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Expansions in Public Health Insurance and Crowd-Out: What the Evidence Says

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Expansions in Public Health Insurance and Crowd-Out:
What the Evidence Says

Enactment of the Children's Health Insurance Program (CHIP) has been accompanied by concerns that new coverage will "crowd-out" private health insurance coverage -- that is lead people who already have insurance to drop it -- rather than principally provide coverage to children who are uninsured. Concern about crowd-out under CHIP stems in part from misperceptions that the Medicaid expansions of the 1980s had a significant crowd-out effect. However, a significant body of literature has emerged indicating the contrary--that is, that only a small share of Medicaid program increases was attributable to the crowding out of private coverage.

The main challenge in estimating the extent of displacement of private coverage that occurred with the Medicaid expansion is to appropriately establish what would have occurred in the absence of the policy change. Each of the studies on the topic uses a different method to develop this counter-factual. Moreover, the studies measure crowd-out in different ways, which makes it difficult to compare their results. Nevertheless, the weight of evidence suggests that the vast majority of Medicaid's enrollment expansion between the late eighties and early nineties provided insurance coverage to children who would otherwise have been uninsured, rather than crowding out pre-existing private insurance.

In assessing the implications of Medicaid's past for CHIP's future, two factors should be kept in mind. First is CHIP's application to a different population under different rules. Children eligible under CHIP have higher incomes and are more likely than children eligible under the Medicaid expansions to have employer-sponsored coverage to crowd-out. However, unlike under the Medicaid expansions, states are required to adopt strategies to prevent crowd-out and are allowed to impose premiums, making the public program less appealing to the already insured. Exactly how these factors will offset each other is unclear.

Second, to the extent that crowd-out occurs, it is important to recognize that its costs are not without benefits. It is true that the substitution of public for private coverage reduces the effectiveness of a new program in expanding coverage, since some of the dollars are going to the already insured rather than the uninsured. But the low-income families who choose substitution gain significant benefits – continuous coverage (with preventive care) at lower costs. As long as the new program is making every effort to reach the uninsured, its improvement in the lives of some of the low-income insured may not be much of a policy problem.

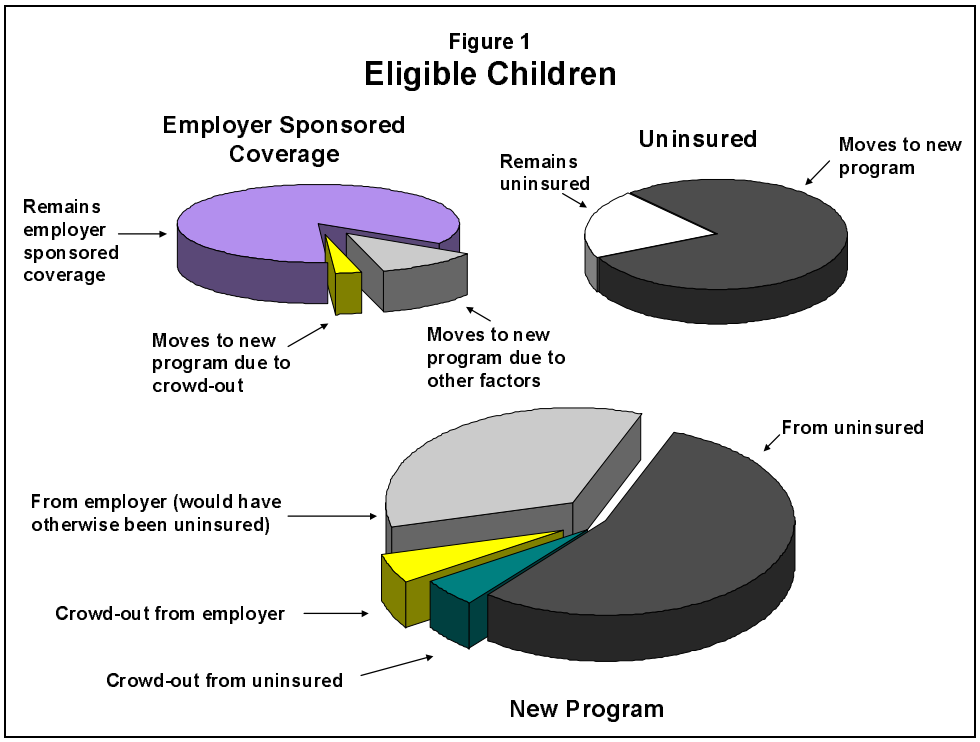
Theory

The simplest articulation of the theory of crowd-out is that if the cost to a family of subsidized health insurance is less than that of employer-sponsored health insurance, then the family will substitute the public coverage for the employer-sponsored coverage.[1] The theory

[1] In addition to concern that individuals will choose to drop their coverage, there is also concern that employers will respond to the policy change. Specifically, employers may reduce their contributions to family

suggests that over time an employee eligible for a subsidy in a public program is likely to either drop his or her employer-sponsored coverage or move to a job that provides higher wages or other compensation in place of insurance benefits. Thus, the employee can receive both higher wages/compensation and health insurance coverage through participation in the public program.

Figure 1 illustrates the way a new program draws entrants from both the uninsured and those with private coverage, distinguishing between crowd-out and other behavior. When a new program is implemented some eligible children will have employer-sponsored coverage and some will be uninsured. Over time, children will move into the new program from both circumstances. Importantly, not all movement from employer-sponsored coverage is "crowd-out." For example, some children will make this type of move when a parent loses his or her job due to a recession or other factors. In this case, the new program serves as the safety net that prevents the child from becoming uninsured.



Crowd-out occurs when families who would have retained their employer-sponsored coverage in the absence of a new program drop it as a direct result of the extension of subsidized coverage. Crowd-out also can occur over time as previously uninsured families who enrolled in the new program chose to maintain the public subsidy in the presence of a offer of employer-sponsored coverage. The goal of any new program is to have the majority

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coverage and new low-wage firms entering the market may chose not to contribute to family coverage. While the effects of such employer responses will be captured in the research on coverage of individuals, evidence and research on employers' behavioral responses to expansions in coverage is sparse, therefore, I do not address this aspect of crowd-out here.

of new entrants coming from the uninsured (including those that had private coverage but would have become uninsured in the absence of the new program) and the minority being those who otherwise would have had private coverage.

Importantly, the share of new entrants into the program that come from employer-sponsored coverage versus the uninsured depends on not only the rate at which families in each group take up the offer of the new program but also the relative size of both groups prior to the program being implemented. If the eligible population is comprised mostly of uninsured children and few with private coverage the potential for crowd-out is less than when the eligible population is mostly comprised of children with employer-sponsored coverage with fewer being uninsured.

To see whether the crowd-out theory has been borne out by experience, researchers have studied Medicaid's expanded coverage of pregnant women and children that began in the late 1980s. Under the expansion, states were required to provide Medicaid coverage to children below 100 percent of poverty, regardless of family structure, who were born after September 30, 1983, to children below 6 years of age, and to pregnant women with incomes below 133 percent of poverty. In addition, states were given the option to cover infants and pregnant women up to 185 percent of poverty and to use 1902(r)(2) provisions and Section 1115 waivers to extend Medicaid coverage to children and pregnant women with incomes above the mandated levels. Together these expansions provide a natural experiment for assessing crowd-out.

A Review of the Evidence

The following discussion reviews five [2] of the studies that have analyzed the extent of crowding out of private insurance by the Medicaid expansions to poor children and pregnant women. [3] The review begins by clarifying differences in approach then turns to study findings.

Differences in Approach

In comparing the studies it is important to recognize three fundamental differences in their approach: the research question being asked; the type of data being analyzed; and the methods employed to establish what would have happened in the absence of the expansions. First, the studies pose different questions and measure the extent of crowd-out in different ways. Each of the studies defines crowd-out as those Medicaid enrollees who would have

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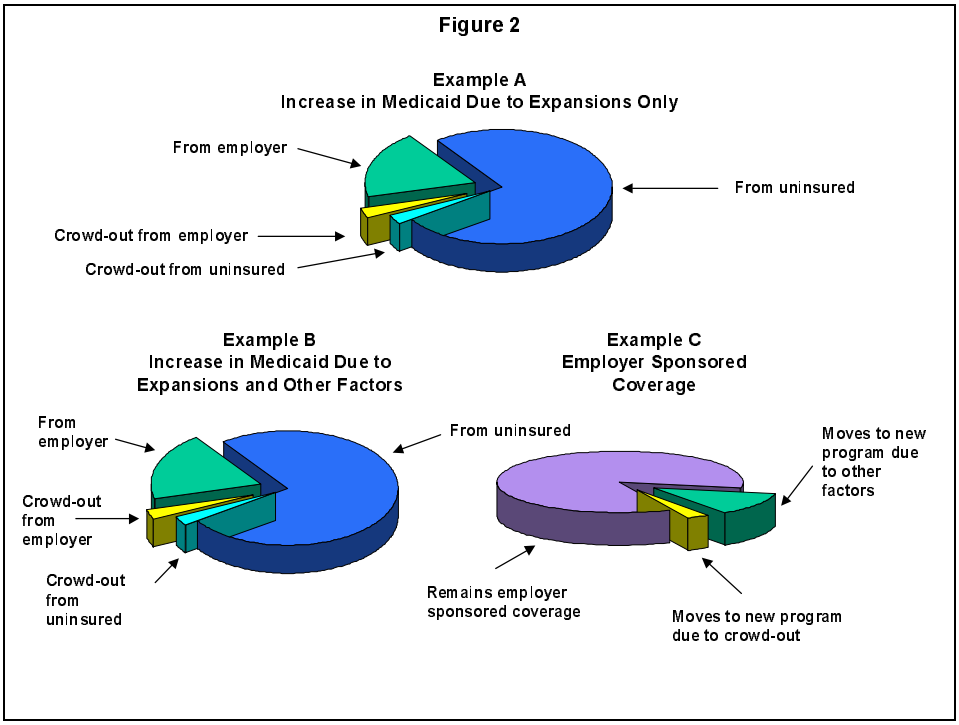
[2] A sixth study (Shore-Sheppard) is in progress but not yet ready to review.

[3] A small part of private coverage is private non-group coverage. While those with such coverage may also be crowded out, at higher cost and lower value the displacement of non-group coverage is less of a topic of public concern. Note, however, that private coverage, as used in this paper refers to employer-sponsored coverage and other private coverage.

retained their private coverage in the absence of the expansions.[4] Some of the studies estimate what share of the growth in Medicaid enrollment that resulted from the legislated expansions in eligibility is attributable to crowd-out. (See Figure 2, example 1.) Since, independent of these expansions, Medicaid enrollment was already growing (due to the recession and expansion-related outreach efforts), other studies estimate the percentage of the ***total*** growth in Medicaid enrollment that is attributable to the crowding out of private coverage. (Figure 2, example 2.) Other studies take yet another approach. Rather than measuring crowd-out as a share of Medicaid enrollment increases, they determine what share of children who actually ***moved*** into the Medicaid program from different types of coverage would have retained their private coverage in the absence of the expansions (i.e. were crowded out). (Figure 2, example 3.) Notably, none of the studies assess the extent to which the expansions led those with private coverage to drop it and enroll in the Medicaid program.[5] These different methods of measuring crowd-out, while each valid, make it difficult to compare results across studies.

Figure 2



[4] The work by Cutler and Gruber makes a number of different estimates of crowd-out. In most of their estimates, they define crowd-out to be individuals who in the absence of the expansions would have retained their private coverage, regardless of whether they enrolled in the Medicaid program. In one of their estimates, they define crowd-out as Medicaid enrollees who in the absence of the expansions would have retained private coverage.

[5] Blumberg, Dubay and Norton calculated that rate at which children who became eligible for Medicaid took up the offer of public coverage. As discussed later , this analysis provides an upper bound estimate of the share of children with employer-sponsored coverage who dropped their private coverage as a result of the expansions.

Second, previous studies use different types of data. Some of the studies use cross sectional data while others use longitudinal data. Using cross-sectional data researchers can examine changes in the probability of having a certain type of insurance at different points in time. Using longitudinal data, researchers can follow the same people over time and therefore can also examine ***movement*** in and out of different insurance coverage types. Three studies reviewed here use several years of cross sectional data to analyze changes in the distribution of coverage of people in the Current Population Survey (CPS) in different years. The CPS is a nationally representative cross-sectional survey that collects detailed information on employment, income, and insurance coverage. Three studies followed coverage of individuals over time using two nationally representative longitudinal surveys: the Survey of Income and Program Participation (SIPP) and the National Longitudinal Survey of Youth (NLSY).

Third, each study uses a different method to account for how insurance coverage would have changed had the Medicaid expansions not been implemented. Establishing this counter-factual is important because it avoids attributing to the expansions the results of other factors that contributed to the erosion of private coverage over this period. Analyses that do not adequately account for these factors will likely over-estimate the extent to which the expansions displaced private insurance coverage for two reasons. First, there was a recession occurring over the period the expansions were being implemented that likely increased the movement from private insurance coverage into the Medicaid program. Specifically, as workers lost their jobs (and their employer-sponsored coverage) as a result of the recession, they may have enrolled their families in the Medicaid program. Second, there was a decline in employer-sponsored coverage occurring for the general population due to rising premium costs and increased employee cost sharing, which also may have resulted in increased movement from private insurance coverage into the Medicaid program. In analyzing whether the expansions crowded out private coverage, it is critical to disentangle the impacts of these changes on the distribution of health insurance coverage from the impacts of the expansions.

Each of the studies considered below uses a different method to account for the declines in employer-sponsored coverage that were unrelated to the expansions. In essence, they use a different group of individuals to "control for" how employer-sponsored insurance coverage would have changed for eligible individuals in the absence of the program change. Unfortunately, there is no perfect control group and the choice of methods used to control for the declines in employer-sponsored coverage unrelated to the expansions appears to account for some of the variation in crowd-out estimates.

Cross-sectional Studies

Cutler and Gruber (1995; 1996) were the first to assess the extent of crowd-out under the Medicaid expansion and used individual level data from the 1987 through 1993 CPS. In their study, they use multivariate regression to estimate the effects of Medicaid eligibility on the probability of having private insurance coverage and the probability of having Medicaid coverage, controlling for socio-economic characteristics of families. Cutler and Gruber (1996) recognize that unmeasured individual and family characteristics that affect the demand for health insurance coverage may also affect Medicaid eligibility and use appropriate

statistical methods to address this problem. They proceed in two steps. First they predict Medicaid eligibility as a function of simulated eligibility. Simulated eligibility is derived by estimating the percentage of a national sample of children and pregnant women in 1987 that would be eligible under each states' Medicaid eligibility rules in each year. They then use the predicted values of Medicaid eligibility for each individual to measure the effects of eligibility on coverage.[6] Since predicted eligibility varies only because of variation in state eligibility requirements and not because of individual characteristics, this two step procedure eliminates the bias that may arise due to omitted variables. In addition, Cutler and Gruber (1996) account for the secular trend (that is, the decline in private coverage due to factors unrelated to the expansions) by including variables for each year and state. In essence this strategy uses individuals who are not eligible for Medicaid to control for what would have happened to those eligible for the expansions in the absence of the new program.

The work by Cutler and Gruber produces a number of crowd-out estimates. They first estimate separate effects for children and pregnant women. For children, they find that between 31 and 41 percent of the increase in Medicaid coverage that occurred as a result of the expansion in eligibility was offset by declines in private coverage resulting from the expansions. For women of childbearing years, Cutler and Gruber estimate that the increase in Medicaid coverage that occurred as a result of the expansions was accompanied by a decline in private coverage that was greater than the increase in Medicaid coverage, suggesting a crowd-out rate of over a 100 percent. They recognize that this latter estimate is too high because women who drop their private coverage as a result of the expansions can only enroll in Medicaid if they become pregnant, but this result also raises questions about the appropriateness of restricting the unmeasured trends to be the same for those eligible and not eligible for Medicaid.

Cutler and Gruber then calculate a total crowd-out effect that accounts for "conditional coverage" and "spillover" effects. To account for conditional coverage, Cutler and Gruber treat as Medicaid-covered pregnant women and children who do not enroll in Medicaid but who implicitly have Medicaid coverage if they become pregnant (in the case of women) or sick (in the case of children).[7] Accounting for those conditionally covered under the expansion increases the number of individuals estimated to have enrolled in Medicaid and thus lowers their initial crowd-out estimate. Spillover effects come about when a family drops employer-sponsored coverage because some of the family members (pregnant mother and younger children) are eligible for, and choose to take advantage of, Medicaid leaving the ineligible family members (older children, father, non-pregnant mother) without insurance.

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[6] To be precise, Cutler and Gruber use an instrumental variable procedure to identify the effects of eligibility on coverage, since Medicaid eligibility is potentially endogenous in these regressions.

[7] They actually account for "statistical" persons, that is, they aggregate the average costs associated with hospitalization of children and hospital delivery for pregnant women and determine how many full cost individuals these partial costs account for.

When they consider spillover and conditional coverage, Cutler and Gruber estimate that for every two people (both children and pregnant women) that enrolled in Medicaid as a result of the expansions, one person dropped their private insurance, which they consider to be a crowd-out rate of 50 percent. [8] However, elsewhere they note that "this figure is too high....80 percent of the increase in Medicaid [as a result of the expansions], or 2.8 million people, was from those who were formerly uninsured" a crowd-out rate of 20 percent (Cutler and Gruber 1996). The difference in their two estimates is due to the fact that not everyone they identified as dropping private insurance as a result of the expansions was eligible for Medicaid. Rather many were non-eligible family members of eligible children (the spillover effect).

Dubay and Kenney (1996, 1997) examined the extent of crowd-out that occurred as a result of the Medicaid expansions for children and pregnant women using CPS data from pre and post expansion periods. In contrast to Cutler and Gruber, Dubay and Kenney focus their analysis on the groups targeted by the Medicaid expansion -- children less than 11 years of age with incomes below 133 percent of poverty and pregnant women with incomes under 185 percent of poverty. They do this on grounds that the expansions affected only a small portion of the entire population and the secular declines in employer-sponsored insurance that were occurring for the group targeted by the expansions are likely to have been dissimilar to the declines for the whole population. Furthermore they conduct their analysis separately for women and children above and below poverty. While children and pregnant women below the poverty line can be eligible for Medicaid due to the expansions or to participation in cash assistance programs, those with incomes above the poverty line are virtually all expansion eligible.

Rather than using multivariate analysis, Dubay and Kenney compare changes in the probability of having private coverage and changes in the probability of having Medicaid coverage for low-income individuals that were affected by the expansions to those of low-income individuals unaffected by the expansions. They attribute to the expansions only the decline in private coverage for pregnant women and children that is greater than that for men age 18-44 in the relevant income category.[9] Again in contrast to Cutler and Gruber, Dubay and Kenney estimate the share of the ***total*** increase -- rather than the increase due only to the expansions in eligibility -- in Medicaid coverage between 1988 and 1992/93[10] that was associated with the crowding out of private coverage.

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[8] It is important to recognize that none of the other studies reviewed here account for spillover effects and conditional coverage making it difficult to compare Cutler and Gruber's total crowd-out estimates to other estimates. Therefore, in comparing their work to other studies, this analysis compares other studies to Cutler and Gruber's first estimates of crowd-out.

[9] The use of men as a control may overestimate the extent of crowd-out that occurred as a result of the expansions since most men have coverage in their own name and declines in employer contributions were greater for dependent coverage (Dubay and Kenney 1997).

[10] Dubay and Kenney estimate changes for children between 1988 and 1993 and for pregnant women between 1988 and 1992.

Dubay and Kenney find that 14 percent of the increase in Medicaid enrollment of pregnant women and 17 percent of the increase in enrollment of young children that occurred over the expansion period was attributable to crowd-out. Among those with incomes below poverty, they find no evidence of crowding out for pregnant women and very little crowding out for children. For pregnant women and children with household incomes above the poverty line (that is, 100-185 percent of poverty for pregnant women and 100-133 percent of poverty for children), Dubay and Kenney find the crowd-out effect to be 45 percent for pregnant women and 21 percent for children. The higher crowd-out estimate for pregnant women may indicate that as income eligibility thresholds increase, a larger percentage of new entrants into the program may be due to crowd-out. However, this higher estimate may also reflect differences between pregnant women and children in the demand for health care and thus insurance coverage.[11]

In attempting to compare the results of Dubay and Kenney to those of Cutler and Gruber's first estimates of crowd-out, it is critical to recognize the key differences between the effects estimated by these studies. Cutler and Gruber use the increase in the probability of Medicaid coverage that was due to eligibility expansions as the denominator for their analyses. Dubay and Kenney use the ***total*** increase in the probability of having Medicaid coverage over the period of analysis due to both the expansions and other factors. While much has been made of the difference between Cutler and Gruber's and Dubay and Kenney's work, their results are not *necessarily* inconsistent. If crowd-out only occurred for children made eligible for Medicaid after 1988, Dubay and Kenney's estimates would be expected to be lower than Cutler and Gruber's since the denominator in Dubay and Kenney's estimate is larger. On the other hand, crowd-out could have occurred for those children eligible for Medicaid prior to 1988 if outreach about the Medicaid expansions informed their parents about the Medicaid program and encouraged them to drop their children's coverage to take-up Medicaid. Crowd-out could also have occurred among this population if the expansions allowed those who were eligible under pre-expansion rules to remain in the program longer forgoing offers of private coverage. If crowd-out did occur among the previously eligible, the estimates from these two studies would perhaps be expected to be more similar.[12]

However, the estimates that Dubay and Kenney make for children with incomes over 100 percent of poverty should be similar, though not necessarily identical, to the effects estimated by Cutler and Gruber since these children are eligible for Medicaid due only to the expansions. [13,14] Cutler and Gruber's first estimates of crowd-out are higher than Dubay and

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[11] The higher crowd-out estimates for children and pregnant women with incomes above poverty does not necessarily mean that those with higher incomes dropped their coverage at a higher rate. Rather this result likely reflects the fact that at higher incomes there is more private coverage to crowd-out.

[12] Yazici and Kaestner (1998) provide evidence that there was some crowding out of children eligible in 1988.

[13] The results from these studies for pregnant women are not really comparable because Dubay and Kenney focus on pregnant women and Cutler and Gruber focus on women of childbearing years.

Kenney's estimates for children over poverty. The inconsistency between the results from these two studies is either due to differences in their overall methods or in the comparison group used to account for the secular trends. Notably, each set of authors has criticized the other for their choice of comparison group.[15]

Results from Longitudinal Studies

While cross-sectional data can be used to analyze the impacts of the Medicaid expansions, longitudinal data can identify more complex effects of policy changes. By following individuals over time, movements from one type of coverage to another can be observed. To illustrate why this is important, consider the following example: When cross-sectional data are used, the movement of one group out of employer-sponsored coverage and into uninsurance combined with another group moving from uninsurance into Medicaid might be wrongly construed to be movement from employer coverage into Medicaid. Such a characterization of these more complicated dynamics would be misleading. To avoid this result, some researchers have used longitudinal data. Even with longitudinal data, however, it is critical that analyses use an appropriate comparison group to control for what would have occurred in the absence of the policy change. While longitudinal data are ideal for analyzing the dynamic nature of the impact of Medicaid policy on insurance coverage, they also have disadvantages. In particular, sample sizes for the populations affected by the Medicaid program are small in longitudinal surveys compared to cross-sectional surveys such as the CPS potentially resulting in imprecise estimates.

Two unpublished and one forthcoming studies have used longitudinal data to assess the extent of crowding out. Like Dubay and Kenney, each of these studies focus on a group of children affected by the expansions and use the experience of other low-income groups to control for what would have happened in the absence of the policy change.

Yazici and Kaestner (1998) used the 1988 and 1992 National Longitudinal Survey of Youth (NLSY) to examine the crowd-out issue. They limit their analysis to low-income children who were under 9 years old in 1988 and follow these children over the four-year period. Yazici and Kaestner compare changes in the probability of Medicaid coverage and in the probability of private coverage for two groups of eligible children (those who were always eligible for Medicaid and those who gained eligibility for Medicaid due to the expansions) to changes in coverage for children who were never eligible for Medicaid and who experienced

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[14] This comparison ignores the fact that most expansion eligible children had incomes below the poverty line where the share of the program increase attributable to crowd-out appears to be lower. Thus, Dubay and Kenney's estimate for those with incomes above 100 percent of poverty is likely an overestimate of expansion related crowd-out for the overall expansion affected population.

[15] Dubay and Kenney argued that Cutler and Gruber should use a low-income comparison group. Cutler and Gruber argued that the industries in which men and women are employed and thus their insurance coverage is quite different making men a poor control for pregnant women.

no decline in family income. In addition, they compare the experience of children who became eligible for Medicaid due to a loss of family income to that of children who were never eligible but who had a loss of family income and whose incomes were below $40,000. Yazici and Kaestner use an alternative comparison group for children who became eligible for Medicaid due to a decline in family income on the grounds that these families should have different patterns of insurance coverage than families that did not face a reduction in income. They define as crowd-out only the decline in private coverage that is greater than that of each of the comparison groups.

Yazici and Kaestner estimate that 5.3 percent of the increase in Medicaid enrollment among children who were eligible for Medicaid in 1988 and 1992 was attributable to the coverage of children who would have had private coverage in the absence of the policy change. These children could have been affected by the expansions due to outreach regarding the new program and through the higher eligibility criteria. For children who became eligible for Medicaid due to the expansions but who had no decline in family income, 14.1 percent of the increase in Medicaid coverage was attributable to the crowding out of private coverage. Finally, 23.9 percent of the increase in Medicaid coverage for children who became eligible due to a loss of family income was attributable to crowd-out. Combining the estimates for the three groups results in a crowd-out rate of 14 percent indicating that the other 86 percent would have been uninsured if not for the Medicaid program. Despite using different data and different control groups, the estimates by Yazici and Kaestner are consistent with those of Dubay and Kenney who estimate a similar effect (17 percent).

Thorpe and Florence (1997) take a different approach to measuring crowd-out than the previous studies. Using the 1989 through 1994 waves of the National Longitudinal Survey of Youth (NLSY) they examine whether children who moved from employer-sponsored insurance in one year to Medicaid coverage (through expansion and non-expansion eligibility routes) in the subsequent year had parents who retained their private coverage during this period. They define as crowd-out movement of a child into Medicaid when his/her parent has private coverage.[16] They measure the extent of crowd-out as a percentage of all children who ***moved*** into the Medicaid program. Essentially, this analysis uses the experience of children's parents to control for the secular decline in coverage. They make separate estimates for children with incomes under 100 percent of poverty and between 100 and 200 percent of poverty. While children and pregnant women below the poverty line can be eligible for Medicaid due to the expansions or to participation in cash assistance programs, those with incomes above the poverty line are virtually all expansion-eligible.

[16]Only children with the same insurance coverage as their parents are included in this analysis. Children with different insurance from their parents' account for only 1 percent of Thorpe and Florence's sample of low-income children. This strategy may overestimate the extent of crowd-out, since during the period analyzed some parents would have dropped their children's coverage even in the absence of the expansions, as employers reduced contributions to family coverage.

Thorpe and Florence first examine children who enter the Medicaid program from employer-sponsored coverage or other private coverage. They find that, for children living in poverty who ***moved into*** the Medicaid program from private insurance, between 1 and 14 percent had parents who maintained private coverage, depending on the year being examined. For children with incomes above poverty this percentage ranged from 15 to 20 percent.

Thorpe and Florence then assess whether parents whom no longer had employer-sponsored coverage when their children enrolled in Medicaid did so principally because their children were now covered. To do this they examined potential reasons for the loss of coverage. In the vast majority of the cases (between 66 and 84 percent depending on the year), the parent lost coverage because of the loss of employment. The authors therefore concluded that the bulk of Medicaid enrollment by children who previously had employer-sponsored insurance cannot be attributed to the direct displacement of private coverage; rather it reflects the loss of insurance due to loss of employment. These findings also suggest that the extent of spillover from parents' dropping their private coverage when their children became eligible was minimal.

While the policy focus in the crowd-out debate has centered on the movement from private coverage to the Medicaid program, Thorpe and Florence acknowledge that crowd-out can occur even when an uninsured child enters the Medicaid program. This can happen if after a child moves from uninsurance to Medicaid, the family chooses to forgo a subsequent offer of private coverage. To include these children in their crowd-out estimate, they also measure the percentage of new entrants into the Medicaid program from employer coverage, other private, and uninsurance in 1990 and 1994 who lived in families where the head of the household was insured in the year the child entered the Medicaid program. They make one estimate for all entrants with family incomes less than 200 percent of poverty. Using this method, they estimate that 16 percent of all children who entered the Medicaid program from private insurance and from uninsurance in each of these years were the result of crowding out of private insurance (e.g. would have had private coverage if Medicaid was not available.)

Blumberg, Dubay, and Norton (1998) use the 1990 panel of the Survey of Income and Program Participation (SIPP) to assess the extent of movement from private insurance into the Medicaid program, and from uninsurance into the Medicaid program that occurred as a result of the mandated expansions that was attributable to crowd-out. Like Thorpe and Florence, they focus on ***movements***. In contrast to Thorpe and Florence, they examine "expansion related" movements into the Medicaid program rather than all movements. They use multivariate methods to contrast the experience of children born after September 30, 1983 with family incomes below 133 percent of poverty to that of children born five years earlier and with family incomes below 133 percent of poverty. They use the latter group to control for changes that would have occurred in the absence of the expansions since these older children are not eligible for the Medicaid expansions solely due to their age. In addition, they control for socio-economic characteristics of the family.

Specifically, Blumberg, Dubay and Norton estimate whether children affected by the expansions who started the panel (pre-expansion) with private coverage had a lower probability of having private coverage and a greater probability of having Medicaid by the end of the panel (post-expansion) than children unaffected by the expansions. They also examined whether children who started the panel uninsured had a lower probability of having private coverage and a greater probability of having Medicaid by the end of the panel.

Blumberg, Dubay and Norton did find some evidence of crowd-out for children who started the panel with private coverage. They estimate that 11 percent of the ***movement*** from private coverage into the Medicaid program that occurred as a result of the expansions was due to the crowding out of private coverage. Blumberg, Dubay, and Norton find no evidence of crowding out for children who began the panel uninsured.

While Blumberg, Dubay, and Norton and Thorpe and Florence take a similar approach to analyzing crowd-out, their results are not directly comparable because the former examines expansion related movement into Medicaid while the latter examines all movement into Medicaid. A rough check on the consistency of the two studies can be made by focusing on movements from private coverage to Medicaid children with incomes above 100 percent of poverty during the 1990 to 1992 period.[17] While Thorpe and Florence's estimate of 18.9 percent in that year is much larger in percentage terms than the 11 percent estimated by Blumberg, Dubay, and Norton, the magnitude of the difference is relatively small. This difference may be due to limitations in Thorpe and Florence's control for declines in private coverage that would have occurred in the absence of the expansions (see footnote 15).

Finally, in a separate paper on the dynamics of insurance coverage, **Blumberg, Dubay, and Norton** (forthcoming) examine the extent to which children eligible for Medicaid under non-cash assistance eligibility routes dropped their private coverage and took up Medicaid over the course of the 1990 panel of the SIPP. Specifically, they identified the proportion of all children who had private coverage and who became eligible for the Medicaid program during the panel who ***moved*** to the Medicaid program. They found that between 6 and 15 percent of the children eligible for the program took up Medicaid. However, in the absence of eligibility expansions some of these children would have lost private insurance due to the recession and the secular declines in private coverage that were occurring over the course of the panel in this analysis. Therefore, this estimate represents the upper bound of the extent to which eligible children may have dropped their coverage to enroll in the Medicaid program.

[17] See footnote 14 for a discussion regarding why these two results are not directly comparable.

Summary

What was the extent of crowd-out that occurred under the Medicaid expansions? As mentioned earlier, each of the studies pose a somewhat different question making it difficult to compare their results directly. Table 1[18] presents the results from each of the studies, noting each specific study's measurement of crowd-out. Despite differences across the studies, the predominant finding is that the extent of crowd-out was small. Dubay and Kenney and Yazici and Kaestner find that less than 20 percent of the ***total*** increase in Medicaid coverage during the period of the expansions was due to providing Medicaid coverage to children who would have otherwise had private coverage. Thorpe and Florence find that only 16 percent of all children ***moving*** into the Medicaid program from private insurance or uninsurance dropped or refused offers of private coverage as a result of the expansions. In addition, the work by Blumberg, Dubay, and Norton found that only 11 percent of the children affected by the expansions who ***moved*** into the Medicaid program was due to the coverage of children who would have otherwise been uninsured. Cutler and Gruber's estimate of the share of the increase in Medicaid coverage due to the eligibility expansions (including both enrollment in Medicaid and conditional coverage) that is attributable to individuals dropping their private coverage and enrolling in the program is also low (20 percent). However, Cutler and Gruber's first estimates of crowd-out upon which the final estimate is based are much larger.

Table 1

Study	**Data**	**Crowd-out Measured as a Share of:**	**Study Population**	**Control Group**	**Estimate**
Cutler and Gruber	CPS	Expansion Related Increases in Medicaid Coverage	Children	Non-Medicaid Eligible Children	31-41 %
Cutler and Gruber	CPS	Expansion Related Increases in Medicaid Coverage	Women of Child Bearing Years	Non-Medicaid Eligible Women of Child Bearing Years	100 %

[18] In this estimate, crowd-out is defined as individuals who in the absence of the expansions would have retained their private coverage, regardless of whether they enrolled in the Medicaid program.

Cutler and Gruber	CPS	Expansion Related Increases in Medicaid Coverage and Conditional Coverage (Include Spillover Effects)	Children, Women of Child Bearing Years, Men and Other Women	Non-Medicaid Eligible Populations	50 %
Cutler and Gruber	CPS	Expansion Related Increases in Medicaid Coverage Including Conditional Coverage (Excludes Spillover Effects)	Children, Women of Child Bearing Years, Men and Other Women	Non-Medicaid Eligible Populations	20 %
Dubay and Kenney	CPS	Total Increase in Medicaid Coverage	Young Low-Income Children	Low-Income Men	17 %
Dubay and Kenney	CPS	Total Increase in Medicaid Coverage	Low-Income Pregnant Women	Low-Income Men	15 %
Yazici and Kaestner	NLSY	Total Increase in Medicaid Coverage	Young Low-Income Children	Non-Medicaid Eligible Low-Income Children	14 %
Thorpe and Florence	NLSY	All Movements Into Medicaid from Private Coverage	Low-Income Children	Parents of Children Moving Into Medicaid	1-20 %
Thorpe and Florence	NLSY	All Movements Into Medicaid	Low-Income Children	Parents of Children Moving Into Medicaid	16%
Blumberg, Dubay, and Norton	SIPP	Expansion Related Movements into Medicaid from Private Coverage	Young Low-Income Children	Older Low-Income Children	11%
Blumberg, Dubay, and Norton	SIPP	Expansion Related Movements into Medicaid from Uninsurance	Young Low-Income Children	Older Low-Income Children	0%

Blumberg, Dubay, and Norton	SIPP	Share of Children with Private Coverage who Become Eligible for Medicaid (non-AFDC eligibility) and Enroll in the Medicaid Program	Low-Income Children	none	11%

It is important to acknowledge that each of the studies reviewed here has limitations. In general, cross-sectional analyses using the CPS means that actual movement between different types of insurance coverage of the same people cannot be observed. And, although longitudinal data can be used to assess the dynamics of insurance coverage changes, longitudinal data tend to be based on a much smaller sample size than the CPS, which can produce imprecise estimates. While the 1990 SIPP panel provides a window around the mandated expansions in coverage for children, an earlier pre-expansion period such as that found in the NLSY is preferable, since many states implemented optional expansions prior to the 1990 mandates.

Finally, there is no perfect way to predict what would have happened to children made eligible by the expansions in the absence of the policy change. Each of the studies has taken a slightly different approach to "control" for this effect. Given that health insurance patterns of the low-income population affected by the expansions are known to be quite different than those of higher-income persons, it would seem preferable to use controls that are based on the experience of a low-income population. Studies that have taken this approach produce results that consistently indicate that the vast majority of the increase in coverage during the expansion period was due to covering children who would otherwise have been uninsured.

Implications for CHIP

State policy makers charged with designing CHIP programs are keenly aware that a large share of children in the income range targeted by the new program have private coverage. Consequently, considerable attention has been paid to assessing the potential for crowd-out under CHIP. In estimating the costs of CHIP programs, state officials have looked to the previous literature to help them predict what share of CHIP eligible children with employer-sponsored coverage will drop that coverage and enroll in the new program. Unfortunately, most of the literature on the Medicaid expansions does not address this issue. Rather the research has focused on estimating what percentage of the increase in Medicaid enrollment was due to the coverage of those who would have retained their private coverage in the absence of the expansions (i.e. were crowded out). While this type of estimate can be used to calculate the share of newly eligible children who dropped their private coverage as a result of the expansions, it is critical that the two types of estimates not be confused. If the number of potentially eligible children who have private coverage is large relative to the uninsured, (as under CHIP), the number of children who drop coverage will likely comprise a smaller share of the broad privately insured population than of the new program.

Importantly, the share of new entrants into CHIP that is attributable to crowd-out may be quite different from under the Medicaid expansions. On the one hand, the CHIP program makes eligible children with higher incomes who are more likely than poor children to have private coverage to be displaced. Consequently, even if families with CHIP eligible children drop their private coverage as a result of the program at the same rate as those made eligible under the Medicaid expansions and the uninsured participate at the same rate, a much higher share of new entrants would be due to crowd-out. On the other hand, the coverage offered under CHIP and the preferences of families eligible under CHIP may be quite different from coverage and preferences under the Medicaid expansions. Higher income families may be more inclined and have a greater ability to retain their private coverage than lower income families. Furthermore, the CHIP legislation charges states with adopting procedures to prevent crowd-out from occurring. In addition, states can impose premiums, which will likely dampen participation among both the insured and uninsured. Together, these factors make it difficult to predict exactly what will happen under CHIP based on the experience of the Medicaid expansions.

The extent to which the CHIP program will crowd-out private coverage is also likely to vary considerably across states. States where few low-income families have employer-sponsored coverage may experience lower levels of crowd-out than states where employer-sponsored coverage for the near poor is more common. Similarly, states that chose to develop stringent strategies to prevent crowd-out such as long waiting periods after private coverage *may* experience lower levels of displacement than states that chose to develop less stringent fire walls. Thus the extent of crowd-out will depend critically on the economic, fiscal, and political environment in each state.

Whatever the future, evidence on experience to date does not call into question the likelihood that the majority of CHIP coverage will reach the population it aims at -- uninsured children in near poor families. At the same time, some displacement of private coverage is inevitable and mechanisms to prevent this phenomenon will create inequities in the program by treating differently children in similar economic circumstances. Therefore, as state officials plan their CHIP programs they should to keep in mind who benefits from crowd-out: Low-income children will come out ahead with greater insurance security, coverage with low out-of-pocket costs, and benefits that always include preventive care. There will also be benefits of financial relief to families who had previously purchased health insurance (and the children in them) and to businesses who have traditionally provided coverage to these low-wage workers.

The focus on crowd-out while important from a budget and efficiency perspective, draws attention away from other challenges states face under both their Medicaid and CHIP programs. These programs must get uninsured children to participate and provide access to high-quality effective medical care in order to realize improvements in child health.

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