decisions about induction when there is not a medical reason. Due to consistent growing evidence of increased risks of elective delivery before 39 weeks' gestation, a growing number of maternity care leaders and organizations discourage earlier labor induction unless there is a well-established medical reason. However, just 21% of survey participants correctly identified 39 weeks or beyond as the earliest week in pregnancy when it is safe to deliver a baby should complications not require earlier delivery. See Figure.

Mothers' identification of earliest week in pregnancy when it is safe to deliver a baby should complications not require an earlier delivery



Most survey participants were uninformed about induced labor. Survey respondents were asked about their level of agreement with two facts about induced labor, and in neither case did a majority of mothers choose the correct response. Only 42% of mothers agreed that inductions might increase the chance for a cesarean. A substantial majority agreed, contrary to best evidence and current clinical guidelines, that if a baby appeared large at the end of pregnancy, it made sense to induce labor (56%). Mothers who experienced an attempted medical induction were more likely to agree with the statement concerning large babies, while having experienced an induction had little relationship to attitudes about the likelihood of a cesarean following an induction.

Some common reasons women cited for induction are not established medical reasons for this procedure, including "baby was full term/it was close to my due date" (44%), "a care provider was concerned about the size of the baby" (16%), and "I wanted to get the pregnancy over with" (19%). See Figure.

Reasons why mothers experienced medical induction

(choose all that apply)
Base: care provider tried to induce labor *n=991*

Baby was full term/close to due date	**44%**
Mother wanted to get pregnancy over with	**19%**
Care provider was concerned that mother was "overdue"	**18%**
Maternal health problem that required quick delivery	**18%**
Care provider was concerned about the size of the baby	**16%**
Water had broken and there was a concern about infection	**12%**
Mother wanted to control timing of birth for work or other personal reasons	**11%**
Care provider was concerned that amniotic fluid around the baby was low	**11%**
Care provider was concerned that baby was not doing well	**10%**
Mother wanted to give birth with a specific provider	**10%**
Some other reason	**10%**

Many women report experiencing pressure from a care provider to have an induction. Overall, 15% of mothers reported experiencing pressure from a care provider to have labor induced. This rose to 25% among mothers who experienced a medical induction compared with 8% among those who did not have an induction.

Discussion about giving birth when a baby might be getting large steers many women toward an induction of labor, even though research and professional guidelines do not support routine use of labor induction in this case. The survey looked at decision-making processes among women whose care providers discussed induction of labor (but not planned cesarean) because the baby might be getting quite large. The providers presented no information at all about reasons not to induce labor to 29% of the women in this situation, versus presenting no information about reasons to induce labor to just 1% of the women. Almost 1 in 5 women in this situation reported that the discussion had not been framed as a matter of choice. Among the 81% of care providers who expressed an opinion about the decision, 80% recommended induction of labor. Ultimately, 67% of women in this situation had a medical induction, and 37% tried a self-induction.

How have women's childbearing experiences changed over the past decade?
A *Listening to Mothers℠ III* data brief

Childbirth Connection has reported results from three *Listening to Mothers℠* surveys over the past decade, in 2002, 2006, and 2013. Although survey questions and sampling strategy evolved somewhat during this period, the three surveys provide an opportunity to consider trends in women's childbearing experiences during what has been in many respects a time of flux for the U.S. maternity and health care systems.

Learn more about Childbirth Connection's *Listening to Mothers℠* surveys and access the full reports and related resources for all three surveys at www.NationalPartnership.org/maternitycare/listeningtomothers.

SUMMARY OF KEY FINDINGS

Women's readiness for pregnancy appears to be improving. The proportion of women who had a preconception visit increased sharply between the second and third surveys, from 28% to 52%. In the same period, there has been a decrease in unintended pregnancies, from 42% to 35%, and in obesity at the time of conception, from 25% to 20%.

The use of prenatal ultrasound has increased, including a steep increase in use for an indication that is not supported by evidence. Between the second and third surveys, the proportion of women who had two or fewer ultrasounds decreased from 41% to 30%, while the proportion who had five or more ultrasounds increased from 23% to 34%. In the most recent survey, 68% of women reported that their caregiver used ultrasound near the end of pregnancy to estimate fetal weight, compared with 51% in *Listening to Mothers℠ II*. Routine fetal weight estimation is not supported by evidence or clinical guidelines.

Many women report experiencing pressure from a care provider to have a cesarean, labor induction, or an epidural. The percentage of women who experienced pressure to have a cesarean rose from 9% to 13% between the second and third surveys, while pressure to accept an epidural increased from 7% to 15% and pressure to induce labor increased from 11% to 15%. The proportion of women who attempted to self-induce labor increased from 22% to 29% during the same period, which may be related to pressure to accept medical induction and desire to avoid such intervention. (In *Listening to Mothers℠ II*, one-third of women who attempted self-induction did so to avoid a medical induction.)

Women's interest in and access to VBAC is shifting. The data on vaginal birth after cesarean (VBAC) suggest a small increase between the second and third surveys in the proportion of women with a prior cesarean who were interested in the option of a VBAC, from 45% to 48%. The proportion of women with a prior cesarean who reported a lack of access to VBAC grew to 56% in the current survey from 42% a decade earlier. For those who did not have the option of a VBAC, the proportion reporting that their care provider or their hospital was unwilling declined appreciably between the last two surveys, however, the proportion of mothers denied access to a VBAC for a medical reason unrelated to their prior pregnancy more than doubled (20% to 45%) across the past two surveys.

Rates of labor induction and episiotomy are on the decline, while an initial increase in cesarean section has stabilized. The proportion of labors brought on by medical induction decreased slightly over the three surveys, from 36% to 34% to 30%, while episiotomy among vaginal births has decreased more dramatically, falling by half over the decade from 35% to 25% to 17%. The cesarean rate increased sharply between the first and second surveys, from 24% to 32% but remained essentially stable at 31% in the current survey.

Hospital support for exclusive breastfeeding is improving, although women's intentions to and experiences with exclusive breastfeeding appear to be declining. Among women intending to exclusively breastfeed, there has been a marked decrease in the percentage of women who received free formula samples or offers at hospital discharge (from 80% to 66% to 49%) and whose babies received formula or water supplementation during the hospital stay (from 47% to 38% to 29%). Across the two most recent surveys there was an increase in newborns being primarily in their mothers' arms in the first hour after birth, a practice that facilitates breastfeeding, from 34% to 47%. However, the percentage of women nearing the end of pregnancy who hoped to breastfeed decreased over the three surveys, from 67% to 61% to 54%, as did the proportion exclusively breastfeeding at one week (falling from 58% to 51% to 50%.)