

Minimum Maternity Stay Legislation: Changes in Hospital Length-of-Stay for Childbirth

**THE PENNSYLVANIA HEALTH
CARE COST CONTAINMENT COUNCIL**

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The Pennsylvania Health Care Cost Containment Council (PHC4) was established as an independent state agency in 1986. To help improve the quality and restrain the cost of health care, PHC4 promotes health care competition through the collection, analysis, and public dissemination of uniform cost and quality-related information. Thanks to this vision, Pennsylvania is building a new health care marketplace where purchasers, consumers, providers, payors, and policy makers can make more informed decisions about the delivery of health care. This analysis is one of a series of reports designed to achieve this goal.

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www.phc4.org

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Background

The length of hospital maternity stays has been the target of much debate in the past several years. The concept of so-called “drive-through deliveries” (i.e., maternity stays sometimes less than 24 hours) began in the mid-1970s in the hope of lowering hospital costs for the delivery of healthy newborns. By the 1990s, the belief that short delivery stays could contain costs had spread, resulting in an overall decrease in the length of maternity stays. For example, the Centers for Disease Control and Prevention (CDC) report that the national average length of stay for a vaginal delivery was 3.2 days in 1980. In 1995, the average length of stay decreased almost by half to 1.7 days.

In response to concern from both the medical community and the public regarding shortened delivery stays, states began to pass laws mandating minimum insurance coverage for maternity stays. In addition, the federal government passed the Newborns’ and Mothers’ Health Protection Act, which provides for a minimum maternity stay. This federal Act became effective January 1, 1998 and mandated that insurers provide coverage for at least 48 hours for a vaginal delivery and a 4-day stay for a Cesarean delivery.

Pennsylvania’s minimum maternity stay legislation (Act 85 of 1996) was enacted on July 2, 1996 and became effective 60 days thereafter. Act 85 requires health policies which provide maternity benefits to “provide coverage for a minimum of 48 hours of inpatient care following normal vaginal delivery and 96 hours of inpatient care following Cesarean delivery.” Act 85 did contain provisions for a shorter length of stay, “but only if the treating or attending physician determines that the mother and newborn meet medical criteria for safe discharge ...” In the case of a shorter length of stay, Act 85 mandates coverage for “at least one home health care visit within 48 hours after discharge ...”

Development of this Analysis

Figures recently published by the CDC reflect that the national average stay for a vaginal delivery has increased from 1.7 days in 1995 to 2.1 days in 1997, an increase which many attribute to minimum maternity stay legislation. CDC figures also state that in 1995, 37% of mothers were hospitalized for one day or less. By 1997, this rate had dropped to 25%.

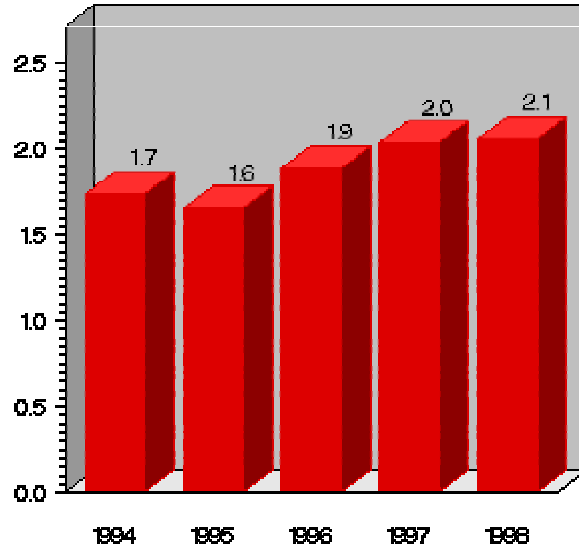
In response to the CDC figures, the Pennsylvania Health Care Cost Containment Council (PHC4) examined its hospitalization data to see what, if any, changes occurred in maternity length of stay since the enactment of minimum maternity stay legislation in Pennsylvania. In this analysis, PHC4 focuses primarily on vaginal deliveries without complications because (1) these deliveries account for approximately 66% of all deliveries in Pennsylvania and (2) these were the deliveries most affected by the minimum maternity stay legislation.

Length of Stay Data

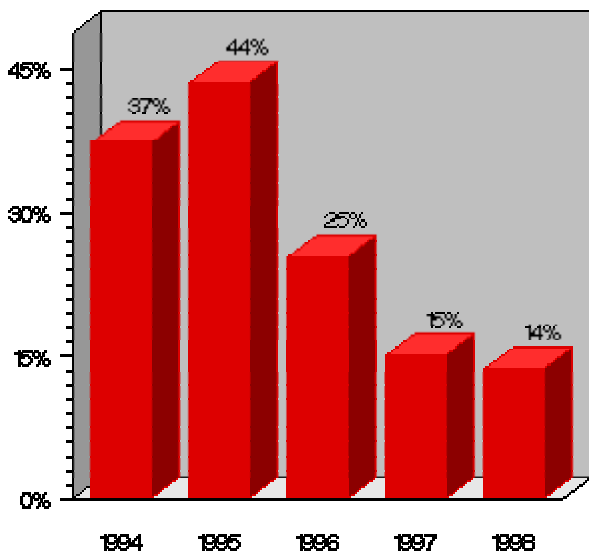
By Year

PHC4's inpatient data shows that the average length of stay for a vaginal delivery without complications in Pennsylvania reflects the national trends. For example, the Pennsylvania figures for the average length of stay in 1995 and 1997 are similar to the national figures published by the CDC. For a vaginal delivery without complications, the average length of stay in Pennsylvania increased from 1.6 days in 1995 to 2.1 days in 1998. The average length of stay for Medical Assistance enrollees having a vaginal delivery without complications also increased – from 1.6 days in 1995 to 2.0 days in 1998.

**Average Length of Stay
Vaginal Delivery without Complications**



**Percent of Mothers
Discharged within One Day or Less**



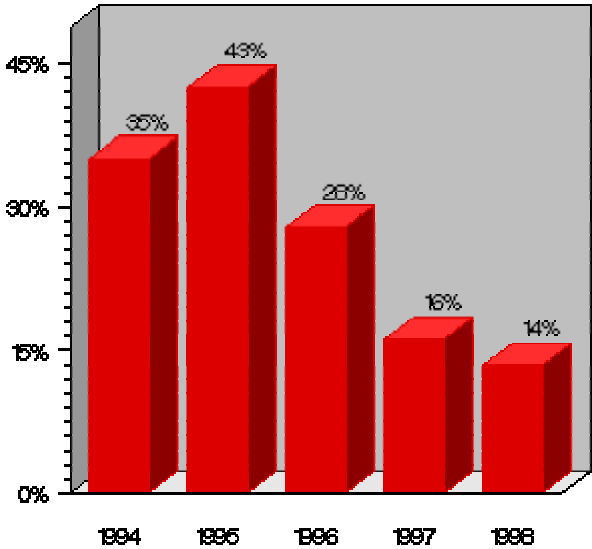
44% of mothers having a vaginal delivery without complications in Pennsylvania were discharged in one day or less in 1995. In 1997, only 15% were discharged in one day or less. This trend continued into 1998, with 14% of mothers having a vaginal delivery without complications discharged within one day or less.

Teenage Deliveries

The average maternity stay for teenage mothers having a vaginal delivery without complications is similar to that of the total population, increasing from an average of 1.8 days in 1994 to 2.1 days in 1998. Similarly, 43% of teenage mothers having a vaginal delivery without complications were discharged within one day or less in 1995, whereas this rate declined to 14% in 1998.

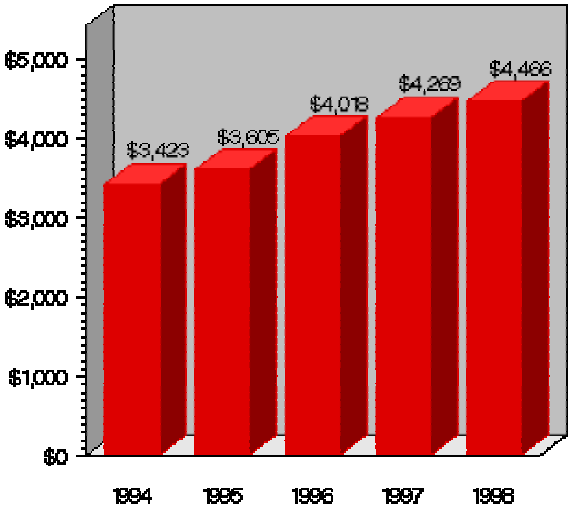
Combining PHC4's data with population estimates from the U.S. Census Bureau indicates that the *rate* of teenage deliveries (i.e., the percentage of women between 15 and 19 who deliver newborns) has decreased from 4.6% in 1991 to 3.6% in 1998. Using the most recent figures available from the National Center for Health Statistics, Pennsylvania's teen birth rate compares favorably to that of other states. Nationally, the teen birth rate ranged from a low of 2.7% in Vermont to a high of 7.4% in Mississippi in 1997, with Pennsylvania's rate below that of 38 other states.

Percent of Teenage Mothers Discharged within One Day or Less



Hospital Charges

Average Hospital Charges for a Vaginal Delivery without Complications



The average hospital charges for a vaginal delivery without complications in Pennsylvania have risen gradually from \$3,423 per delivery in 1994 to \$4,466 per delivery in 1998. While inflation may account for some of this increase, the average charge for a delivery increased 30% from 1994 to 1998, far outpacing the increase in average charges for all hospital stays which increased by 13% in the same time frame.

Summary

The data examined by the Pennsylvania Health Care Cost Containment Council (PHC4) reflects the national trends reported by the Centers for Disease Control and Prevention (CDC). Since 1995, the average length of stay for a vaginal delivery without complications has gradually increased in Pennsylvania. Moreover, the percent of mothers having a vaginal delivery without complications discharged within one day or less has decreased significantly since 1995.

The data suggests that minimum maternity stay legislation has had an immediate impact in lengthening the amount of time a mother and newborn spend in the hospital. The long-term impact of minimum maternity stay legislation, however, is less clear at this point. For example, research continues into areas such as the cost-effectiveness of longer maternity stays, the health of the newborn in the first months (or years) of life, and the bonding between mother and newborn including areas such as breastfeeding. Ultimately, more time is needed to study such issues and learn the complete impact of minimum maternity stay legislation.

Notes of particular interest to this report are as follows:

- (1) The figures contained within this report were generated from the Pennsylvania Health Care Cost Containment Council's inpatient database. Deliveries that did not result in an inpatient hospitalization (such as a home delivery) are not included in this analysis.
- (2) A vaginal delivery without complications was identified by an inpatient record having Diagnosis Related Group (DRG) 373. Where analysis indicates "all deliveries" (i.e., teenage deliveries), DRGs 370 through 375 were used.
- (3) Length of stay figures refer to the duration of the *entire* hospitalization and are, therefore, not limited to the length of hospitalization *after* delivery. Figures representing the average length of stay are the *mean* inpatient length of stay. (Aberrant lengths of stay were excluded from the analysis.)
- (4) The average charges listed are *mean* charges. (Aberrant charges were excluded from the analysis.) These charges are associated with the *entire* hospitalization, not just those associated with the delivery. They are hospital charges only and do not include physician fees, outpatient fees, etc. Further, while charges are a standard way of reporting data, they do not reflect the actual *cost* of the treatment nor do they reflect the *payment* that the hospital may have actually received.
- (5) Teenage delivery rates were calculated using both the Pennsylvania Health Care Cost Containment Council's inpatient data for resident teenage deliveries in Pennsylvania and the United States Census Bureau population estimates for the number of Pennsylvania females between ages 15 and 19. Teen birth rate figures for other states were obtained from the National Center for Health Statistics.

The Pennsylvania Health Care Cost Containment Council collects statewide inpatient discharge data as well as outpatient procedure and free-standing ambulatory surgery center data. Every reasonable effort has been made to ensure the accuracy of the information obtained from the Uniform Claims and Billing Form (UB-92) data elements. Data collection edits and validation edits provide opportunity for data sources to correct specific errors that may have occurred prior to, during, or after submission of data. The ultimate responsibility for data accuracy lies with individual providers.