



# Associated Hospital and Physician Costs for Deliveries to Medi-Cal Beneficiaries, 2006

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## Question

What are the associated hospital and physician costs for deliveries to Medi-Cal beneficiaries?

## Background

Medicaid is a significant financier of maternal and child health care services nation-wide. In 2003, Medicaid paid for, approximately, 1.5 million births or 41% of all deliveries in the United States. Each year California's Medicaid program, known as Medi-Cal, is responsible for financing between 41% and 46% of all deliveries in the state.

## Methods

This analysis evaluated Medi-Cal Fee-for-Service (FFS) claims with a primary delivery diagnosis (ICD-9 codes 650 or 640.0-676.0 with a 5<sup>th</sup> digit of '1' or '2') for service dates between January 1, 2006 and December 31, 2006. RASS summarizes the mean length of hospital stay, mean hospital charges, and mean physician delivery by mode of delivery

(vaginal or cesarean) and hospital type (County Hospital vs. Community Hospital). In cases where physicians are billed for "global" services, which include both prenatal and post-partum care, this analysis estimated physician delivery costs separately. Costs associated with deliveries to Medi-Cal Managed Care beneficiaries could not be estimated, and are excluded from this analysis.

## Results

In 2006, 69.7% of births to Medi-Cal FFS beneficiaries were delivered vaginally, while 30.3% were cesarean deliveries. These proportions varied by hospital type, with beneficiaries receiving services from county hospitals having the lowest proportion of cesarean deliveries.

The average length of hospital stay for a vaginal delivery was 2 days, while those delivering via cesarean section had an average hospital stay of 3.5 days. Mean length of hospital stays were slightly longer for beneficiaries receiving services at county hospitals as compared

to those receiving services at community hospitals.

On average, hospital costs specific to childbirth were \$2809 for vaginal deliveries and \$4654 for cesarean deliveries. Mean hospital costs for vaginal deliveries were slightly higher for beneficiaries receiving services in county hospitals (\$2916) compared to vaginal deliveries in community hospitals (\$2791). These differences may be due, in part, to the variations in mean length of hospital stay.

Mean physician costs were \$532 per vaginal delivery and \$618 per cesarean delivery. Physician delivery costs varied by hospital type, with average physician costs from county hospitals being slightly lower than physician costs from community hospitals (see Table 2 and 3).

### **Limitations**

Hospital and physician costs associated with deliveries for Medi-Cal Managed Care beneficiaries (approximately 25% of all birth financed by Medi-Cal) cannot be estimated and are excluded from this

analysis. In addition, physician delivery costs are somewhat problematic in that physicians who bill for “global” services (services that include prenatal and postpartum care as well as physician delivery charges) could not be separated and included in the “Physician Delivery Costs” estimates.

### **Conclusions**

Average length of stay and hospital delivery charges among Medi-Cal beneficiaries giving birth in 2006 were similar to those reported nationally.<sup>1</sup> Since childbearing is the primary medical reason for women under age 65 to seek healthcare in the Medi-Cal program, routine monitoring of childbirth events and their associated costs is warranted.

### **References**

<sup>1</sup> Russo CA, Weir L., and Steiner C. Hospitalizations Related to Childbirth, 2006. HCUP Statistical Brief #71. U.S. Agency for Healthcare Research and Quality, Rockville, MD.

**Table 1: Mean Costs, Length of Stay and 95% Confidence Intervals Associated with all MediCal Births in 2006, by Method of Delivery.**

	Percent of Deliveries	Mean Hospital Costs	Mean Physician Delivery Costs	Mean Global Delivery <sup>1</sup> Costs	Mean LOS
<b>Vaginal Delivery</b>	69.7%	\$2,809.36 (\$2800.35, \$2818.37)	\$532.09 (\$531.80, \$532.38)	\$1,075.49 (\$1074.72, \$1076.27)	2.08 (2.07, 2.09)
<b>Cesarean Delivery</b>	30.3%	\$4,654.20 (\$4629.05, \$4679.36)	\$618.29 (\$616.88, \$619.70)	\$1,183.91 (\$1181.24, \$1186.58)	3.47 (3.44, 3.49)

<sup>1</sup>Global delivery costs include physician delivery charges and physician charges for prenatal and postpartum services.

**Table 2: Mean Costs, Length of Stay and 95% Confidence Intervals Associated with Medi-Cal Births among Beneficiaries Receiving Services from County Hospitals, by Method of Delivery, 2006.**

	Percent of Deliveries	Mean Hospital Costs	Mean Physician Delivery Costs	Mean Global Delivery <sup>1</sup> Costs	Mean LOS
<b>Vaginal Delivery</b>	74.4%	\$2,916.14 (\$2895.12, \$2937.17)	\$525.62 (\$524.83, \$526.40)	\$1,102.26 (\$1090.61, \$1113.91)	2.32 (2.31, 2.33)
<b>Cesarean Delivery</b>	25.6%	\$4,448.53 (\$4378.24, \$4518.82)	\$558.75 (\$556.39, \$561.11)	\$1,054.21 (\$1025.27, \$1083.14)	3.60 (3.55, 3.65)

<sup>1</sup>Global delivery costs include physician delivery charges and physician charges for prenatal and postpartum services.

**Table 3: Mean Costs, Length of Stay and 95% Confidence Intervals Associated with Medi-Cal Births among Beneficiaries Receiving Services from Community Hospitals, by Method of Delivery, 2006.**

	Percent of Deliveries	Mean Hospital Costs	Mean Physician Delivery Costs	Mean Global Delivery <sup>1</sup> Costs	Mean LOS
<b>Vaginal Delivery</b>	68.7%	\$2,791.27 (\$2781.36, \$2801.19)	\$533.57 (\$533.26, \$533.88)	\$1,075.11 (\$1074.35, \$1075.88)	2.04 (2.03, 2.05)
<b>Cesarean Delivery</b>	31.1%	\$4,680.53 (\$4653.63, \$4707.43)	\$627.43 (\$625.87, \$629.00)	\$1,185.55 (\$1182.88, \$1188.22)	3.45 (3.42, 3.48)

<sup>1</sup>Global delivery costs include physician delivery charges and physician charges for prenatal and postpartum services.