

INSURANCE STATUS AND USE OF HEALTH SERVICES BY PREGNANT WOMEN

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EXECUTIVE SUMMARY

Responding to evidence that substantial numbers of pregnant women have no health insurance coverage over the last decade, many states have implemented Medicaid expansions (and other public programs) to provide coverage to poor and near-poor women, especially during pregnancy. This report presents estimates of the sociodemographic characteristics, health status, access to health services, and utilization of health services for uninsured, privately-insured, and Medicaid-enrolled women who gave birth in a hospital during a one-year period in 1996, based on a nationally representative survey of United States residents.

Many of the findings of this report – especially those related to having a usual source of care and use of health care services – are consistent with findings of other research related to the uninsured population more generally. However, some of our findings add information to the conventional discussion of uninsured pregnant women – for example, suggesting that uninsured pregnant women may be at greater risk from poor health behaviors (such as smoking) than insured women.

Uninsured pregnant women in 1996...

... reported poorer health status than privately-insured pregnant women. Seventeen percent of uninsured pregnant women reported that they had “fair” or “poor” health status compared to 6.8 percent of privately-insured pregnant women. Uninsured pregnant women also were more likely to be smokers than privately-insured pregnant women.

... were less likely to have a usual source of medical care than either privately-insured or Medicaid-enrolled pregnant women. Twenty-nine percent of uninsured pregnant women reported they did not have a usual place they went for their medical care, compared to 14 percent of Medicaid-enrolled and 9 percent of privately-insured pregnant women.

... made fewer physician visits (7.9) than either privately-insured (10.1) or Medicaid-enrolled women (10.3). Uninsured pregnant women were at significantly greater risk of having made no physician or medical provider visits during the year in which they gave birth than Medicaid- or privately-insured women (14.7 percent versus 4.5 and 3.8 percent, respectively).

... had greater perceived unmet medical need than either privately-insured or Medicaid-enrolled women. Eighteen percent of uninsured pregnant women reported that they did not receive some “needed” medical care versus 7.6 of privately-insured and 8.1 percent of Medicaid-enrolled pregnant women.

A substantial number of pregnant women appear to fall through the safety net, either because they forgo discretionary care or because they have limited access to care. As documented in other studies, women of Hispanic origin are at particular risk of being uninsured.

I. INTRODUCTION

Almost half a million women in the United States who gave birth during 1996 had no health insurance, and this number does not seem to have declined since 1990 even with the expansion of State programs designed to cover low-income pregnant women and their children (Thorpe, 1999). Because the uninsured vary with respect to income, ethnicity or race, age, and geographic location, it is hard to generalize about overall effects of lack of health insurance in a national population. Also, the impact of having no health insurance may differ for various types of health services. For example, the uninsured are less likely to forego hospitalizations for emergency care or life-threatening situations than care they perceive as discretionary such as prenatal care. For these reasons, and because no nationally representative population surveys have been conducted to obtain detailed information about both health insurance and use of health care services among pregnant women, policymakers and others know little about the relationship between health insurance coverage and access to pregnancy or birth services, or subsequent maternal and pediatric outcomes.

Several studies indicate that uninsured or Medicaid-enrolled women in specific communities are less likely to receive adequate prenatal care (Harvey and Faber, 1993; Melnikow and Alemagno, 1993). However, evidence is limited about demographic and behavioral correlates of prenatal care for uninsured or near-poor women in the larger U.S. population. This report documents differences in insurance coverage, various correlates of access to medical care, and use of medical services among women who gave birth in 1996, using data from a nationally representative sample of U.S. residents.

II. DATA AND METHODS

Data for this study come from the Community Tracking Study Household Survey (CTS) Round 1 (data for 1996 and 1997), sponsored by The Robert Wood Johnson Foundation. This survey of about 33,000 families and 60,000 individuals was designed to be the first in a series of surveys to track information on insurance coverage, access to care, health service utilization, and satisfaction with health care among the United States population and residents of selected communities within the United States. Questions were asked of one randomly selected child and all adults in each sampled family.

The data permit only an indirect identification of pregnant women. The public use data tape of the CTS household survey does not contain a variable that identifies whether the responding household included a pregnant woman or whether she was hospitalized for delivery. Each woman who reported at least one hospitalization was asked whether any of the hospitalizations were for delivery of a baby. The public use data include two hospitalization variables for each sampled individual – the number of hospitalizations including deliveries, and the number of hospitalizations excluding deliveries. Women who had a hospitalization for a delivery were identified by subtracting the number of hospitalizations without deliveries from the number of hospitalizations with deliveries.

The CTS project staff imputed hospitalizations for about one percent of the sample, so a very small number of men and elderly women were assigned hospitalizations that produced a positive difference between the two hospitalization variables. To extract a usable sample for this study, we selected all women between the ages of 13 and 50 who have either one or two “delivery” hospitalizations, computed as the difference between hospitalizations including deliveries and hospitalizations excluding deliveries. Women with more than two “delivery” stays and women who reported that they had no children also were excluded from the sample, as we assumed that “delivery” stays for these women were also a result of imputation.

Our adjusted estimate of the number of women who were hospitalized for a delivery in 1996-1997 is about 3.3 million.¹ This count is likely to underestimate the actual number of women who were pregnant and delivered a child over the survey period, because it excludes: (1) women who were not hospitalized for a delivery; and (2) women who did not report a hospitalization for a delivery. In addition, women who delivered a stillborn child or an infant who later died during the study period would have been excluded if they had no other children as a result of the data screening described earlier. Our estimate is in the same range as that estimated from Current Population Survey Census data (3.4 million pregnant women during 1996), as well as estimates produced by the National Center for Health Statistics (3.9 million births) using birth certificate data (Ventura *et al.*, 1998).

Conversely, the CTS data are likely to overestimate the number of women who are uninsured, if they are uninsured for only part of their pregnancy. The CTS data offer a point in time estimate of the uninsured, which would be greater than estimates of persons who are uninsured over a period of time, such as one year.²

Estimates of use of medical services in this report represent all care received in the prior twelve-month period; they are not limited to prenatal or perinatal services. Consequently, we cannot compute estimates of prenatal care from the number of physician or non-physician visits reported, since the twelve-month period could include both prenatal and perinatal care, as well as care for reasons unrelated to pregnancy. Some records therefore contain the full term of the pregnancy and care received, while other records contain only a portion of the pregnancy that resulted in a birth early in the 12-month recall period. The database also does not contain information on birth outcome.

¹Because of the limitations of the data used for this analysis, the statistics presented here should not be used to make national estimates about the number of uninsured pregnant women. Nevertheless, the CTS estimates comport in general with estimates from nationally representative surveys.

²While the estimates presented here should not be used to estimate the number of pregnant women covered by Medicaid, as they are probably an undercount of the number of women who were actually covered by Medicaid. The purpose of this study is to compare characteristics and experiences of pregnant women with different types of insurance coverage. We can be reasonably sure that those women who specified they were covered by Medicaid actually are, and therefore can be compared to women with other types of insurance.

Estimates of statistical significance must account for the stratified complex survey design of the CTS household survey. Standard errors of the estimates reported here were generated using SUDAAN, a statistical package compatible that produces standard error estimates that incorporate complex survey design effects. Z-tests of differences between estimates reported here were computed, and all differences reported here are statistically significant at the $p < .05$ level unless otherwise noted.

III. CHARACTERISTICS AND USE OF HEALTH SERVICES AMONG PREGNANT WOMEN BY INSURANCE STATUS

About 3.3 million women in the U.S. delivered babies during 1996, according to the CTS database. Of these women, almost 14 percent were enrolled in a Medicaid program at the time they were interviewed, and another 14 percent (nearly a half-million pregnant women) were uninsured (see Table 1).

An extensive literature documents that many uninsured Americans do not receive necessary or appropriate medical care. Almost 60 percent of the nonelderly U.S. uninsured population in fair or poor health were unable to obtain at least one health service which they felt they needed, compared to 40 percent of non-elderly Medicaid enrollees and 28 percent of privately-insured in fair or poor health (Berk and Schur, 1998; Spillman, 1992). The uninsured have consistently shorter hospital stays than the privately-insured for the same condition (Rice, 1991; Spillman, 1992; Hadley *et al.*, 1991). They also have unusually high rates of disease conditions, indicating that they may be less likely to be screened for early care or prevention. Uninsured children are more likely to have untreated injuries (Overpeck and Koch, 1995). Uninsured persons and Medicaid enrollees also are more likely to be hospitalized for conditions that can typically be treated on an outpatient basis or for conditions that are avoidable with adequate preventive care (Weissman *et al.*, 1992). Given the lack of timely and nationally representative data, however, one can only rely on small studies to infer the effects of being without health insurance on pregnant women and infants.

Table 1
Health Insurance Coverage Among Pregnant Women, 1996

| | Number of Pregnant Women (in thousands) | Percent of Pregnant Women With Type of Health Insurance Coverage |
|---------------------------|--|---|
| Private | 2,329 | 69.9 |
| Medicaid | 452 | 13.6 |
| Uninsured | 460 | 13.8 |
| Other Coverage* | 93 | 2.8 |
| All pregnant women | 3,334 | 100.0 |

*Other coverage includes CHAMPUS/VA, "other" public coverage not classified as Medicaid, and coverage not considered to be private or Medicaid.

A. Sociodemographic Characteristics of Pregnant Women

Uninsured pregnant women differ from those with private insurance in many ways. Not surprisingly, they are poorer and less educated (see Table 2), although they have higher incomes and more education than pregnant women covered by Medicaid. They are also more likely to be single (27 percent) than privately-insured women (11 percent), and less likely than women on Medicaid (59 percent) to be single.

Hispanic pregnant women are more likely to be uninsured than are African American or white women. More than 40 percent of Hispanic pregnant women were uninsured in 1996, compared to only 9 percent of African American or white pregnant women (data not shown). Also, a relatively large percentage of the uninsured pregnant population was of Hispanic origin (Table 3). In part this reflects higher fertility rates among Hispanic women.³ In 1996, 37 percent of uninsured pregnant women were Hispanic, compared to only 8 percent of privately-insured pregnant women. High rates of uninsured Hispanics, including pregnant Hispanic women, has been documented in other sources (Thorpe, 1999; Beauregard, Crilea and Vistnes, 1998; Saver, 1997).⁴

Insurance coverage also differs in other ways by race and ethnicity. White pregnant women were most likely to be covered by Medicaid (81 percent) compared to about half of African American pregnant women and 40 percent of Hispanic pregnant women (see Table 3).

³The high proportion of uninsured pregnant women who are Hispanic is consistent with a much higher fertility rate among Hispanic women. In 1996, Hispanic women (particularly Mexican-American and Puerto-Rican women) had fertility rates almost twice as high as Non-Hispanic white women (Ventura *et al.*).

⁴Our sample size does not allow us to produce estimates of use of medical care by insurance and ethnicity.

Table 2
Sociodemographic Characteristics of Pregnant Women
by Type of Health Insurance Coverage, 1996

| | Private Insurance | Medicaid | Uninsured |
|---|-------------------|----------|-----------|
| Average Family Income* | \$44,842 | \$10,128 | \$18,650 |
| Average years of education | 13.8 | 10.8 | 11.5 |
| Average number of children in family | 2.0 | 2.2 | 1.9 |
| Average number of persons in family | 3.9 | 3.6 | 3.7 |
| Average number of families in household | 1.1 | 1.5 | 1.6 |
| Family type (in percent): | | | |
| Married, birth children only | 86.1 | 31.0 | 70.0 |
| Single, birth children only | 11.2 | 58.5 | 26.8 |
| Non-nuclear family (include relatives other than parents and children) | 2.7 | 10.5 | 3.3 |

* The federal poverty line in 1996 was \$10,360 for a family of two and \$15,600 for a family of four (U.S. Department of Health and Human Services Website)

Table 3
Race/Ethnicity of Pregnant Women by Type of
Health Insurance Coverage, 1996 (in percent)

| | Private Insurance | Medicaid | Uninsured |
|-----------------------------|-------------------|----------|-----------|
| White* | 78.3 | 40.1 | 46.0 |
| African American* | 8.2 | 30.3 | 7.3 |
| Native/Asian/Pacific/Other* | 6.8 | 9.2 | 9.4 |
| Hispanic | 6.6 | 20.4 | 37.3 |
| Total | 100.0 | 100.0 | 100.0 |

*Excludes Hispanics.

Table 4
Employment Status of Pregnant Women by Type
of Health Insurance Coverage, 1996 (in percent)

| | Private Insurance | Medicaid | Uninsured |
|----------------------|-------------------|----------|-----------|
| Employed: | | | |
| Firm 1-24 | 5.3 | 7.8 | 11.3 |
| Firm 25-499 | 11.7 | 1.8 | 11.5 |
| Firm 500+ | 22.5 | 2.0 | 6.3 |
| Government | 6.6 | 4.0 | 3.2 |
| Have Own Business | 6.8 | 1.3 | 6.4 |
| Not Employed for pay | 44.4 | 74.5 | 61.3 |

Note: Column totals do not add to 100 percent because firm size was not ascertained for a small percentage of survey respondents.

Uninsured pregnant women are less likely to be employed for pay than are privately-insured pregnant women (see Table 4). They are less likely to be employed by large firms – with more than 25 employees – which are covered by legislation requiring employers to provide maternity coverage if they offer health insurance. Twenty-three percent of pregnant women employed by firms with fewer than 25 employees were uninsured, compared to 16 percent of pregnant women employed in firms with 25 to 499 employees (data not shown).

Uninsured pregnant women have worse perceived health status than either privately-insured pregnant women or pregnant Medicaid enrollees (see Table 5). Only 12 percent of uninsured pregnant women rated themselves as having “excellent” health, compared to 32 percent of privately-insured pregnant women.

The uninsured population was also more likely to rate themselves as having “fair” health status than was the privately-insured population (15 versus 6 percent), or to report a minor limitation in their usual activity (17 percent versus 7 percent). Women on Medicaid were more likely to report that they had a major limitation in their usual activity, consistent with Medicaid categorical coverage of disabled persons.

Uninsured pregnant women were more likely to be smokers, a finding consistent with the general population. The general population enrolled in the Medicaid program and uninsured people in general are more likely to smoke every day than privately-insured persons – about 31 percent of both Medicaid-enrolled and uninsured persons reported that they smoked every day compared to 18 percent of the privately-insured population (CTS data, not shown). Smoking has been correlated with poor birth outcomes (Castles *et al.*, 1999; Mathews). Sixteen percent

of pregnant women identified in this sample reported smoking every day, and an additional 4.7 percent reported smoking some days. Both pregnant women on Medicaid and uninsured pregnant women are more likely to smoke every day than privately-insured pregnant women.

Among women who ever smoked, uninsured pregnant women were nearly twice as likely to report that they were smoking currently than were privately-insured women (9 versus 15 percent). Pregnant women were less likely than the general population to have ever smoked (33.6 percent versus 49 percent) but were actually less likely to have quit smoking than the general population. Thirteen percent of pregnant women who ever smoked reported that they were not currently smoking, compared to 24 percent of the total U.S. population (data for the U.S. population are not shown here). We are unable to tell from this database, however, whether our sample of pregnant women stopped smoking during pregnancy. Data from other sources indicate that the majority of women who had ever smoked continued to smoke throughout their pregnancy (LeClere and Wilson, 1997), although they may cut down on the number of cigarettes smoked.

Table 5
Perceived Health Status of Pregnant Women
by Type of Health Insurance Coverage, 1996 (in percent)

| Perceived Health Status | Private Insurance | Medicaid | Uninsured |
|------------------------------------|-------------------|----------|-----------|
| Excellent | 31.6 | 24.4 | 12.1 |
| Very Good | 40.2 | 27.7 | 32.3 |
| Good | 21.3 | 29.4 | 38.4 |
| Fair | 6.0 | 15.4 | 15.3 |
| Poor | 0.8 | 3.1 | 2.0 |
| No limitation of usual activity | 87.5 | 66.7 | 78.1 |
| Small limitation of activity | 7.4 | 8.0 | 16.6 |
| Substantial limitation of activity | 5.1 | 25.3 | 5.4 |
| Never smoked | 68.9 | 63.2 | 58.3 |
| Have smoked and now smoke: | | | |
| Every day | 11.9 | 21.0 | 26.1 |
| Some days | 3.9 | 4.8 | 7.2 |
| Not at all | 15.3 | 11.0 | 8.5 |

B. Access to Health Services

Uninsured pregnant women are much more likely to have no usual source of medical care (29 percent) than are either privately-insured women (9 percent) or women on Medicaid (14 percent)⁵ (see Table 6). Privately-insured pregnant women are most likely to have their usual source of medical care at a private physician's office or HMO, while women on Medicaid or who are uninsured are more likely receive care on a regular basis from a hospital outpatient department or community health center.

Table 6
Usual Source of Medical Care of Pregnant Women
by Type of Health Insurance Coverage, 1996 (in percent)

| | Private Insurance | Medicaid | Uninsured |
|----------------------------|--------------------------|-----------------|------------------|
| No usual source of care | 8.5 | 13.6 | 28.9 |
| Private doctor or HMO | 75.4 | 56.8 | 35.8 |
| Hospital OPD health center | 14.5 | 26.2 | 28.2 |
| Other or no response | 1.6 | 3.4 | 7.1 |
| Total | 100.0 | 100.0 | 100.0 |

On average, uninsured pregnant women who do visit the doctor do not wait longer to obtain an appointment or travel substantially farther to the doctor than women with private health insurance (see Table 7). Uninsured women's waiting times also are very similar to those of pregnant women on Medicaid – both groups waited about 5 minutes longer than did privately-insured pregnant women, but this difference is not statistically significant. Women with private insurance travel slightly longer distances to their physician than do women on Medicaid or uninsured pregnant women. This could reflect selective contracting by their insurers, their desire see a particular physician, or better access to transportation services.

Out-of-pocket expenditures may be a deterrent to receiving medical care. Pregnant women on Medicaid were most likely to have no out-of-pocket expenditures (see Table 8). Uninsured women were significantly more likely than Medicaid enrollees to have had high out-of-pocket expenditures (more than \$3000) in the prior 12 months but statistically were as likely as privately-insured pregnant women to have had high out-of-pocket expenditures. This is consistent with evidence from the general population that the uninsured do not pay more out-

⁵ While it would appear from data presented in the table that pregnant women on Medicaid are also less likely to have a usual source of medical care than privately-insured pregnant women, this difference is not statistically significant.

of-pocket than insured pregnant women. Rather, they may try to avoid using services when they are not seriously ill. (Johnson and Crystal, 1998)

Table 7
Waiting and Travel Times of Pregnant Women
by Type of Health Insurance Coverage, 1996

| | Private Insurance | Medicaid | Uninsured |
|--|-------------------|----------|-----------|
| Average travel time to last physician visit, in minutes | 20.6 | 16.6 | 16.9 |
| Average waiting time at last physician visit, in minutes | 20.6 | 25.5 | 25.1 |
| Average time to obtain last physician appointment, in days | 15 | 9 | 11 |

Table 8
Out-of-Pocket Health Care Expenditure Category of Pregnant Women
by Type of Health Insurance, 1996 (in percent)

| Out-of-pocket expenditures category: | Private Insurance | Medicaid | Uninsured |
|--------------------------------------|-------------------|--------------|--------------|
| No out-of-pocket expenditures | 4.4 | 37.6 | 15.2 |
| Expenditures between: | | | |
| \$1-\$500 | 42.6 | 51.0 | 44.9 |
| \$501-\$1999 | 33.9 | 6.1 | 20.4 |
| \$2000-\$2999 | 7.9 | 3.2 | 3.8 |
| \$3000-\$4999 | 6.8 | 0.8 | 8.6 |
| \$5000 or more | 4.4 | 1.3 | 7.1 |
| Total | 100.0 | 100.0 | 100.0 |

C. Utilization of Health Services

Ambulatory Care Services-Pregnant women with no health insurance are less likely to report physician visits and have fewer physician visits on average than pregnant women covered by either Medicaid or private insurance (see Table 9). Both privately-insured and Medicaid-enrolled pregnant women report an average of 10 visits in the prior 12 months, compared to 8 visits among uninsured women. Many obstetrical practices substitute nurse practitioner or nurse midwife visits for some physician visits during a prenatal care regimen. Combining both physician and non-physician medical visits, the average number of medical professional visits is about 11 for privately-insured and Medicaid-enrolled women, and fewer than 9 for uninsured women. Uninsured pregnant women also had one less visit, given that they made at least one visit to a physician or non-physician medical professional, than did their insured counterparts.

Table 9
Ambulatory Care Visits by Pregnant Women
by Type of Health Insurance Coverage, 1996

| Utilization Measure | Private Insurance | Medicaid | Uninsured |
|--|-------------------|----------|-----------|
| Percentage of Pregnant Women with: | | | |
| No physician visits | 3.8 | 4.5 | 14.7 |
| 1-3 physician visits | 17.8 | 17.3 | 21.4 |
| 4-8 physician visits | 20.6 | 23.6 | 21.7 |
| 9-10 physician visits | 12.6 | 7.5 | 13.9 |
| More than 10 physician visits | 45.3 | 47.2 | 28.4 |
| Mean number of physician visits | 10.3 | 10.1 | 7.9 |
| Mean number of non-physician medical professional visits | .67 | .96 | .59 |
| Mean number of physician plus non-physician medical professional visits | 10.9 | 11.0 | 8.5 |
| Mean number of physician plus non-physician medical professional visits for pregnant women with at least one visit | 11.0 | 11.0 | 9.8 |

The American College of Obstetrics and Gynecology (ACOG) recommends that pregnant women have between 11 and 15 visits, while acknowledging that 8 to 10 visits can be acceptable (Palen, Shapiro and Harris, 1996). Because the twelve-month period for which the woman reported visits could be pre or post-delivery we cannot draw any conclusions about the

provision of adequate prenatal care. However, on average pregnant uninsured women made fewer medical professional visits of all kinds surrounding their deliveries. In fact, almost 15 percent of uninsured pregnant women report no physician visits during 1996, while only 4 percent of pregnant women with insurance coverage made no visits to physicians during the year prior to their interview. In addition, pregnant women with either private insurance or Medicaid were significantly more likely than uninsured pregnant women to have made more than 10 physician visits during the past year. Very few non-physician medical visits are reported by any insurance group in this database, and it does not appear that these visits were substituted for physician visits in the uninsured population. Considering that the uninsured group also reported worse health status, these are troubling statistics.

Both privately-insured pregnant women and pregnant women on Medicaid were more likely than uninsured pregnant women to have had both a sick visit to a physician and a checkup during the previous year (see Table 10). Eighteen percent of uninsured pregnant women reported that they had not obtained needed medical care during the past 12 months, compared to 8 percent of insured women. These findings could indicate less need for ambulatory care services among uninsured women, although this is not supported by their poorer health status. An alternative explanation for the lower percentage of sick visits for uninsured pregnant women may be that they used prenatal care but tried to minimize other physician visits.

Table 10
Type of Last Visit to Physician and Perceptions of Unmet Need for Medical Care by Pregnant Women, 1996 (in percent)

| | Private Insurance | Medicaid | Uninsured |
|--|-------------------|----------|-----------|
| Had checkup, no sick visit | 39.5 | 41.6 | 47.9 |
| Had checkup and sick visit | 28.1 | 34.7 | 16.2 |
| Had sick visit, no checkup | 28.8 | 16.8 | 21.1 |
| Other (no visits)* | 3.7 | 6.9 | 14.9 |
| Type of LAST doctor visit: | | | |
| Checkup | 43.1 | 53.6 | 46.0 |
| Sick visit | 56.9 | 46.4 | 54.0 |
| Reported "did not receive needed medical care" | 7.6 | 8.1 | 18.1 |

*Differs from the "percentage with no physician visit" statistics in Table 9 because a different weight was used for these variables.

Table 11
Hospital Use by Pregnant Women by Type of Health Insurance Coverage, 1996

| | Private Insurance | Medicaid | Uninsured |
|--|----------------------|----------|-----------|
| Mean number of ER visits/no hospital admission | .29 | .67 | .48 |
| Mean number of hospital stays excluding delivery | .25 | .52 | .17 |
| Mean number of hospital stays including deliveries | 1.25 | 1.53 | 1.18 |
| Mean hospital length of stay, in days (including deliveries) | 2.52 | 3.12 | 2.27 |

Inpatient Services ~ Pregnant women on Medicaid use more hospital services than either privately-insured or uninsured pregnant women (see Table 11). They were more likely to be admitted through an emergency room, have more emergency room visits that did not result in an admission, and have longer average hospital length of stays than privately-insured or uninsured women.

Higher use of hospital services by pregnant women on Medicaid could reflect a greater number of more severe prenatal complications or worse birth outcomes than for other women, or it could reflect greater use of hospital inpatient and emergency room services in general.⁶ Women covered by Medicaid were also significantly more likely to have a significant limitation of their usual activity, another indication of their poorer health status relative to privately-insured or uninsured women.

⁶For example, one study shows that Medicaid enrollees in some settings had higher use of hospital emergency rooms, fewer preventive care visits (e.g., immunizations, well-baby), were more likely to miss scheduled appointments, and had higher walk-in rates than privately insured HMO enrollees (Gibson et al., 1998). There is also some evidence that Medicaid populations under fee-for-service arrangements are more likely to use hospital emergency rooms as their usual source of medical care and that this pattern is difficult to break for new Medicaid managed care enrollees (McCauley et al., 1998).

IV. DISCUSSION AND CONCLUSIONS: DOES INSURANCE COVERAGE MATTER FOR PREGNANT WOMEN?

Health insurance coverage affects the use of health care services by pregnant women. Nearly one fifth of uninsured pregnant women (18 percent) reported that they did not receive needed medical care, consistent with their lower use of both outpatient and inpatient care. Women who were uninsured at some time during pregnancy were less likely than women with private insurance or Medicaid to use medical care during the year of their delivery, and to have made a lower number of physician and non-physician visits. They also used fewer hospital days (including delivery) on average than either privately-insured or Medicaid women. Pregnant women with Medicaid coverage reported service utilization that was more similar to that of privately-insured pregnant women and substantially greater than that reported by uninsured pregnant women.

Uninsured pregnant women also reported much lower health status than privately-insured pregnant women, and a much higher rate of one measure of unhealthy behavior available in the database – smoking. With respect to health status measures, uninsured pregnant women appear similar to women who reported Medicaid coverage during pregnancy. Uninsured and Medicaid-enrolled women had higher rates of current smoking than privately-insured women, which would also indicate that factors other than insurance (e.g., income, ethnicity and education) might also influence health behaviors that ultimately affect pregnancy outcomes.

The significantly lower use of health services among uninsured pregnant women suggests that substantial numbers of these women fall through the safety net, either because they avoided discretionary care or because they have limited access to care. In contrast to uninsured women, women on Medicaid who gave birth used services at about the same level as their privately-insured counterparts.

While the data used in this study have limitations, the significant differences between uninsured and insured women's use of medical services found here suggest directions for future research and policy initiatives. Women with different insurance status also differ both on a number of sociodemographic characteristics associated with access to care (such as race and ethnicity, income, and education) as well as on actual access to care measures (such as having a usual source of medical care). Women of Hispanic origin seem to be at particular risk of being uninsured. By inference this could suggest that Hispanic women were at greater risk of receiving inadequate pre- or post-natal care than the other major ethnic/racial group. However, other data indicates that Hispanic women are about as likely to receive late or no prenatal care as are African American women, and both groups are significantly less likely than white women to receive such care (Ventura *et al.*, 1998). These two findings – that pregnant Hispanic women are more likely to be uninsured, but not more likely to receive an inadequate number of prenatal visits – raise important issues about both data reporting and how insurance affects use of specific health care services.

Future studies might focus on Hispanic women in particular, to determine the independent effects of ethnicity and other factors associated with use of services, in addition to lack of health insurance. Future studies might also examine actual use of prenatal and postnatal care, rather than all medical care utilization, to evaluate the effects of lack of insurance on maternal and birth outcomes more precisely. Finally, scope of coverage for maternity benefits might affect use among insured pregnant women.

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