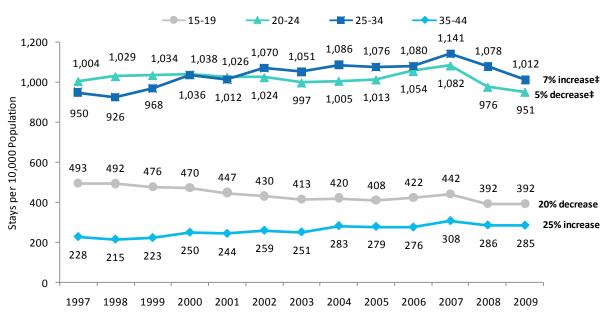
## **EXHIBIT 5.6 Childbirth**



Stays per 10,000 Population for Childbirth by Age, 1997-2009

‡ 2009 stays per 10,000 population are not statistically different from 1997 stays per 10,000 population at p<0.05. Source: AHRQ, Center for Delivery, Organization, and Markets, Healthcare Cost and Utilization Project, Nationwide Inpatient Sample, 1997-2009.

- The highest rate of hospital stays for childbirth was among 20 to 24 and 25 to 34 year olds. Between 1997 and 2009, the rate of births was similar for these age groups.
  - The birthrate among 20 to 24 year olds remained stable between 1997 and 2007 and then declined 14 percent to 951 births per 10,000 females in 2009.
  - The birthrate among 25 to 34 year olds increased 20 percent from 950 births per 10,000 females in 1997 to 1,141 births per 10,000 females in 2007, and then decreased 13 percent to 1,012 births per 10,000 females in 2009.
- Among 15 to 19 year olds, the rate of births decreased from 493 stays per 10,000 females in 1997 to 392 stays per 10,000 females in 2009, a 20-percent decrease over the time period.
- For those aged 35 to 44 years, the birthrate increased by 25 percent between 1997 and 2009. There were 228 births per 10,000 females in 1997 and 285 births per 10,000 females in 2009.

	NUMBER OF STAYS IN THOUSANDS		STAYS PER 1,000 MATERNAL STAYS	
PRINCIPAL CCS DIAGNOSIS	1997	2009	1997	2009
All maternal stays <sup>+</sup>	4,333	4,568	1,000	1,000
Trauma to vulva and perineum due to childbirth	710	748	164	164
Maternal stay with previous C-section	271	540	63	118 8
Prolonged pregnancy	104	275	24	60 8
Normal pregnancy and/or delivery	536	261	124	57 8
Hypertension complicating pregnancy, childbirth and				
the puerperium	184	235	42	51 8
Fetal distress and abnormal forces of labor	418	219	97	48 8
Early or threatened labor	260	197	60	43 8
Umbilical cord complication	258	194	60	42 8
Polyhydramnios and other problems of amniotic cavity	201	179	47	39 8
Malposition, malpresentation	161	160	37	35

## Number of Stays and Stays per 1,000 Maternal Stays for the Most Frequent Principal Diagnoses for Maternal Hospital Stays, 1997 and 2009

+ Includes additional maternal CCS diagnoses not shown on this table but listed in the Sources and Methods of this report.

 $\pounds$  2009 stays per 1,000 maternal stays are statistically different from 1997 stays per 1,000 maternal stays at p<0.05.

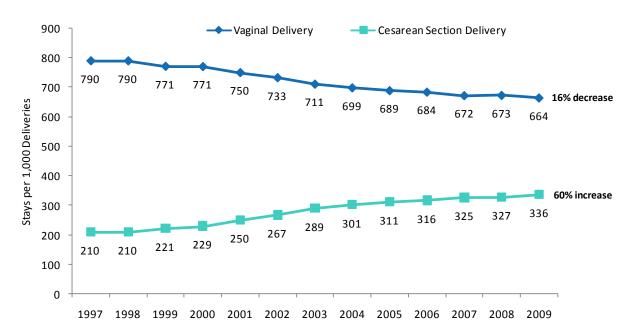
- There were 4.6 million maternal stays in 2009.
  - Trauma to vulva and perineum due to childbirth was the most common condition in both 1997 and 2009 and the rate of this condition was similar between years.
- The following maternal conditions increased from 1997 to 2009:
  - Maternal stay with previous C-section
  - Prolonged pregnancy
  - Hypertension complication pregnancy, childbirth and the puerperium
- The following maternal conditions decreased from 1997 to 2009:
  - Normal pregnancy and/or delivery
  - Fetal distress and abnormal forces of labor
  - Early or threatened labor
  - Umbilical cord complication
  - Polyhydramnios and other problems of amniotic cavity
- Maternal stay with previous C-section rose in rank from fourth in 1997 to second in 2009.
- The number of stays for normal pregnancy decreased from 124 per 1,000 maternal stays in 1997 to 57 per 1,000 maternal stays in 2009. Normal pregnancies are defined as vaginal births with no complicating conditions.

	NUMBER OF STAYS WITH THE PROCEDURE IN THOUSANDS		PROCEDURES PER 1,000 MATERNAL STAYS	
ALL-LISTED CCS PROCEDURES	1997	2009	1997	2009
All maternal stays (with procedures)	3,965	4,266	915	934
Cesarean section	797	1,375	184	301 8
Repair of obstetric laceration	1,133	1,339	261	293 8
Artificial rupture of membranes to assist delivery	850	929	196	203
Fetal monitoring	997	855	230	187
Episiotomy	863	315	199	69 8
Ligation or occlusion of fallopian tubes	304	287	70	63
Forceps, vacuum, and breech delivery	426	276	98	60 8
Insertion of catheter or spinal stimulator and				
injection into spinal canal	124	190	29	42
Prophylactic vaccinations and inoculations	14	77	3	17 8
Blood transfusion	18	58	4	13 8

# Number of Stays and Stays per 1,000 Maternal Stays for the Most Frequent All-listed Procedures for Maternal Hospital Stays, 1997 and 2009

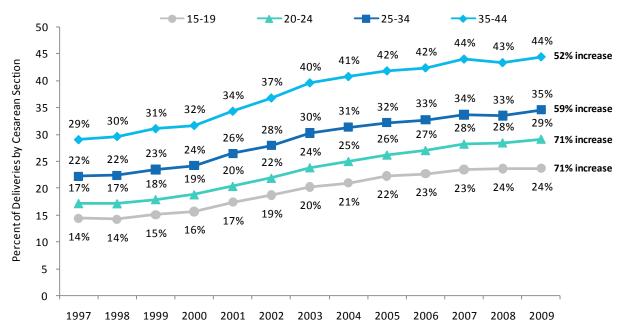
\$ 2009 stays per 1,000 maternal stays are statistically different from 1997 stays per 1,000 maternal stays at p<0.05.

- Repair of obstetric laceration and C-section were the most common maternal procedures in 1997 and 2009.
  - There were 261 procedures for repair of obstetric laceration per 1,000 maternal stays in 1997 and 293 procedures per 1,000 maternal stays in 2009.
  - C-section, which was the fifth ranked maternal procedure in 1997, rose to the first ranked in 2009, occurring at a rate of 301 procedures per 1,000 maternal stays in 2009.
- The rate of episiotomies decreased 65 percent from 199 procedures per 1,000 maternal stays in 1997 to 69 procedures per 1,000 maternal stays in 2009.



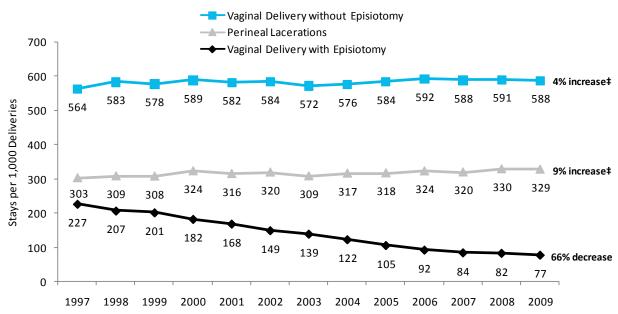
Stays for All-listed Vaginal Delivery and Cesarean Section per 1,000 Deliveries, 1997-2009

- The rate of vaginal deliveries decreased by 16 percent, from 790 stays per 1,000 deliveries in 1997 to 664 stays per 1,000 deliveries in 2009.
- The rate of C-sections increased by 60 percent between 1997 and 2009. There were 210 C-sections
  performed per 1,000 deliveries in 1997 and 336 per 1,000 deliveries in 2009.



#### Percent of Maternal Stays with All-listed Cesarean Section Procedures by Age, 1997-2009

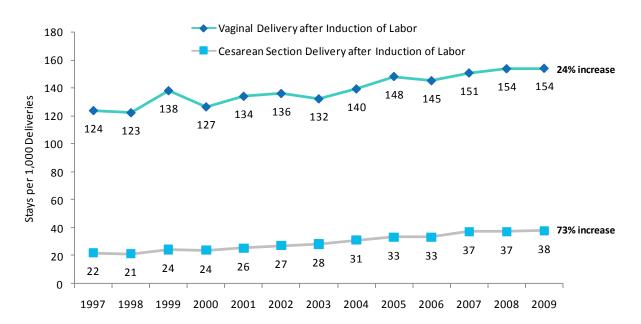
- In 2009, the percent of deliveries via C-section was highest among 35 to 44 year olds (44 percent). This
  represents a 52-percent increase from 1997.
- Among 25 to 34 year olds, the percent of maternal deliveries with a C-section grew to 35 percent in 2009 from 22 percent in 1997, a 59-percent increase since 1997.
- The largest increases were seen in the youngest age groups (15 to 19 and 20 to 24 year olds) for whom the C-section rate grew by 71 percent between 1997 and 2009.



### Stays for All-listed Vaginal Deliveries with and without Episiotomy and Perineal Lacerations per 1,000 Deliveries, 1997-2009

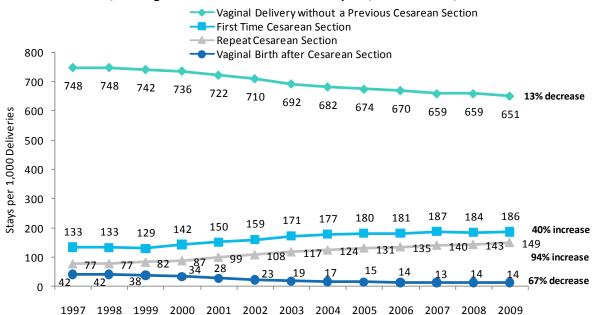
‡ 2009 stays per 1,000 deliveries are not statistically different from 1997 stays per 1,000 deliveries at p<0.05. Source: AHRQ, Center for Delivery, Organization, and Markets, Healthcare Cost and Utilization Project, Nationwide Inpatient Sample, 1997-2009.

- The rate of vaginal delivery without episiotomy remained relatively stable from 1997 to 2009.
- From 1997 to 2009, the rate of perineal lacerations also remained stable.
- The rate of vaginal delivery with episiotomy decreased 66 percent from 227 stays per 1,000 deliveries in 1997 to 77 stays per 1,000 deliveries in 2009.



#### Stays for Vaginal and Cesarean Section Deliveries after Induction of Labor per 1,000 Deliveries, 1997-2009

- The rate of vaginal deliveries after induction of labor increased by 24 percent from 124 per 1,000 deliveries in 1997 to 154 in 2009.
- From 1997 to 2009, the rate of C-sections after induction of labor increased by 73 percent from 22 to 38 per 1,000 deliveries.





- The rate of vaginal delivery without a previous C-section decreased by 13 percent from 748 per 1,000 deliveries in 1997 to 651 per 1,000 deliveries in 2009.
- Between 1997 and 2009, first time C-section rates increased by 40 percent from 133 procedures per 1,000 deliveries in 1997 to 186 procedures per 1,000 deliveries in 2009.
- Between 1997 and 2009, the rate of repeat C-sections grew by 94 percent from 77 previous C-sections per 1,000 deliveries in 1997 to 149 per 1,000 deliveries in 2009.
- Vaginal births after C-sections declined 67 percent between 1997 and 2009 from 42 stays per 1,000 deliveries to 14 stays per 1,000 deliveries.